intelbras

User manual

Impacta

intelbras

Impacts 16, Impacts 40, Impacts 68, Impacts 68i, Impacts 94, Impacts 140, Impacts 220, Impacts 94 R*, Impacts 140 R*, Impacts 220 R* and Impacts 300 R* Hybrid plants

Congratulations, you have just purchased a product with Intelbras quality and safety.

The Impacta switchboard is an ideal solution for the integration of voice and data networks for small and medium-sized companies, as in addition to presenting the usual functions of a CPCT (Private Telephone Switching Switchboard), it acts as a gateway, interconnecting two networks and allowing calls with VoIP (Voice over IP) technology.

** Rack version.*

ATTENTION: This product comes with a factory default password. For your safety, it is ESSENTIAL that you change it as soon as you install the product and ask your technician about the configured passwords, which users have access and recovery methods.

ANATEL

This is a product approved by Anatel, the approval number can be found on the product label, for queries, visit the website: *sistemas.anatel.gov.br/sch*.

Care and safety

Install the switch in a location with 40 cm of free space around it.

Do not install in unventilated, humid places, near sources of heat or vibration.

Avoid installing the switchboard on walls where there is sunlight, behind doors, under windows or in places with high circulation of people(halls, corridors, etc.).

Look for a location close to the earth potential equalization bar (see item *3.3. Grounding*) and close to a source of electrical energy.

Do not install the switch near electrical power cables.

Do not install the switch near televisions or equipment that operate on radio frequency.

Always install the switch in accordance with the telephone company's regulations.

LGPD - General Law for the Protection of Personal Data: Intelbras does not access, transfer, capture or perform any other type of processing of personal data from this product.

Índice

1. Introduction

1.1. Basic concepts

Lines, bundles and routes

To better understand call routing at Impacta exchanges, it is important to consider the following information:

- Each of the central external accesses, whether analog, VoIP or digital, is associated with only one bundle of lines.
- The bundle can contain one or several lines.
- For each of the exchange routes, a main bundle of lines is programmed, and alternative bundles can be defined. Thus, when making a call, you must choose the route you want to use and the control panel will select an available line from the main beam of the chosen route. If all lines in this bundle are busy, the switch will attempt to access a line from the first available alternate bundle.

In the factory programming, all lines installed in the switch are of a single bundle (ANA beam) and all extensions have only the defined automatic route (route 0). In this case, the automatic route uses only the ANA beam.

TO ACCESS THE STEP-BY-STEP VIDEO OF THIS SCHEDULE, **CLICK HERE.**

Switch numbering plan

Impacta switches have a completely configurable numbering plan. In addition to changing the extension numbers, the codes for all the services offered can also be changed.

Extension numbering - factory programming

Model	Extension numbering
Impacta 16	From 20th to 31st (12 extensions)
Impacta 40	200 to 231 (32 extensions)
Impacta 68/ Impacta 68i	200 to 231 (32 extensions)
Impacta 94/ Impacta 94 R	200 to 247 (48 extensions)
Impacta 140/ Impacta 140 R	200 to 247 (48 extensions)
Impacta 220/ Impacta 220 R	From 200 to 327 (128 extensions)
Impacta 300 R	2000 to 2239 (240 extensions)

Note: *the numbering of the extensions is totally flexible.*

Signaling of telephone devices

Telephone sets have two forms of dialing: pulse (decadic) and tone (multifrequency). In the tone system, there are two additional keys, * and #, which serve to signal services.

Impacta centrals prioritize the use of the tone signaling system, as the use of the * and # keys are essential for the use of the available services. Telephones with pulse signaling will be able to make internal and external calls normally, but will not be able to make use of all the services that require these keys.

Attendant extension and operator extension

- **Attendant extension:** this is the extension defined to receive external calls from the exchange. If the line has Direct Inward Dialing (DID) or Automated Attendant, the call can be forwarded to the extension without the assistance of setting the extension as an attendant.
- **Operator extension (operator):** all extensions can be defined as common or operator extensions. However, the operator station has a larger queue for handling incoming calls and can carry out the switch's system programming.

In the factory setting, the extension defined as the operator and attendant extension for all lines in the day shift is 20/200/2000. Extension 21/201/2001 is also defined as an operator extension, but it only serves the lines on the night shift.

2. Technical specifications

2.1. Capacity of lines and extensions

Model	Model Minimum capacity	Maximum capacity
Impacta 16	2 analog trunks and 4 extensions.	4 analog trunks, 12 analog extensions and 2 optional boards[1].
Impacta 40	2 analog trunks and 4 extensions.	8 analog trunks, 32 analog extensions and up to 2 optional accessories[1].
Impacta 68i	2 analog trunks and 4 extensions.	Digital trunks: 30 channels, analog trunks: 6 (with E1 card) or 8 (without E1 card), IP trunks: 30, extensions: 32 extensions (analog), 30 IP extensions and up to 3 optional accessories (including ICIP board).
Impacta 94/ Impacta 94 R	A board with 2 analog trunks and 12 analog extensions.	Option 1: 76 lines + 168 extensions (with 30 lines IP[2], 30 digital lines, 16 analog lines (or 8 analog lines and 8 GSM channels), 48 TDM extensions and 120 IP[2] extensions). Option 2: 46 lines + 48 extensions (30 digital lines, 16 analog lines and 48 TDM extensions) + Accessory base[2].
Impacta 140/ Impacta 140 R	One board with 2 analog trunks and 12 analog extensions.	Option 1: 92 lines + 200 extensions (with 30 IP[2] lines, 60 digital lines, 02 analog lines, 80 TDM extensions and 120 IP[2] extensions). Option 2: 70 lines + 80 extensions (60 digital lines, 10 analog lines (or 2 analog lines and 8 GSM channels) and 80 TDM extensions) + Accessory base[2].
Impacta 220/ Impacta 220 R	One board with 2 analog trunks and 12 analog extensions.	Option 1: 92 lines + 200 extensions (with 30 IP[2] lines, 60 digital lines, 02 analog lines, 80 TDM extensions and 120 IP[2] extensions). Option 2: 70 lines + 80 extensions (60 digital lines, 10 analog lines (or 2 analog lines and 8 GSM channels) and 80 TDM extensions) + Accessory base[2].
Impacta 300 R	One board with 2 analog trunks and 12 analog extensions.	Option 1: 106 lines + 280 extensions (with 30 IP lines, 60 digital lines, 16 analog lines (or 8 analog lines and 8 GSM channels) 160 TDM extensions and 120 IP extensions[2]). Option 2: 84 lines + 160 extensions (60 digital lines, 24 analog lines (or 16 analog lines and 8 GSM channels) and 160 TDM extensions) + Accessory base[2].

[1] Optional Boards: Ethernet, ICIP68I (only for Impacta 68i) and (Voice Mail, Modem, VoIP - Discontinued Boards).

[2] ICIP board (Accessory base and its optional boards VoiceMail, Modem, VoIP, Commands - Discontinued boards).

***Note:** the total number of boards is limited to the number of slots on the control panel, respecting the order of placement of each board. For more information consult the programmer software.*

2.2. Modularity of boards

Number of branches and trunks (lines) per board:

Model	Analog Branches	Digital Extensions	Ramais Misto	Placa Tronco/Ramal	Analog Trunks	Digital Trunks	Board trunk GSM or GSM/3G
Impacta 16	4 extensions	4 extensions	1 digital extension l and 3 analóg	not available	2 trunks	not available	not available
Impacta 40	4 extensions	4 extensions	1 digital extension and 3 analog	not available	2 trunks	não disponível	not available
Impacta 68i	4 extensions	4 extensions	1 digital extension and 3 analog	not available	2 trunks	1 E1 up to 30 lines)	not available
Impacta 94/ Impacta 94 R	16 extensions 24 extensions[1]	16 extensions	4 edigital extensions and 12 analog	2 troncos analógicos e 12 ramais analógicos	8 trunks	1 E1 up to 30 lines)	8 channels[2]
Impacta 140/ Impacta 140 R	16 extensions 24 extensions[1]	16 extensions	4 edigital extensions and 12 analog	2 troncos analógicos e 12 ramais analógicos	8 trunks	2 E1 (up to 60 lines) 1 E1 (up tp 30 lines)	8 channels[2]
Impacta 220/ Impacta 220 R	16 extensions 24 extensions[1]	16 extensions	4 edigital extensions and 12 analog	2 troncos analógicos e 12 ramais analógicos	8 trunks	2 E1 (up to 60 lines) 1 E1 (up tp 30 lines)	8 channels[2]
Impacta 300 R	16 extensions 24 extensions[1]	16 extensions	4 edigital extensions and 12 analog	2 troncos analógicos e 12 ramais analógicos	8 trunks	2 E1 (up to 60 lines) 1 E1 (up tp 30 lines)	8 channels[2]

[1] Requires PBX firmware version 3.16.xx or higher.

[2] Requires PBX firmware version 3.18.xx or higher, and web programmer version v1.4.xx or higher.

2.3. Hardware settings

The positions available on the base boards are:

Model	Slot	CPU board	Note
Impacta 16	3 extension slots 2 trunk slots 2 options slots	Integrated in the baseboard	No E1 board
Impacta 40	8 extension slots 4 trunk slots 2 options slots	Integrated in the baseboard	No E1 board
Impacta 68i	8 slots for extensions 4 slots for trunks 2 slots for options	Integrated in the baseboard	The E1 board is installed in slot 12
Impacta 94/ Impacta 94 R	CPU slots + 6 generic use slots	Independent board	The E1 board is installed in slot 6 next to the
Impacta 140/ Impacta 140 R	CPU slots + 6 generic use slots	Independent board	The E1 board is installed in slot 6 next to the
Impacta 220/ Impacta 220 R	CPU slots + 11 generic use slots	Independent board	The E1 board is installed in slot 11 next to the CPU board.
Impacta 300 R	CPU slots + 11 generic use slots	Independent board	The E1 board is installed in slot 11 next to the CPU board.

2.4. Number of intelligent terminals

Impacta 16	8
Impacta 40	8
Impacta 68/ Impacta 68i	8
Impacta 94/ Impacta 94 R	40
Impacta 140/ Impacta 140 R	48
Impacta 220/ Impacta 220 R	48
Impacta 300 R	48

Impacta 16, Impacta 40, Impacta 68 and Impacta 68i

The maximum capacity of smart terminals is 8 per switch and for each module added we eliminate one terminal. Installation examples:

8 intelligent terminals without modules or 4 intelligent terminals with 4 modules (distributed in up to 2 modules per IT).

Impacta 94

The maximum capacity of smart terminals is 40 per switch and for each module added we eliminate one terminal. Installation examples:

40 intelligent terminals without modules or 20 intelligent terminals with 20 modules (distributed in up to two modules per IT).

Impacta 140/140R, Impacta 220/220R, Impacta 300R

The maximum capacity of intelligent terminals is 48 per switch and for each module added we eliminate a terminal. Installation examples:

48 intelligent terminals without modules or 24 intelligent terminals with 24 modules (distributed in up to two modules per IT).

Attention: the maximum electrical resistance allowed in the conductor used in the terminal installation cannot exceed 22 Ω in each lane of the conductor pair.

Test conditions:

Diameter of conductor	Resistance	Temperature	Max distance
0,5 mm (24 AWG)	110 Ω/km	25 °C	200 m

2.5. Maximum number of plates (Impacta 94/140/220/94 R/140 R/220 R/300 R)

Board	Impacta 94/ 94 R	Impacta 140/ 140 R	Impacta 220/ 220 R	Impacta 300 R
24 extensions[1]	2	3	6	10
CPU	1	1	1	1
1E1/2E1	1	1	1	1
Analog trunk	2	3	3	3
Analog extension	3	5	10	10
Digital extension	3	3	3	3
Mixed extension	3	5	10	10
Accessory base	1	1	1	1
2-channel VoIP/ 4 channels	1	1	1	1
Commands	1	1	1	1
Trunk/extension	4	6	11	11
GSM trunk card(2) or GSM/3G(2)[2]	2[3]	2[3]	2[3]	2[3]

[1] Requires PBX firmware version 3.16.xx or higher.

[2] GSM trunk card: requires PBX firmware version 3.18.xx or higher; GSM/3G Trunk Card Requires PBX firmware version 3.24. xx or higher.

[3] You can place two GSM or GSM/3G 4-channel boards or one GSM or GSM/3G 8-channel board per control unit.

Attention: the total number of boards is limited to the number of slots on the control panel, respecting the order of placement of each board.

Availability of porters

Model	IP 700 Porter Interface	XPE 1001 T intercom
Impacta 16/40/68/ 68i	1	2
Impacta 94/140/220/94R/140R/220R/300R	3*	5

** Necessita Placa Base de Acessórios e Placa de comandos.*

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2.6. Line signaling

- **Analog trunks:** decadic (pulse) or multifrequency (tone).
- **» Digital trunks:** E1Impacta (68, 68i, 94, 140, 220, 94R, 140R, 220R and 300R): R2 digital or ISDN.
- **» IP trunks:** ICIP 30 (94, 140, 220, 94 R, 140 R, 220 R and 300 R): SIP.

2.7. Line range

- **» Trunks:** 2000 Ohm.
- **» Extensions:** 1100 Ohm (including telephone).

2.8. Electrical protection

There is electrical protection against transients and fluctuations in the network in trunks, extensions and AC power.

2.9. AC input and extension power

Model	AC input	Extension Power
Impacta 16, Impacta 40 and Impacta 68 and Impacta 68i	90 V – 240 V (50 ou 60 Hz) Full Range	-24 V (DC) and ring frequency at 25 Hz
Impacta 94/ 94 R	90 V – 240 V (50 ou 60 Hz) Full Range	-36 V (DC) and ring frequency at 25 Hz
Impacta 140/140 RandImpacta 220/220 R	90 V – 240 V (50 ou 60 Hz) Full Range	--36 V (DC) and ring frequency at 25 Hz
Impacta 300 R	90 V- 240 V (50 ou 60 Hz) Full Range	-36 V (DC) and ring frequency at 25 Hz

Average current consumption of the extensions:

- » Average analog extension current: 22 mA.
- » Average off-hook digital extension current: 40 mA.
- » Average current of digital extension on hook: 28 mA.
- » Maximum current supplied by the 36 V source to the extensions: 2.6 A.

2.10. Programming protection

All switch and user configuration programs are stored in Flash memory and will not be lost in the event of a power failure.

2.11. Maximum power

Model	Maximum power
Impacta 16	24 W
Impacta 40	40 W
Impacta 68	40 W
Impacta 68i	60 W
Impacta 94/Impacta 94 R	150 W
Impacta 140/Impacta 140 R	150 W
Impacta 220/Impacta 220 R	150 W
Impacta 300R	210 W

2.12. Attendant extensions in the event of power failure

In the event of a lack of electricity, some analog lines are coupled to analog extensions, as shown in the table below:

Model	Attendant extension
Impacta 16	Line 1 to the last extension position in slot 1 (extension 23)* Line 3 to the last extension position in slot 2 (extension 27)*
Impacta 40 Impacta 68 Impacta 68i	Line 1 to the last extension position in slot 1 (extension 203)* Line 3 to the last extension position in slot 2 (extension 207)* Line 5 to the last extension position in slot 3 (extension 211)*
Impacta 94/Impacta 94 R	1st analog trunk from slot 5 to last extension position in slot 1
Impacta 140/Impacta 140 R	1° tronco analógico do slot 5 à última posição de ramal no slot 1
Impacta 220/Impacta 220 R	1st analog trunk from slot 9 to last extension position in slot 1 1st analog trunk from slot 10 to last extension position in slot 2 1st analog trunk from slot 11 to last extension position in slot 3
Impacta 300 R	1st analog trunk from slot 9 to last extension position in slot 1 1st analog trunk from slot 10 to the last extension position in slot 2 1st analog trunk from slot 11 to the last extension position in slot 3

** Switchboard with factory default numbering.*

2.13. Real time clock

It maintains the correct time for Alarm Clock, Time, Ticketing and Billing services even in the event of a power outage. For this, the battery jumper must be closed.

Impacta 16 - CN17 closed

Impacta 40 - J14 closed

Impacta 68 and Impacta 68i - J14 closed

Impacta 94/140/220/94 R/140 R/220 R/300 R - J3 closed

2.14. Auto attendant - DISA

Model	Number of channels
Impacta 16	4
Impacta 40	8
Impacta 68i	8
Impacta 94 / Impacta 94 R	16
Impacta 140 / Impacta 140 R	16
Impacta 220 / Impacta 220 R	16
Impacta 300 R	16

The DISA function does not require an accessory. The specification for recording messages up to version 3.08.xx is:

- » WAV file
- » Sampling rate: 8 kHz
- » 16 bits
- » Mono channel
- » Size: 150 kB

For versions greater than 3.10.xx, consult the programmer, in the *Maintenance* option.

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2.15. Caller ids

Impacta exchanges have caller ID for all telephone lines without the need for any other accessory. However, it is necessary to enable the function (jumper on the trunk card), program it and contract this service from the telephone company.

2.16. Dimensions and weight

Model	Width	Height	Depth	Weight (kg)	Gross weight (AQ)	Net weight (AQ)
Impacta 16	23,62 cm	20,83 cm	11,1 cm	1	1,325	0,98
Impacta 40	34,35 cm	23,3 cm	11,1 cm	1,8	1,995	1,5
Impacta 68	34,35 cm	23,3 cm	11,1 cm	1,8	1,99	1,465
Impacta 94	49,1 cm	37,8 cm	16,7 cm	7,7	6,885	5,095
Impacta 140	49,1 cm	37,8 cm	16,7 cm	7,7	7,015	5,195
Impacta 220	49,1 cm	37,8 cm	16,7 cm	7,9	7,445	5,73

Tolerance +or- 3%

Model	Width	Height	Depth	Weight (kg)	Gross weight (AQ)	Net weight (AQ)
Impacta 94 R	19"	6 U	11 cm	6,8	5,7	4,68
Impacta 140 R	19"	6 U	11 cm	6,8	5,68	4,69
Impacta 220 R	19"	6 U	11 cm	8,1	5,545	4,43
Impacta 300 R	19"	6 U	11 cm	8,28	5,725	4,61

Tolerance +or- 3%

2.17. Operating Environment

Temperature	0 °C up to 45 °C
Moisture	10% to 90% non-condensing

2.19. Quantity of tickets

Impacta exchanges can store up to 905 tickets. When using the ICIP card and ticketing via FTP, it is possible to store up to 10,000 tickets.

2.20. Switchboard compatibility

The compatibility of the switchboards works according to the table below:

CPU/3

	BASE 94	BASE 140	BASE 220	BASE 300
CPU 94/Firmware 94	Yes	No	No	No
CPU 94/Firmware 140	No	No	No	No
CPU 94/Firmware 220	No	No	No	No
CPU 94/Firmware 300	No	No	No	No
CPU 140/Firmware 94	Yes	Yes	No	No
CPU 140/Firmware 140	Yes	Yes	No	No
CPU 140/Firmware 220	No	No	No	No
CPU 140/Firmware 300	No	No	No	No
CPU 220/Firmware 94	Yes	Yes	Yes	No
CPU 220/Firmware 140	Yes	Yes	Yes	No
CPU 220/Firmware 220	Yes	Yes	Yes	No
CPU 220/Firmware 300	No	No	No	No
CPU 300/Firmware 94	No	No	No	No
CPU 300/Firmware 140	No	No	No	No
CPU 300/Firmware 220	No	No	No	No
CPU 300/Firmware 300	No	No	No	Yes

Yes: runs/works | No: does not run/does not work

2.21. Quantity Of outbound conversions

Starting with version 3.16.X, the switchboard supports up to 350 outbound conversion rules.

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Note: *the number of digits after conversion, including the external number, is limited to 24 digits. Example for external number 0214832595935 > conversion: 4000@#89123456? will be converted to 4000@#891234560214832595 excluding the final 935.*

2.22. Compatible browsers and operating systems for using the WEB programmer

- For PABX version 3.18.x, the recommended browser is Mozilla Firefox version 24 to 28.
- For PABX version 3.20.x, the recommended browser is Mozilla Firefox version 37.
- Installation of the Web Desktop Programmer requires Windows 7,8 or 8.1 operating systems.

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3. Installation

Equipment intended for installation and operation in proper environments with specialized professionals.

Impacta 68i/ Impacta 220

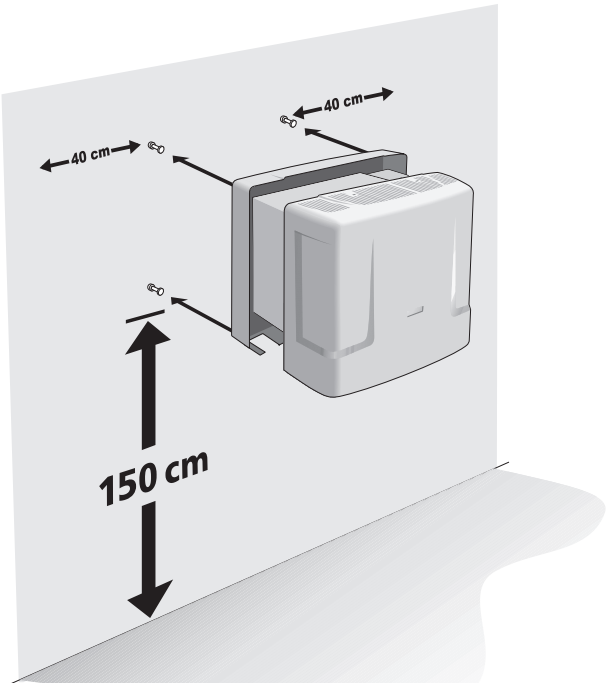
Note: *this equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Privacy of communications may not be ensured when using this device.

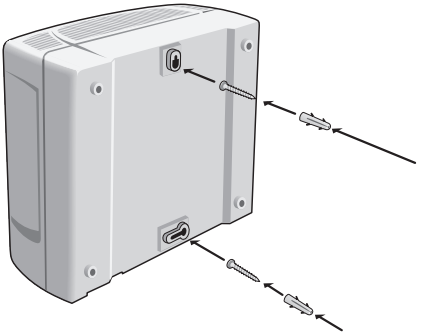
3.1. How to attach to the switchboard

- » The control unit must be at least 150 cm from the floor and with 40 cm of free space around it.
- » Use the central itself to mark the fixing location.
- » Fix the screws and bushings that come with it.
- » Fit the centrad and make sure it is secure.

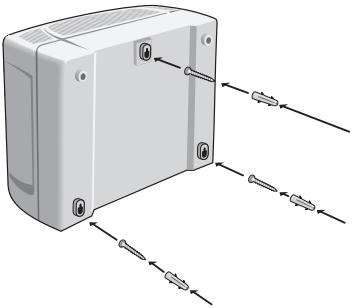


The holes for fixing the centrals vary according to each model. Look at the figures below:

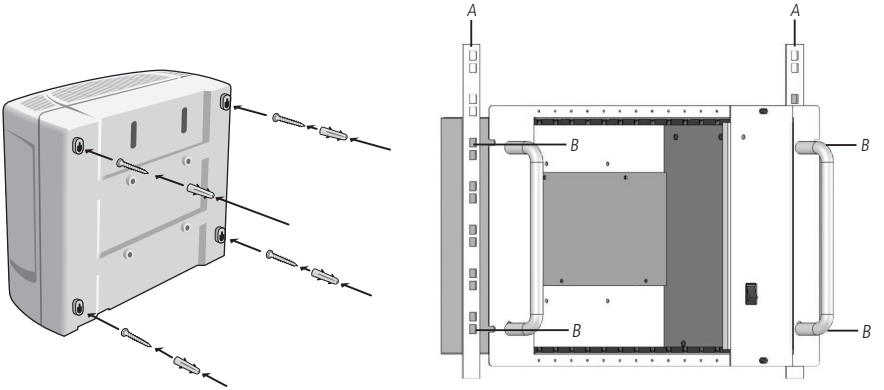
» Attaching of Impacta 16



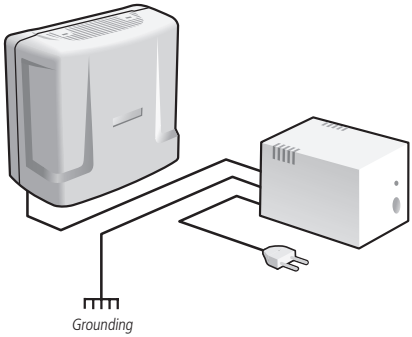
» Attaching Of Impacta 40, Impacta 68 and Impacta 68i



» Attaching Of Impacta 94/140/220/94 R/140 R/220 R/300 R



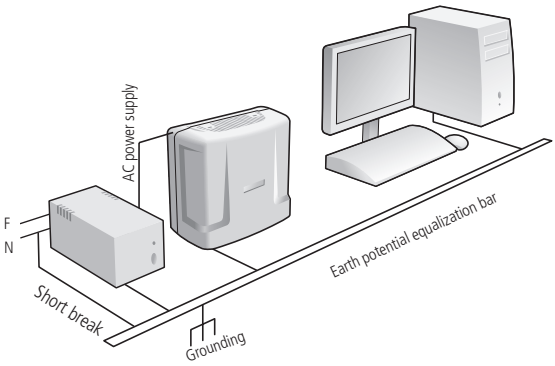
3.2. AC installation



The central unit can be connected to a voltage of 110 or 220 V (50/60 Hz), as the selection is automatic. To avoid interrupting the operation of the telephone exchange, use a nobreak or short break.

Attention: the short break used must have greater power than the central need. When to install a short break or UPS, it will be essential to interconnect the grounding of the two equipments.

3.3. Grounding



The ideal way to ground the control unit is to create a ground potential equalization bar.In this bar, the neutral of the electric power, the control unit's ground, the AC input protections and the ground wire of any other equipment connected to the control unit must be connected.

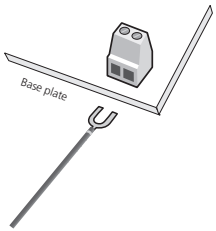
The ground potential equalization bar creates the same potential for multiple ground wires, preventing current flow between them. If it is not possible to install the equalization bar, the grounds must be interconnected to create the same potential between them.

Attention: the maximum resistance for grounding is 5 W.

Impacta 16, Impacta 40 and Impacta 68i Power Stations

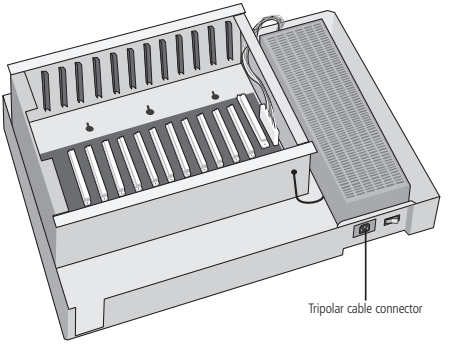
Connect the grounding wire to the connector shown in the table:

Model	Connector
Impacta 16	CN11
Impacta 40	CN9
Impacta 68i	CN9



Impacta power station 94/140/220 and 94 R/140 R/220 R/300 R

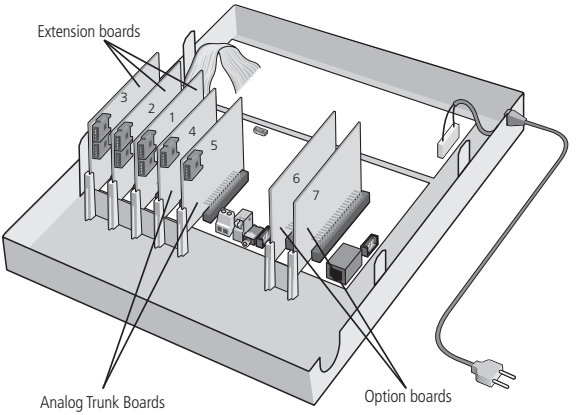
Impacta 94/140/220 and 94 R/140 R/220 R/300 R power stations are powered by a three-pole cable, which already has a grounding.



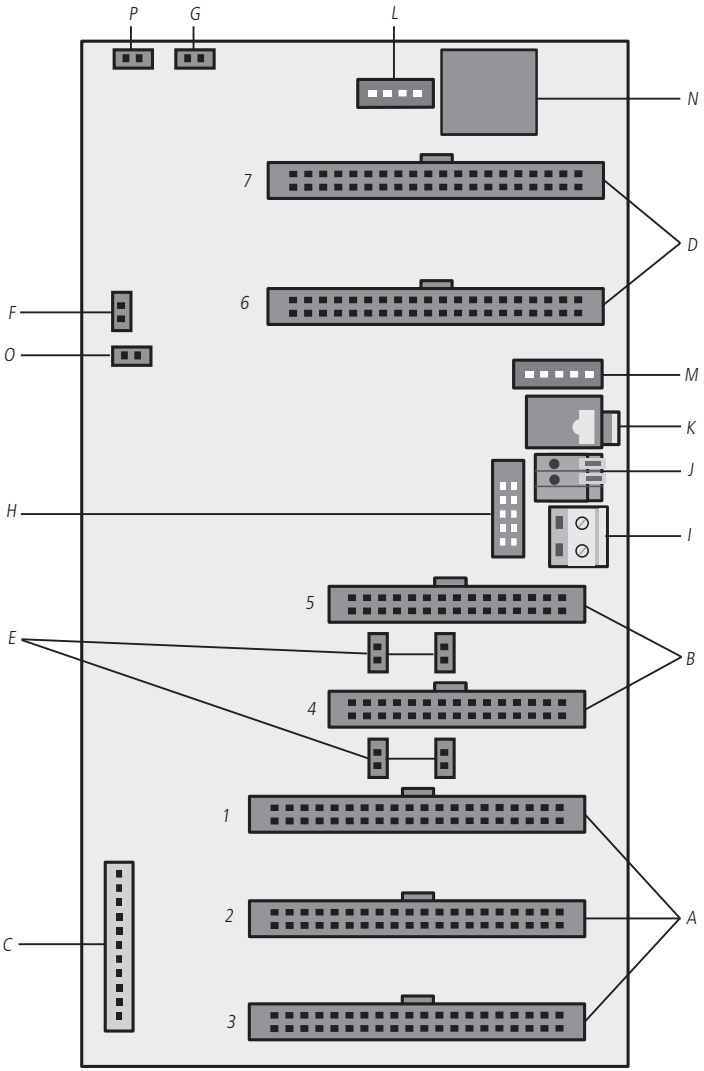
3.4. Installation diagram

Installation diagram for the Impacta 16 power station

Visão geral da central, suas placas e conexões:



Description of slots, connectors and jumper



A. Slot1/CN9, Slot2/CN8 and Slot3/CN5: connection of the extension boards.
B. Slot4/CN6 and Slot5/CN7: connection of analog trunk cards.
C. CN1: power supply connector.
D. Op1/CN14 and Op2/CN15: connection of option boards.
E. J1, J10, J3 and J11: jumper for line coupling.

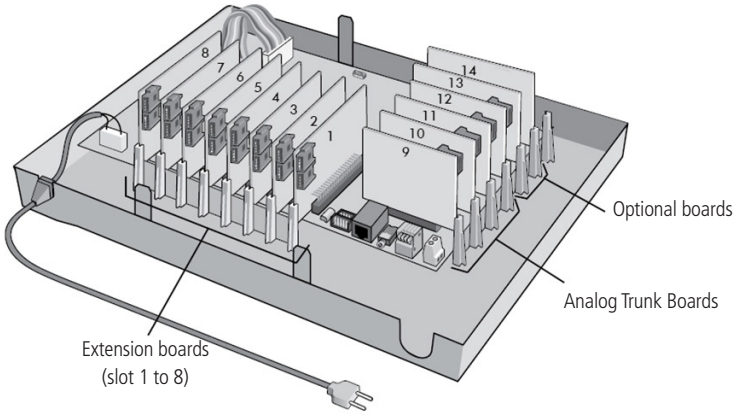
Slot	Trunk	Jumper
Slot4/CN6	No plate	J1 and J10 closed
	With plate	J1 and J10 open
Slot5/CN7	No plate	J3 and J11 closed
	With plate	J3 and J11 open

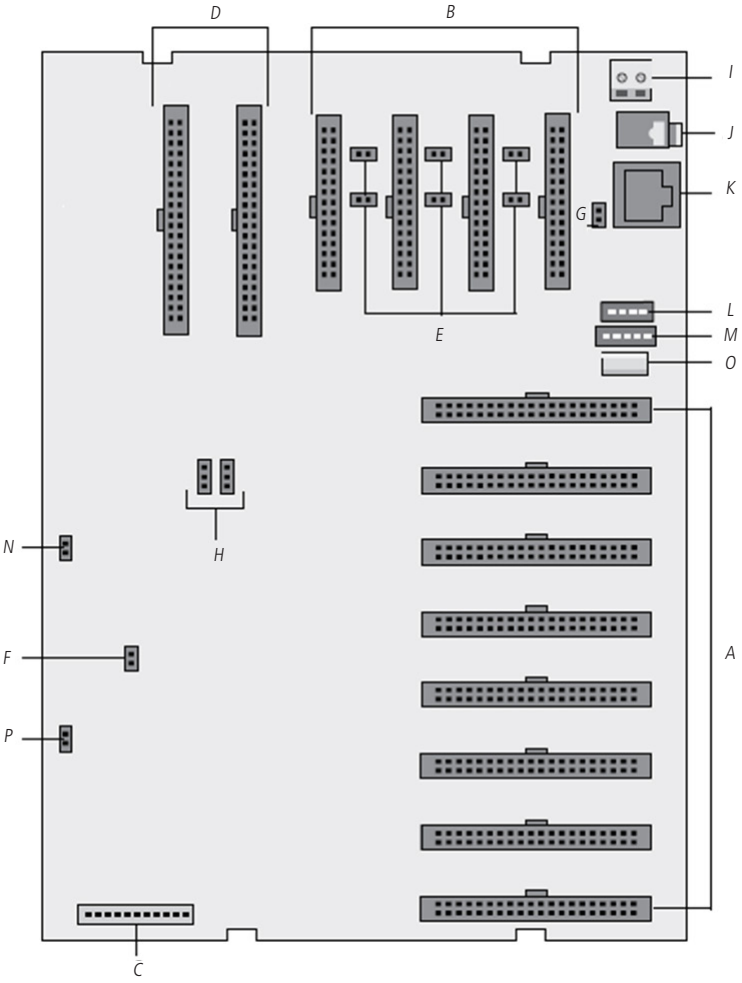
Note: *if the last positions of the boards' extensions are muted, check the configuration of these jumpers.*

G. J12: Watchdog
H. J5: monitor.
I. CN3: connection to firmware recorder. I. CN11: plant grounding.
J. CN10: technical reserve.
K. CN13: external music input (P2 jack).
L. CN4: connection of external actuation interface and emergency call device (alarm sensor).
M. CN12: IP 700 porter.
N. CN16: serial cable connection (RS232). O. J6: full reset.
O. Battery jumper (CN17): the jumper must be connected during installation to avoid a possible loss of date and time (switch calendar) every time the plant's AC power is cut off.

Impacta 40 power station installation diagram

Overview of switchboard, boards and connections:





A. Slot1/CN22 to Slot8/CN15: connection of the extension boards.
B. Slot9/CN11, Slot10/CN10, Slot11/CN8 and Slot12/CN7: connection of analog trunk cards.
C. CN1: power supply connector.
D. Slot13/CN5 and Slot14/CN3: connection of option boards.
E. J1, J11, J12, J3, J6 and J13: jumper for line coupling.

Note: *if the last positions of the boards' extensions are muted, check the configuration of these jumpers.*

Slot	Trunk	Jumper
CN11	no board	J1 and J11 closed
	with board	J1 and J11 open
CN10	no board	J3 and J12 closed
	with board	J3 and J12 open
CN8	no board	J6 and J13 closed
	with board	J6 and J13 open

G. F. J2: full reset (hard reset). G.J10: DCDB.

H. H. CN27 and CN28: jumpers for selecting the type of communication between the computer and the Impacta 40 control panel. Both in position 1-2 for serial (RS-232) or Ethernet communication, or both in position 2-3 for USB communication.

TO ACCESS THE VIDEO WITH THE STEP-BY--STEP OF THIS PROGRAMMING, **CLICK HERE**.

I. CN9: central grounding.

J. CN23: external music input (P2 jack).

K. CN25: serial cable connection (RS232).

L. CN14: connection of external actuation interface and emergency call device (alarm sensor).

M. CN13: connection for IP 700 porter interface.

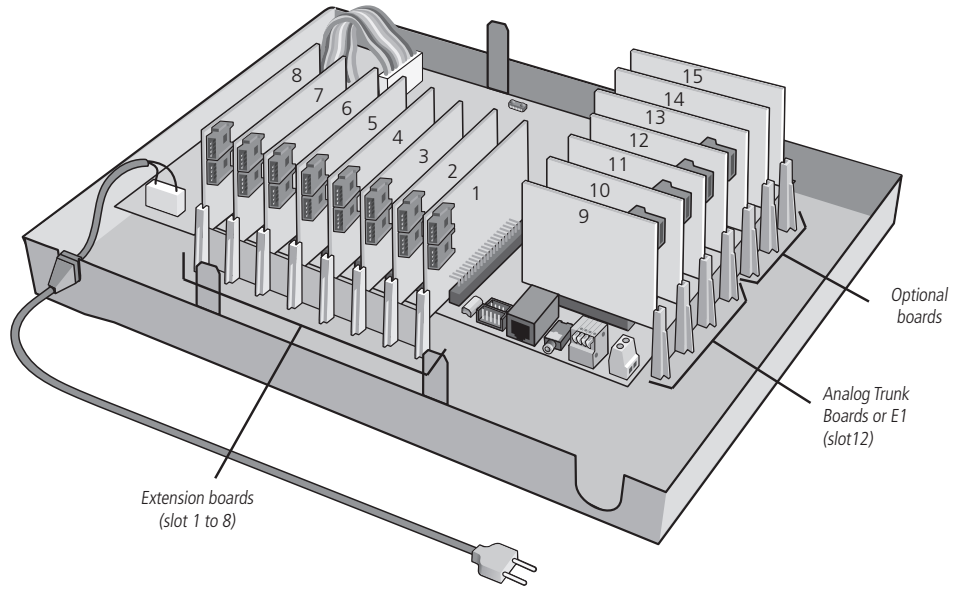
N. J14: : Battery jumper. The jumper must be connected during installation to avoid possible loss of date and time (central schedule) every time the switch's AC power is cut.

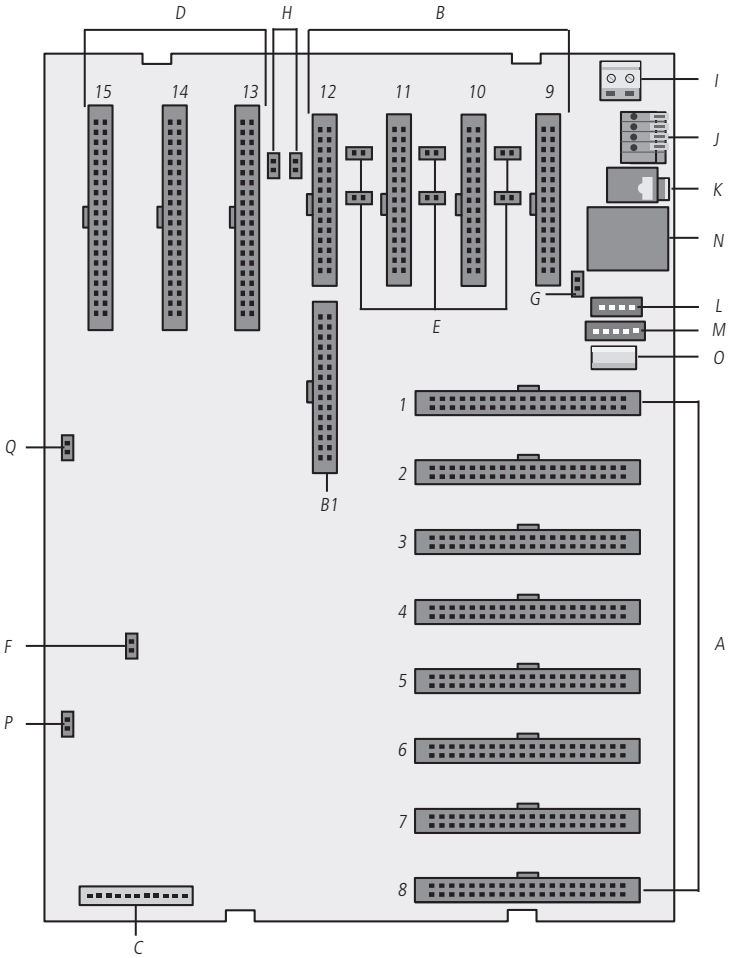
O. CN24: USB cable connection.

P. J15: Watchdog.

Installation diagram of the Central Impacta 68 and Impacta 68i

Central overview, boards and connections:





Slot 1 a 8

A. Slot1/CN22 to Slot8/CN15: connection of the extension boards.
B. Slot9/CN11, Slot10/CN10, Slot11/CN8 and Slot12/CN7: connection of analog trunk cards. B1. CN6 to CN7: E1 digital trunk card connection.
C. CN1: power supply connector.
D. Slot13/CN5, Slot14/CN3 and Slot15/CN2: connection of option boards. E. J1, J11, J12, J3, J6 and J13: jumper for line coupling.

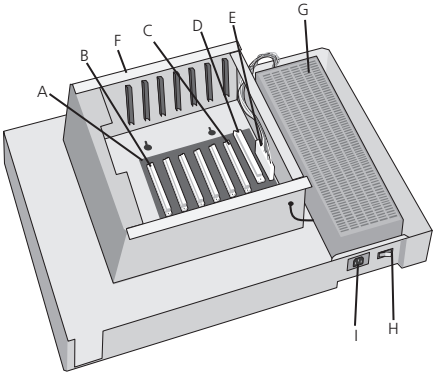
Note: *if the last positions of the boards' extensions are muted, check the configuration of these jumpers.*

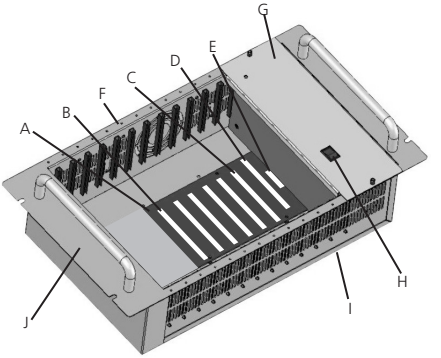
Slot	Trunk	Jumper
Slot9/CN11	no board	J1 and J11 closed
	with board	J1 and J11 open
Slot10/CN10	no board	J3 and J12 closed
	with board	J3 and J12 open
Slot11/CN8	no board	J6 and J13 closed
	with board	J6 and J13 open

E. J2: full reset (hard reset). G.J10: DCDB.
F. J16 and J17: for E1 trunk slot 12, jumpers closed. For analog trunk, open jumpers.
G. CN9: plant grounding. J. CN12: technical reserve.
H. CN23: external music input (P2 jack).
I. CN14: connection of external actuation interface and emergency call device (alarm sensor). M. CN13: connection for IP 700 porter interface.
J. CN25: serial cable connection (RS232). O. CN24: USB cable connection.
K. J15: Watchdog.
L. J14: battery jumper. The jumper must be connected during installation to avoid possible loss of date and time (central schedule) every time the switch AC power is cut off - J14.

Installation diagram of the Impacta 94/140/94 R/140 R

Central overview, boards and connections:

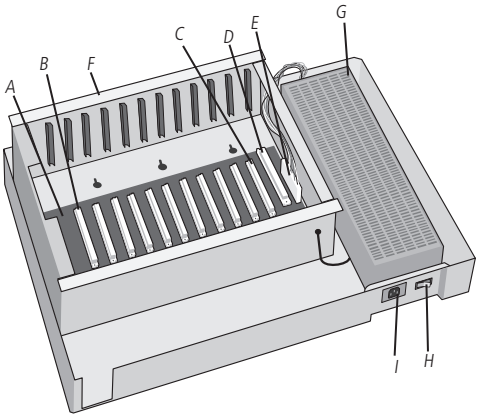


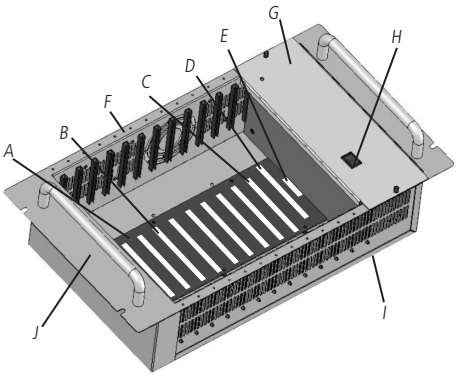


A. Backplane board.
B. Slot 1 to 6: board connection:
   » Analog extension board (16 extensions per board).
   » Mixed extension board (4 digital extensions + 12 analog extensions).
   » Digital extension board (16 extensions per board).
   » Trunk board (8 per board).
   » Trunk/extension card (2 trunks per card and 12 analog extensions).
   » Accessory base board.
   » Board 24 analog extensions (24 extensions per board).
   » GSM or GSM/3G trunk board (4 or 8 channels per board).
C. Slot 6: E1/2E1 board connection, if installed.
D. CPU slot: CPU board.
E. Power supply connector.
F. Metal cabinet (all boards come with factory metal profile for fastening).
G. Power Supply.
H. On/off switch.
I. AC input (three-pole cable).
J. Sub Rack 19".

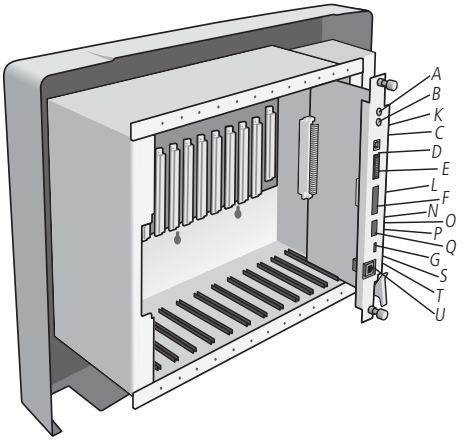
Installation diagram of the Impacta 220, 220 R and 300 R

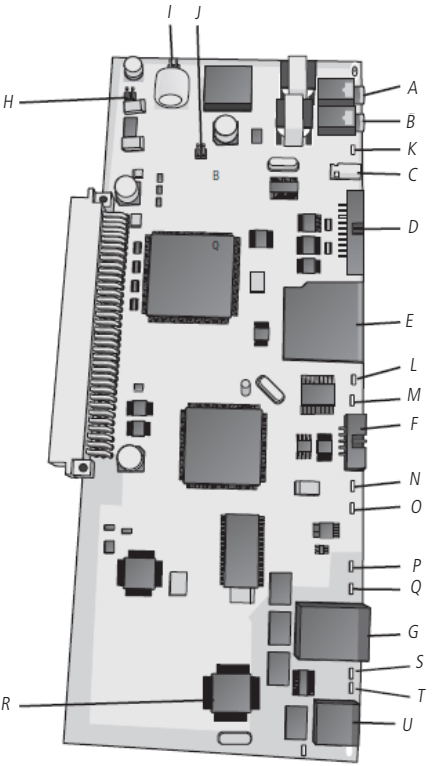
Central overview, boards and connections:





A. Backplane board.
B. Slot 1 to 11: board connection:
   - » Analog extension board (16 extensions per board).
   - » Mixed extension board (4 digital extensions + 12 analog extensions).
   - » Card 24 analog extensions (24 extensions per card).
   - » Digital extension board (16 branches per board).
   - » Trunk board (8 per board).
   - » Trunk/extension board (2 trunks per board and 12 analog trunks).
   - » Accessories Base Board.
   - » GSM or GSM/3G trunk board (4 or 8 channels per board).
C. Slot 11: E1/2E1 board connection, if used.
D. CPU slot: CPU board.
E. Power supply connector.
F. Metal cabinet (all boards come with a factory metal profile for fastening).
G. Power Supply.
H. On/off switch.
I. AC input (three-pole cable).
J. Sub Rack 19".





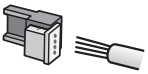
A. CN4: external music input 1.
B. CN5: external music input 2.
C. CN3: USB cable connection.
D. CN1: flat cable connection with E1/2E1 board.
E. CN7: SD Card socket.
F. CN2: connector for firmware recorder.
G. CN6: serial cable connection (RS232).
H. J4: full reset (hard reset).
I. J3: enable clock battery.
J. J6: Watchdog.
K. LD1: USB communication status.
L. LD2: presence of SD card.
M. LD3: SD card communication status.
N. LD6: CPU board initialization status.
O. LD7: CPU model error blocking indicator.
P. LD4: data transmission via RS232.
Q. LD5: data reception via RS232.
R. CI1: Ethernet circuit.
S. LD10: TX/RX Ethernet link.
T. LD9: Ethernet link active.
U. CN10: Ethernet cable connection (RJ45).

3.5. Installation of analog extensions and junctions

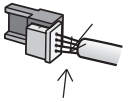
Before installing the extensions, prepare the connector with the wiring from each extension. Each connector holds 2 extensions (4 wires).

Note: the name of the connector used in Impacta is Connector FM plug 180 degrees.

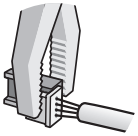
To install, follow the procedure:



1. Place the wires corresponding to the 2 extensions in the female connector. It is not necessary to strip the wires;



2. Place the part where the wires were inserted against the base of the connector until it clicks into place, locking the two parts. Check that the wires are secure;



3. Use universal type pliers to lock the two parts of the connector.

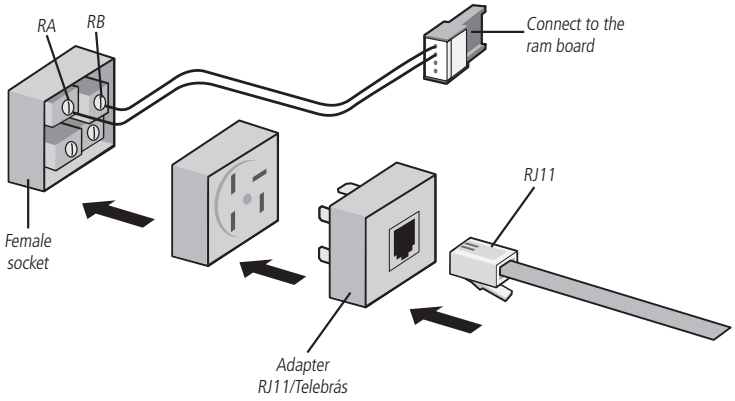
Wires used in extensions:

AWG	Wire diameter	Wire diameter + cover
26	0,4 mm	0,66 mm
24	0,5 mm	0,8 mm

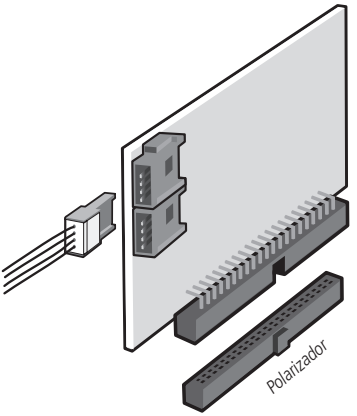
Attention: check if the analog lines are decadic (pulse) or multifrequency (tone) before installing them in the central panel, as this information will be used in the programming of the lines. To verify, put the handset in touchtone mode directly on the phone line and place a call. If the call is completed, the line will accept touchtone dialing.

Installation of extension sockets

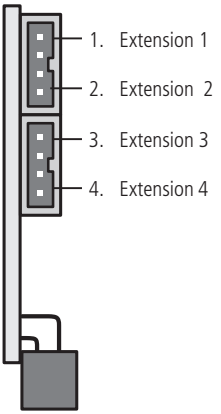
Attach a female socket to the wall where the extension will be installed and connect the wires to the RA and RB outputs, as shown in the following figure:



Extensions of the Impacta 16, Impacta 40, Impacta 68 and Impacta 68i exchanges

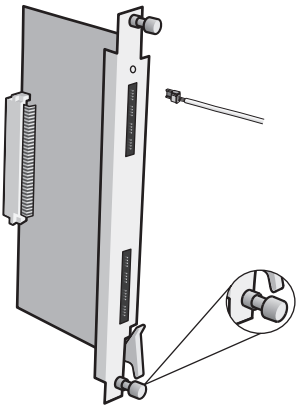


1. Make sure that the extension board (analog, digital or mixed) is perfectly seated in the base connector;

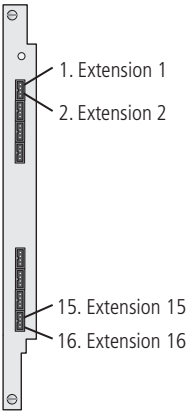


2. Follow the extension numbering sequence (on the mixed extension board, position 1 is a digital extension, the others are analog).

Extensions of the Impacta 94/140/220/94 R/140 R/220 R/300 R



1. Make sure that the fixing screws of the extension board profiles are properly tightened. These screws, in addition to fixing, are responsible for grounding the extension protections;



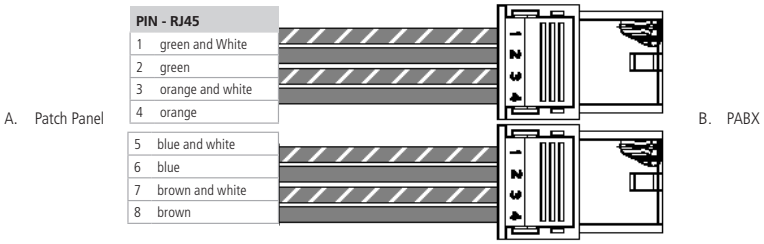
2. Follow the extension numbering sequence (on the mixed extension board, position 1 to 4 are digital extensions, the others are analog).

Note: *for the 24 Extensions board, the extension starts at extension 1 and ends with extension 24.*

Installation of extensions in structured cabling

For the installation of extensions using patch panel and cat5 cable:

- The wiring must be prepared as shown in the figure below. It is not allowed to install extensions for digital extensions.
- Maximum installation distance of Intelligent Terminals (ITs) and the PABX is:
  - Impacta 16, Impacta 40, Impacta 68 and Impacta 68i: 200 m (0.5 mm wire)
  - Impacts 94, 140, 220, 94 R, 140 R and 220 R: 800 m (0.5 mm wire)
  - Impacts 94, 140, 220, 94 R, 140 R, 220 R and 300 R: 600 m (cat5 multi lan cable)



Crimp suggestion: the stubs must be connected in pairs of wires twisted together.

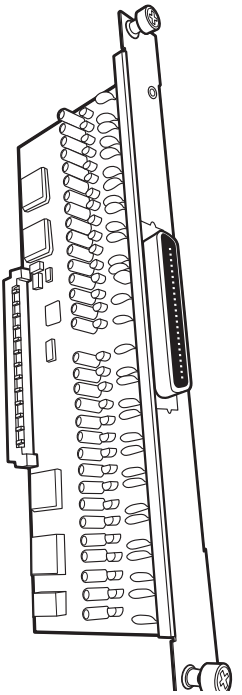
Attention: before connecting the terminal, check that there is no short circuit or low insulation between the wires.

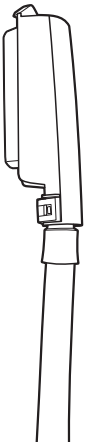
3.6. Installation of analog extensions and junctions

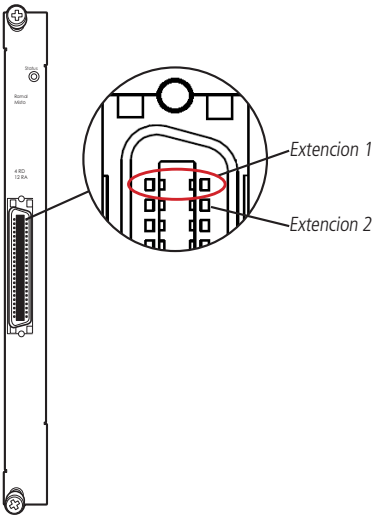
Extensions of the Impacta 94/140/220/94 R/140 R/220 R/300 R

Installation of boards with Champ connector 16 extension, 16 mixed extension and 24 extensions.

» Champ connector boards



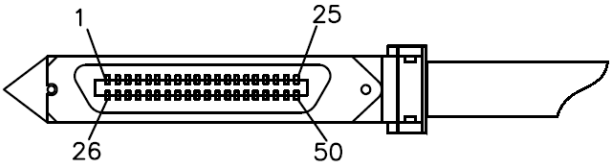




1. Follow the extension numbering sequence as shown on the side. Also check the Champ connector pins and the color coding of the cable.

Note: *for the 24 extensions board, the extension starts at extension 1 and ends with extension 24.*

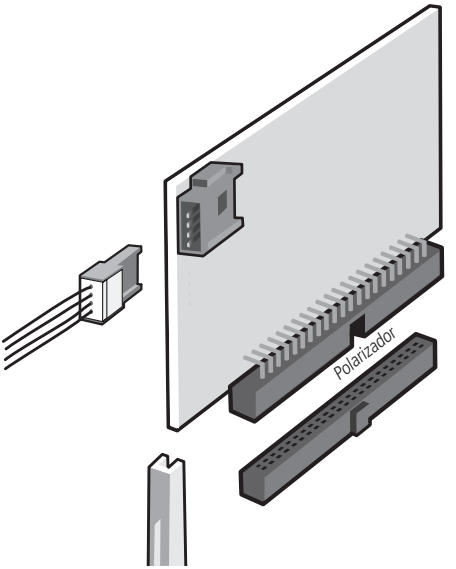
The connection of the extensions of the analog and mixed extension boards is carried out through the Champ CAT.3 24 AWG cable with 25 pairs and connector (CN50P/M).



PINOS	Color									
1	White	6	Red	11	Black	16	AMARELO	21	ROXO
26	Blue	31	Blue	36	Blue	41	AZUL	46	AZUL
2	White	7	Red	12	Black	17	AMARELO	22	ROXO
27	Orange	32	Orange	37	Orange	42	LARANJA	47	LARANJA
3	White	8	Red	13	Black	18	AMARELO	23	ROXO
28	Green	33	Green	38	Green	43	VERDE	48	VERDE
4	White	9	Red	14	Black	19	AMARELO	24	ROXO
29	Brown	34	Brown	39	Brown	44	MARROM	49	MARROM
5	White	10	Red	15	Black	20	AMARELO	25	ROXO
30	Gray	35	Gray	40	Gray	45	CINZA	50	CINZA

Color coded 25-pair Champ cable

3.7. Analog lines of the Impacta 16, Impacta 40, Impacta 68 and Impacta 68i



Make sure the analog trunk card is fully seated in the backplane connector.

1.

Analog trunk circuit packs feature multiple adjustment jumpers; always check the position of each of them before turning on the central.

Analog trunk board and jumper

Ring Sensitivity Jumper

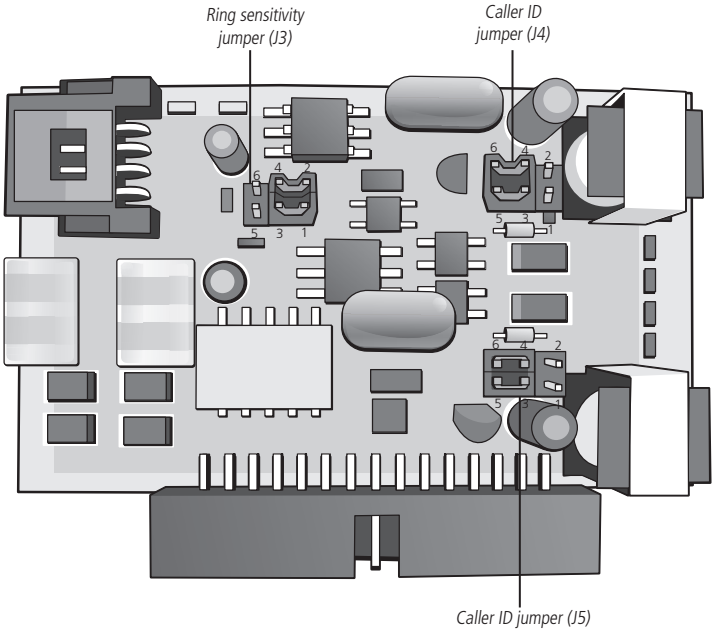
Ringer Sensitivity (J3A and J3B): Change the sensitivity of the circuit that monitors the presence of the ringer on the line (ringing).

- » No jumper: more sensitive
- » Position 1-3 and 2-4: less sensitive (factory default)
- » Position 3-5 and 4-6: avoids false bell (must not be used when configured with polarity inversion. In this case, jumpers J2A and J2B that are soldered on the board must be removed).

Caller ID jumper

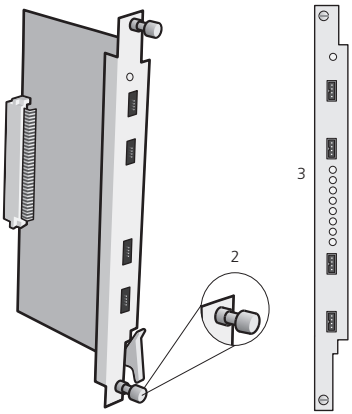
Impacta exchanges have caller ID for all telephone lines without the need for any other accessory. However, it is necessary to program it, enable the function by changing the jumper on the trunk board J4 and J5 and contract this service from the telephone company. J4 and J5 jumper configuration:

- » No jumper: no identification
- » Position 1-3 and 2-4: no identification
- » Position 3-5 and 4-6: enables identification on the line



Analog lines of the Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R

Trunk boards have various jumpers for setting and enabling some features.



1. Make sure the analog trunk board is snugly seated in the backplane connector.
2. Make sure that the screws for fixing the trunk boards to the wall are properly tightened. These screws, in addition to being fixed to the wall, are responsible for grounding.
3. Each trunk board (joint) has the possibility to receive 8 phone lines.

When installing the lines, always check the position of the jumpers on the analog trunk cards that enable the following services:

» Central polarity inversion Impacta 94/140/220/94 R/140 R/220 R/300 R

Jumper J2 (A to H) must be closed to enable the reverse polarity readout circuit used for charging. If your analog lines do not provide this service, these jumpers must remain open.

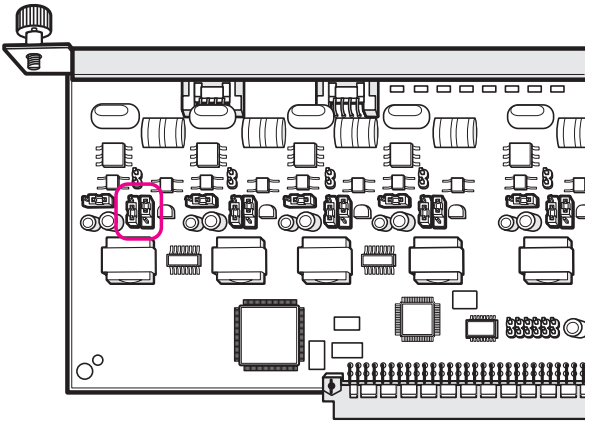
» Polarity reversal sensitivity (J3A and J3B):
  » No jumper: recommended for lines with polarity inversion;
  » Position 3-5 and 3-6: do not use polarity inversion activated.
  » Ring circuit sensitivity

Jumper J1 (A to H) changes the sensitivity of the circuit that monitors the presence of ringing on the line (ringing). J1 jumper positions (A to H):

» No jumper: more sensitive (factory default).
» Position 1-2: less sensitive.
» Position 2-3: avoids false bell (must not be used when configured with polarity inversion. In this case, jumpers j2A and J2B must be removed).
» Caller identification circuit: to enable identification on the exchange board's trunk board, check the numbering of the trunking board.

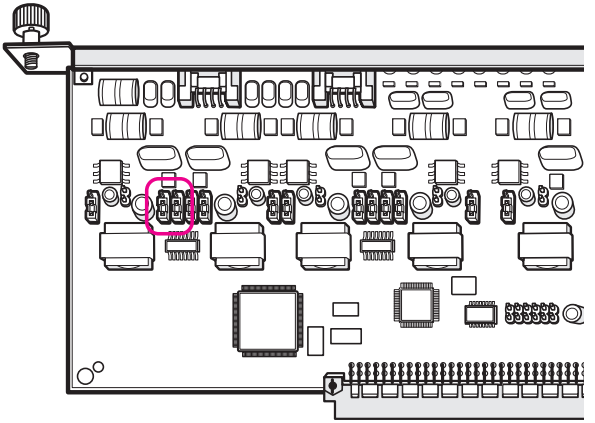
Old boards: 3250461/1 and 3250461/2

Jumper configuration: J3 (A to H) position 2-3 and J4 (A to H) position 1-2 configured for caller ID.



New boards and board 2 joiners and 12 extensions: from 3250461/3.

Jumper configuration: J3 (A to H) and J4 (A to H) set to position 2-3 for caller ID.



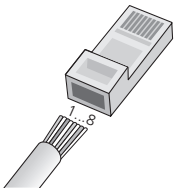
3.8. Connecting to a computer

The central programming can be done from a computer, through programs developed especially for this function. Software communication with the central can take place in the following ways:

Programming via serial interface and ticketing

Use a standard UTP cable with an RJ45 connector on one side and a DB9 connector on the other end, checking the connection diagram in the table below (standard EIA/TIA 568 A).

The cable must have a maximum capacitance of 2500 pF and must not exceed 15 meters in length. This cable can be used both for programming and for billing, but these services will not be used simultaneously. Impacta exchanges can store up to 905 tickets.



RJ45 connector of centra	CPC DB9 connector PC	Computer DB25 connector
1 - White/green		
2 - Green	4 – DCD	20 – DCD
3 - White/orange	2 – RXD	3 – RXD
4 - Blue	5 – GND	7 – GND
5 - White/blue		
6 - Orange	3 – TXD	2 – TXD
7 - White/brown		
8 - Brown		

Attention: to use the cable for programming configured that the jumper J5 on Impacta 16 or J10 on Impacta 40, Impacta 68 and Impacta 68i is open.

To use the affiliate ticketing service make sure that the jumper J5 on Impacta 16 or the J10 on Impacta 40, Impacta 68 and Impacta 68i closed.

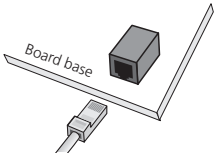
On central Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R, if the CPU board jumper J5 is in the ICTI position. To use the billing service, specify that the J5 jumper on the Impacta 16 or the J10 on the Impacta 40, Impacta 68 and Impacta 68i are closed. In central Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R if the jumper J5 of the

CPU board is in DCDB[1] position.

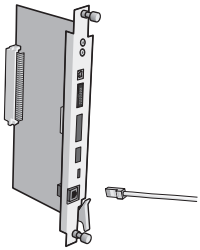
[1] Controls 94, 140, 220, 94 R, 140 R, 220 R and 300 R that have a CPU board with built-in Ethernet do not have jumper J5.

Note: for the billing service, the printer must be configured to receive 8 bits per character, without parity, 1 stop bit and 9600 Baud. This speed can be changed in the central programmer.

Connection of Impacta 16, Impacta 40, Impacta 68 and Impact 68i:



Connection of the Impacta 94, 140, 220, 94 R, 140 R, 220 R power stations and 300 R:



Ticketing

Call tickets will display the following columns of information in the call grid on the PBX activity screen:

Ramal	Juntor	Numero		Data	Hora	Dur	Tipo
316	8901	32325555		06/05	13:56	12	SCH
316	8901	32325555		06/05	13:56	12	SCH
316	8901	32325555		06/05	13:56	13	SAT
316	8901	32325555		06/05	13:56	13	SAT
316	8902	32326666	10	06/05	13:57	12	SCH
316	8902	32326666	10	06/05	13:57	12	SCH
316	8902	32326666	10	06/05	13:57	38	SAT
316	8902	32326666	10	06/05	13:57	38	SAT

Ticketing

- Extension - extension that originated or received the call (up to 10 characters);
- Joiner - joiner number used in the outgoing or incoming call (up to 10 characters);
- Telephone Number - telephone number dialed (outgoing calls) or called (incoming calls) (up to 24 characters);
- Date - date the call was originated or received (5 characters);
- Time - call start time (5 characters);
- Account code - account code used to make the call (5 to 8 characters);
- Duration - duration of the call (up to 6 characters);
- Call type - call class (3 characters), see data below:
  - DNA - incoming only served by DISA (*)
  - EAT - Incoming Attended
  - ENA - unanswered incoming
  - EID - identified incoming
  - EOC - busy incoming
  - EES - incoming on hold
  - ECH - incoming calling
  - SAT - Sainte attended
  - SNA - Sainte not answered
  - SID - Sainte identified
  - SOC - Sainte occupied
  - SES - Sainte on hold
  - SCH - Sainte calling
  - IAT - attended intern
  - INA - unattended internal
  - IID - identified internal
  - IOC - busy internal
  - IES - intern on hold
  - ICH - internal calling
  - Example: 313 8961 843035206 100 08/25 10:31 4 SATRRRRRRRRR JJJJJJJJJ NNNNNNNNNNNNNNNNNNNNNNN CCCCC DD/MM HH/MM TTTTTT ttt

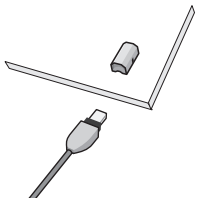
* Available from PBX version 3.20.13.

A column can be blank for a given call. This will occur when the column value is not applicable (for example, in the case of internal there is no joiner) or when there is no associated information (for example, telephone number in incoming calls without subscriber identification). Between the fields there will always be a space. At the end of the ticket there will be two characters: Carriage return (new line) and Line feed (line feed).

In total, a ticket can be 77 characters long for 5-digit account codes and 80 characters for 8-digit account codes.

Programming via USB interface

For communication via USB Interface, use a cable with standard mini-USB type B connector on one side and type A on the other. In Impacta 68 and Impacta 68i this connector is located on the base board of the central. In impacts 94/140/220/300 the connector is on the CPU board.



Central Impacta 40, Impacta 68 and Impacta 68i: CN24 of the base plate or central 94/140/220/94 R/140 R/220 R/300 R. CN3 of the CPU board.

Note:

- » *To use the cable for programming make sure that the jumper J5 on Impacta 16 or J10 on Impacta 40, Impacta 68 and Impacta 68 i are open. On the Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R switches, check if the jumper CPU board J5 is in ICTI[1] position.*
- » *To use the billing service, make sure that the jumper J5 on Impacta 16 or J10 on Impacta 40 , Impacta 68 and Impacta 68 i are closed. On the Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R control panels, check the jumper CPU board J5 is in DCDB[1] position.*

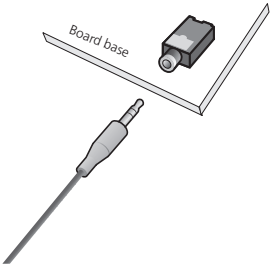
[1] The 94, 140, 220, 94 R, 140 R, 220 R and 300 R switches that have a CPU board with built-in Ethernet do not have the J5 jumper.

3.9. On hold music selection

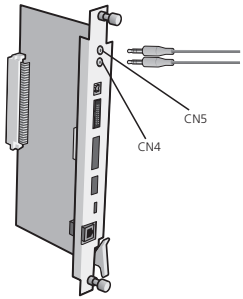
It is possible to play music for all held calls. The central offers the possibility of internal and external digital music (radio, CD player, etc). The centrals Impacta 94, 140, 220 , 94 R, 140 R, 220 R and 300 R allow two options for external music and Impactas 16, 40, 68 and 68i only one option.

The selection of the music on hold source is carried out on the control panel programmer. To install this feature, follow the procedure.

Note: *the cable impedance must be 8 Ω.*



1. Connect the external music source (P2 type connector) to the connector CN13 for Impacta 16 or CN23 for Impacta 40, Impacta 68 and Impacta 68i as shown on the side;



2. Connect the cable with a connector type P2 to the connector CN4 (external music 1) and/or CN5 (external music 2) on the Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R.

4. Operation

4.1. Call answering

All calls received by the central will be answered by the attendant extension or attendant group. This programming is individual per line (joint) of the exchange, and the same attendant extension or attendant group can be programmed for all lines.

Factory programming: extension 20/200/2000 attendant for all lines during the day and 21/201/2001 at night.

Automatic answering

Impacta centrals have a messaging and automatic call answering system (DISA). When activating this feature, the attendance will take place as follows:

The transfer will be forwarded to the line attendant extension when:

- The calling user of the line does not enter anything.
- The user calling the line enters a non-existent, incorrect, or incomplete extension number.
- If the calling user uses a pulse telephone, which is incompatible with the automated attendant system.

Note: » *In the system programming of the exchanges, it is possible to configure a call to be dropped if it cannot be transferred properly by the DISA function.*

» *It is also possible to configure the DISA function so that it only plays the message and forwards it to the attendant extension.*

» *The recording time on Impactas 16, 40, 68 and 68I is limited to 60s for "Day" message, 60s for "Night" message and 73.7s for internal music, however, the total time of recorded messages and music is limited to 73.7s. (Adding DISA day + DISA night + indoor music cannot exceed 73.7 seconds). In impacts 94, 140, 220 and 300, the DISA time remains limited to 60s for the "Day" message and 60s for the "Night" message. The internal music is limited to 90s, totaling a maximum of 210s of recording.*

» *When the originator of the call to the group is an IP Extension, this will not hear the INTERNAL Music while waiting for an answer from one of the extensions of the group, but the ringing tone.*

Answer by caller identit

Through the caller's identity, the exchange can transfer incoming calls directly to previously registered extensions, groups, DISA or Black list. To do this, you must fill in a table in the switch's Scheduler to define a call attendant for each external user number.

This type of service has priority over other forms of inbound routing of the exchange, if the DISA function has been defined for a joiner. However, if the caller's number is identified and is part of the service table using the Caller ID, the call will be forwarded according to the table.

Caller ID is a feature usually provided by telephone operators. Impacta exchanges are prepared to perform caller identification without any additional hardware.

Direct dialing in (DID)

For cases of digital trunking (E1), telephone operators offer a service in which extension numbers become part of the public network's numbering system, being directly accessed during a call.

Note.: *the Impacta 16 and the Impacta 40 do not have the E1 option.*

TO ACCESS THE VIDEO WITH THE STEP-BY--STEP OF THIS PROGRAM, **CLICK HERE.**

4.2. ANI filter

The ANI (Automatic Number Identification) facility, that is, automatic identification of the number, allows you to restrict the reception of calls, via E1 digital junctions, to a list of specific numbers. Only incoming calls from numbers belonging to the list will be directed to the called DID or to the attendant at the ringer. Any incoming call from an identified number that does not belong to this list will be redirected to a specific attendant. This attendant can be any of the extensions, groups or the "DISA" programmed into the switch.

To enable this feature, go to System>ANI Filters, select Enable and choose the attendant for blocked numbers. To register the numbers that will be allowed to access the DDRs, fill in the fields Released number, Ring type and press Add. Repeat this operation to add other desired numbers and then press *Save*.

Filter exceptions ANI

It is possible to register one or more exceptions, thus allowing specific extensions or groups of extensions to receive calls even from blocked numbers. For example: you want to allow calls from any number to be received in DDR 6656. extension 3300, so an exception must be applied to it. Go to Ports>Extensions, select extension 3300, go to User>Miscellaneous tab and check the option Does not check ANI filters. If the DID attendant is a group of extensions, access this group at Ports>Group of extensions and check the option Does not check ANI filters.

4.3. Do not obey follow me from the destination of the call*

The functionality "Do not obey follow me from destination" present in the screen Ports>Extensions>Users>Miscellaneous is used when you want the destination extension to ring even if it has a "Follow me" configured.

Exemple: extension 200 has the option "Do not obey follow me from destination" enabled, extension 201 has a "Follow me" configured for any number (internal or external), when extension 200 calls extension 201, the extension 201 will ring and the call will not go to the number configured in your "Follow Me".

** Functionality available as of PBX version 3.20.08.*

4.4. Making calls

Internal call

- » Access to the operator's extension (9): through the switch's Programmer, it is possible to define which extension will be accessed using code 9. Factory programming: extension 20/200/2000 is the operator's extension of the exchange accessed by code 9 .
- » Last internal call redial: To redial the last internal number dialed at the extension, press # + 1 + *.
- » Take internal prank calls: through a voice message, this feature identifies the last extension that called the number.
- » To listen to the called extension number, press # + 67 + listen to the message + *. If do not want to return the call, do not press the end *.

External call

To make an external call, press 0 + external number.

Factory setting: the extension makes internal, external local, regional, DDD calls and can receive external calls.

- » Redial last external call: To redial the last external number dialed on the extension, press # + #.
- » Take external prank call: Through a voice message, this feature identifies the last external number that called the extension. To hear the number that called, press # + 2 + *.

If you do not wish to return the call, do not press the final *.

Note: *for this feature to be executed successfully, it is necessary that the incoming call has been identified (external caller number detected) by the switch and that the extension has a category for external access. The feature only works for calls without the area code.*

TO ACCESS THE VIDEO WITH THE STEP-BY--STEP OF THIS PROGRAM, **CLICK HERE.**

External call via special route

This feature allows access to the outside line through special routes. In the control panel programming, up to 8 special routes (routes 1 to 8) can be defined.

To use a special route, press 8 + route number (1 to 8) + external number.

Example:

» Using route 1: 81 + external number.

» Factory setting: all lines connected to the switch are pre-configured as route 0 (automatic route).

Note: *before using the special route, it must be programmed in the switchboard programmer.*

External call using account code

The account code is a way of concentrating phone calls (directed to numbers in the public network) in a specific account number, facilitating the accounting of expenses.

An example of an application would be the association of the code to a project account so that, at the end of the project, the cost related to telephone calls can be determined. Every account code may or may not have a password for its use.

Number of accounts from Impacta 16, Impacta 40, Impacta 68 and Impacta 68i: 150 accounts. Number of accounts of the Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R exchanges: 300 accounts.

To make an external call using account code, press 11 + account code + # + account code password + * + external number.

Exemple: make an external call using account 75, whose password is 4325: 11 + 75 + # + 4325 + * + external number.

Note: » *Account code can be created with or without access category (DDD, DDI, etc).*

» *The code, password and category for external account access are defined via the control panel's Programmer or via keyboard*. The account code password is optional and is up to 4 digits long.*

» *Account code is not available for VoIP call.*

» *Password and account code cannot start with the number 0 (zero).*

» *When using IP extension for dialing, the account code can be dialed as follows: 11 + COD + * + Password + * + External number.*

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

External call using account code with quick accesso

In Account Code programming, the Quick Access field can be filled in with a 7-digit value. Thus, it can be used as a faster alternative to command 11 + account code + # + account code password + * + external number.

Example:

» When programming account 75, we added the value 1234567 in the Quick Access field.

» Make an external call using quick access from account 75: 11 + # + 1234567 + external number.

Use of account code with session

It is possible to define the usage time of the account code, such as one session. The goal is not to have to re-enter the account code command with each new call.

The programming of this feature is given by the command * + 66 + [password *] + time + *

» » Command to make calls for 15 minutes on an extension without a password: * + 66 + 15 + *

» » Command to make calls indefinitely: * + 66 + 99 + *

» » Command to disable programming: * + 66 + 0 + *

After configuring the usage time, make the first call using the account code. From the second call onwards, you can only dial 11 + the number you want to call.

Note: *the time is reset with each new call. Therefore, if a 15-minute session is scheduled, after each call ends, another 15 minutes will be available to make new calls. In this example, the session will only expire when it reaches 15 minutes with no new calls.*

Change account password

To change the password, press * + 11 + account code number + # + old password + # + new password + *.

Place calls using the central's general directory

The control panel has a general purpose phonebook with 100 memory locations.

To make calls using the directory, press # + 72 + Directory number + *.

Example:

» Access to phonebook 89: # + 72 +89 + *.

» The call is automatically made to the phonebook number.

Note: *if the extension does not have a category for the number registered in the phonebook, the general phonebook position must be marked as a privileged number and enable the category privileged phonebook access on the extension. For example, in case an extension with category for local access tries to access a long distance or area code number in the directory, the call will only be made if the position in the directory has been enabled as a privileged number and the extension has a privileged directory access category. even if the extension does not have a category for this type of call through the phonebook, it can originate. The general schedule uses the system's output beams to generate calls.*

Attention: only in the Impacta 16 and Impacta 40 switchboard it is possible to program the general phonebook via the extension.

Make calls using the extension's private directory

To place a call using your extension's private directory, press # + 71 + directory number (1 to 10) + *.

Example: consult phonebook 3: # + 71 + 3 + *.

Obs.: » *The definition of the extensions with schedule is carried out in the programmer of the exchange or via keypad*.*

» *See extension schedules to program numbers in the phonebook.*

* Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.

Extension group access

This is a simplified form of calling. Since several extensions are part of the group, any one of them can answer your call.

The Impacta switch allows you to group extensions, facilitating the answering and routing of calls. This function behaves like a call router for the group members according to the group type.

To access the extension group, press 6 + group number + *.

Group number:

» As of version 3.20.02 the number of groups is as follows:

» Impact 16: from 1 to 5 groups

» Impact 40: from 1 to 10 groups

» Impacta 68 and Impacta 68i: from 1 to 20 groups

» Impacts 94, 140, 220, 94 R, 140 R, 220 R and 300 R: from 1 to 40 groups

Group types

Know the types of groups:

» **Distributor:** forwards the incoming call to one member at a time. As members are called, they lose priority on the next call. When a call goes through all the members and no one answers, it goes back to the first member, circulating according to the availability of the group members.

Example: suppose you have programmed the following sequence of extensions 200, 201 and 203 for a distributor group, and the last call went to the one destined for extension 200, the next call will be forwarded to extension 201, and if it is busy or does not answer will go to extension 203.

» **Hospitality Group:** just like the Distributor group, the call is routed to one member at a time. However, members can only be IP extensions. In the INVITE SIP message sent to the IP extension, a new Reason tag is included: SIP; group="613" containing the group number that is directing the call to the extension.

» **ACD:** group ACD (Automatic Call Distribution) distributes calls to group members according to schedule, by time or by number of calls. If not programmed, the distribution mode works as a distributor group.

» **Call Center:** the Call Center group distributes calls to group members according to the schedule, by time or by number of calls. It is similar to the DAC group, but the members of this group are not extensions but agents. In other words, participants will not be added to the group. Instead, accounts must be created.

Creación de agentes: para crear cuentas de agentes, vaya a Sistema>Agente de Call Center.

Puede crear hasta 100 posiciones de agente. El número máximo de agentes conectados simultáneamente a cada conmutador será: Impactos 16: 12 agentes; Impacto 40/68/68i/94/140: 20 agentes; Impactos 220/300 30 agentes.

» **Commands to operate the agent:** * + 81 [password *] + operation + agent + # + password + # + group + *

» **Operación:** operación deseada. 0 para reanudar, 1 para ingresar, 2 para pausar, 3 para reanudar.

- » **Agente:** código de agente
- » **Grupo:** código de grupo de extensión

Example: suppose that a group 1 of the Call Center type was created and then an agent with code 100 and password 1234 was created.

- » Para autenticar al agente en el grupo: * + 81 + 1 + 100 + # + 1234 + # + 61 *
- » Después de ejecutar este comando, el agente estará presente en el grupo, pero en pausa.
- » Para que el agente esté disponible: * + 81 [contraseña *] + 3 + 100 + # + 1234 + # + 61 *
- » Para pausar el agente: * + 81 [contraseña *] + 2 + 100 + # + 1234 + # + 61 *
- » Para eliminar al agente del grupo: * + 81 [contraseña *] + 0 + 100 + # + 1234 + # + 61 *

» **Capture:** use this group to capture calls from a particular department. Create a pickup group with all the extensions in the department and by entering command 560* the extension will pick up the ringing call without needing to know the group number. The PBX will recognize which group the extension belongs to and will only allow pickup of calls from that group. The extension can only belong to one such group. This group will not receive calls, only those directed to extensions.

» **Hierarchical:** just like the Distributor group, the call is routed to one member at a time. However, members have fixed priority to be called. When a call goes through all the members and no one answers, it goes back to the first member, circulating according to the availability of the group members.

Example: suppose you have programmed extensions 200, 201 and 203 for a Hierarchical group, when you receive a call, it will ring at extension 200, if you do not answer, it will ring at extension 200, if 201 does not answer, it will ring at extension 203. it always rings in the same order, regardless of whether the extension answered the call or not.

» **Multi-ring:** all group members are called simultaneously, however the rings are not synchronized. The time the call will remain on each member is the total time of the call or until one member is answered. The extension member of this group can be programmed not to ring for each incoming call, however, it can answer the call, as a member of the group, by picking it up. It is noteworthy that, if there is already a call with a member of the group and another incoming call is in progress, signaling beeps will be sent to the extension being called.

» **Single Ring:** same as Multi Ring group, but only one member will be called. The member who will call is the first member of the group who is free. Any extension in the group answers the call.

Attention: if there are IP extensions in this group, they will ring along with the first available analog or digital extension. If there are only IP extensions in the group, everyone will ring.

Example: suppose it have programmed extensions 200, 201 and 203 to a single ring group, when receiving a call, it will ring only extension 200, but extensions 201 and 203 can answer the call by going off-hook.

» **Router:** has similar characteristics to the Distributor group. This is the only group that allows external diversion of its participants. In other groups, external diversion is not allowed.

Example: suppose it have programmed extensions 200 and 201 for the router group. When you receive a call, it will ring extension 200 until it is answered. The second call will be forwarded to extension 201. If the extensions have configured forwarding, the calls will be forwarded according to the forwarding schedule.

» **Paging:** allows the extension selected as programmer to activate the hands-free feature of all TI extensions in the group and thus transmit audio. This feature will not work for other types of extensions that are in the group, even if they are handsfree. Direct transfer of calls to extensions in this group is not allowed. Only consultations are allowed and must be done only through the extension selected as the group's scheduler, as it is the only one that can originate a call to this type of group.

Direct transfer of calls to group members is not allowed. It only allows consultations, that is, it is not possible to transfer a call, however, it is possible to make a consultation only through the group's programming extension, as it is the only extension that can call this type of group.

Only extensions that are enabled as a program group extension will be able to call the paging group.

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

Group members

Groups can only have extensions as members. An extension can be part of as many groups as needed.

Number of members in the group:

- » **Impacta 16:** 12 extenciones
- » **Impacta 40/68/68i/ 94/140/94 R/140 R:** 20 extenciones
- » **Impacta 220/220 R/300 R:** 30 extenciones

Group schedule

The groups are programmed through the central programmer or via keyboard on Impacta 16* and Impacta 40*. The group member and the time he will remain calling must always be configured, in addition to defining the group type and the group access code.

** Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.*

Access to the chief-secretary

This feature allows quick access between extensions that need to communicate constantly. Every extension can be programmed as Boss or Secretary. Each Chief extension can have up to two Secretary extensions and each Secretary extension up to two Chief extensions.

Optionally, we can arrange for all calls made to the boss to be answered by his secretary. For this to occur, we must always program a diversion from the boss's extension to the secretary's extension. In this case, to transfer the call to the boss, the secretary must use the secretary boss command (FLASH + 121 or 122).

- » **121**: Secretary or Chief 1.
- » **122:** Secretary or Chief 2.

The Chief extension accesses the Secretary 1 extension with code 121 and the Secretary 2 extension with the code 122. The Secretary extension accesses the Chief extension1 com o código 121 e o ramal Chefe 2 com o código 122.

Secretary extension accesses Busy Chief extension

If the Chief extension is busy on another call, the Secretary extension can transfer to the busy extension by placing

call waiting. When the Chief extension becomes free, the call that was on hold automatically returns to the Secretary extension. If the Secretary extension is busy, the call goes to the answering queue. If there is no queue or if it is full, the call is dropped.

The Chief extension accessing the busy Secretary extension

When the Chief extension calls the Secretary extension and the Secretary is busy, a sequence of beeps is automatically generated at this extension, signaling that the Chief extension is calling.

Optionally, it can be programmed so that the Boss extension automatically joins the Secretary extension call in progress (intrusion) when busy. In this situation, the Chief extension hears a warning (tone) of the breach of confidentiality and joins the call after the Secretary extension hears a sequence of beeps.

Intercom of the Chief/Secretary extension

When the telephone set of the Chief or Secretary is a smart terminal, the two can communicate through an intercom, without the need to make a call. To do this, press # + 821 (Boss/Secretary 1) or # + 822 (Chief/Secretary 2).

***Note:** the secretary's speakerphone microphone remains turned off so there is no breach of confidentiality.*

4.5. Transfers

It is possible to transfer an internal or external call, during a call, to another extension or even to another call. To do this, press Flash + extension number and go on-hook.

Example 1

Internal call transfer:

- » Extension 203 is talking to extension 205.
- » Extension 203 dials Flash + 209, waits for ringing tone, and goes on-hook.
- » Extension 209 is called and extension 205 hears ring tone.

Example 2

External call transfer:

» Extension 210 is talking to an outside line.
» Extension 210 dials Flash + 0 waits for dial tone and makes a new outside call, while the first line listens to music.
» As soon as the second line ringing tone is heard, extension 210 goes on-hook.
» The first line stops listening to music and starts to hear ringing tone.
» When the second line answers, a call between 2 trunk circuits is initiated.

Note: » *If the transfer is from one external number to another, in the case of analog trunk circuits, the call is limited to 10 minutes. This time can be programmed via impact programmer.*

» *To make this type of transfer, the extension needs a category releasing the facility. The Join-Juntor transfer feature must be checked. In the factory setting, the extensions do not transfer to an external number.*

Callback after transfer

After a transfer, the call can return to the extension that performed the transfer. There are two cases:

» If the extension or trunk to which the call was transferred does not answer because it is busy or absent, after a while (factory setting: 5 minutes, can be changed from 1 minute to 5 minutes) it will return to the extension that generated the transfer .

or

» When user A calls user B and, over ringtone, consults user C and goes on-hook.
» After this operation, users B and C are receiving a call signal (bell).
» When one of the two answers, he will hear a ringing tone, waiting for the second to answer. If the call is not answered, user A will be called again to speak with the user who has already answered.
» If user A is already busy and does not have any free position in the queue, the call is ended.
» In the case of this transfer, if neither of the two extensions that are ringing (receiving a call) answers, the call is ended without returning to user A.

4.6. Consultation

During a call, use the Flash key to perform some operation, such as: calling an extension, group or external number and making an inquiry. While in consultation, the previous call will be put on hold.

To perform a query, press Flash + desired number.

Note: *to perform a transfer after consulting another extension, hang up.*

Return of the consultation

To return to the call that was on hold while a consultation was being made, press Flash + # + 0. The call with the consulted extension will be ended.

Note: *if the consulted user hangs up, the return will be automatic.*

Hang up the current call and receive internal dial tone for a new call

In this option, the current call is disconnected, but no queue calls are answered. The extension receives an internal dial tone to call another extension or take an external route.

To program during the current call, press Flash + # +11.

4.7. Queue of assistance

Every extension can be configured to have or not queue for incoming calls. When an extension is busy and receives a new call, there are two situations: if the extension has no queue for answering calls, the caller will receive busy tone; if there is an answering queue, the call will be put on hold and the called extension receives an audible warning (beep).

Factory programming: All extensions have a one-position queue, except extensions 20/200/2000 and 21/201/2001 which have a 4-position queue.

Hang up the current call and answer the first one in the queue

To hang up the current call and answer the first in line, press Flash + # + 80.

Put the current call in the queue and answer the first one in the queue

Press Flash + # + 9 and the current call is not disconnected, but sent to the end of the queue (if there is a new vacancy in queue). The first call in the queue is now answered.

Queue the current call and receive internal dial tone

Press Flash + # + 84 and the current call goes to the end of the queue, but no calls in the queue are answered. the extension receive an internal dial tone to call another extension or answer an outside line.

4.8. Hold call

To put a call on hold and perform another operation, press Flash + 4.

Note: » *If the hold time expires and the connection with the second call continues, two beeps signal that the call is on hold. Hang up the handset to receive the first call.*

» *If you have ended the call with the second external call and the hold time for the first call has not expired, you can end the hold and answer the call.*

Factory programming: Call held time is 15 seconds.

4.9. Held call capture

To pick up a call that has been placed on hold at your extension, press 54 + *.

Differences between retention and service queue

There are differences between hold and the answer queue, although in both cases, calls remain waiting for an extension:

- » Hold is only for calls that have already been answered and the answering queue may have calls that have not yet been answered or calls forwarded by an extension.
- » The hold has only one position and the service queue can have its size configured in programming.
- » If the answer queue has been set to size 0, the extension will not be able to receive calls while it is busy, however, it will still be able to place calls on hold and make inquiries.

4.10. Pendulum

This feature makes it possible to exchange the current call for another one that is in the service queue, whether these calls internal or external. To do this, press Flash + 5 + *. If an extension is on a call and another extension is on hold, it can be switched between the two using the Pendulum feature.

Note: *pendulum is not available for the Multi Ring group queue.*

4.11. Pendulum Function with Call Transfer*

Extension receives an internal or external call requesting an external call to be made. Extension dials flash ZERO, dials an external number, after being answered, gives the pendulum command, then perform the pendulum call transfer (FLASH+#63) and disconnect the call. The caller starts talking to the call generated by the extension managing the operation.

Note: *extension must be cleared for Trunk-Trunk transfer if the requestor is not an internal extension.*

** Facility available from version 3.20.13 of the PABX.*

4.12. Call parking

Estacionar uma chamada atendida é deixá-la num local apropriado (estacionamento) para que possa ser capturada no To park an answered call is to leave it in an appropriate place (parking) so that it can be picked up at the appropriate time by the person to whom it is intended. You must notify the existence of the call to be answered and the parking number used.

To park a call, press Flash + 7 , wait to hear the park number, then hang up. A message will inform you of the parking number used for the call.

Central	Parkings
Impacta 16	2 Parking
Impacta 40	5 Parkings
Impacta 68/ 68i	5 Parking
Impacta 94/Impacta 94 R	10 Parkings
Impacta 140/ Impacta 140 R	10 Parkings
Impacta 220/ Impacta 220 R	10 Parkings
Impacta 300 R	10 Parkings

Attention: if the call is not pulled out of parking for a period of three minutes, it will return to the station that parked it. In current versions this period can be set to up to seven minutes.

Call parked pickup

To pick up a call that was placed in the parking lot, press 57 + parking number + *.

4.13. Pick up

This feature makes it possible to answer calls directed to other extensions that have not been answered or are parked or held. It is possible to pick up external and internal calls, with the exception of wake-up calls and callbacks.

See below the types of capture that can be carried out:

- » General pickup: To pick up a call ringing at any extension, press 55.
- » Call pickup from specific extension: To pick up a call ringing at an extension, press # + 5 + extension number + *. Pickup can also be done if the call is in an extension's answer queue and is generating beeps at a busy extension.
- » Extension Group Call Pickup: To pick up a call from an extension belonging to an extension group extensions, press 56 + group number + *.

Note: *this capture will only be performed if your extension belongs to the same group or if the group allows the capture.*

- » Held Call Pickup: To pick up a call that has been put on hold at your extension, press 54 + *.
- » Parked call pickup: To pickup a call that has been parked, press 57 + parking number + *.
- » Boss/Secretary Pickup: picks up a call ringing at an extension that is part of the Boss/Secretary group Secretary. Only extensions that are part of this group will be able to use it.

This feature can be used when the Boss or Secretary extension wants to answer a call ringing at their respective extensions.

- » To capture from Boss or Secretary 1, press 511.
- » To capture from Boss or Secretary 2, press 512.

Note: *chief extensions only capture Secretary extensions and vice versa.*

- » Operator extension call pickup: To pick up a call that is ringing or queued at the operator extension defined as extension 9, press # + 59.

4.14. Intercalation

Intrusion allows you to interfere with an ongoing external or internal call. The requested extension will receive beeps indicating that it will be merged (breach of confidentiality in the call). After 5 seconds, your extension will be entered into the conference with the extensions/line that were in conversation.

To perform an intercalation, press Flash + #8 + *.

Example: : extension 214 wants to talk to extension 221 that is busy with an outside call. lest it be need to wait for it to idle, press Flash + #8 + * over busy tone or over ring tone (extension queued). From that moment, extension 221 will receive beeps signaling that another extension has joined the conversation.

Note: » *During a conversation, the barged extension and its first party will receive beeps.*

- » *Switch schedules define the extensions that can be barged and the extensions that accept to be barged.*
- » *Factory programming: no extension has a category to perform intrusions, but everyone can receive them.*

4.15. Conferences

Conference is a meeting held with two or more people, which can be by extension or external call.

The conference will have a manager, who is the one who created the conference, and who will be responsible for it, being the only one with access to the options. The only action other members can take is to hang up to leave the conference. To start a conference, the manager and participating extensions must have a category to do so.

The conference ends whenever the manager hangs up or when all other participants hang up, leaving only the manager. There is no time limit for a conference.

Create a conference and add participants

To start a conference while talking to another extension or outside line, press Flash + # + 700.

The extension that carried out the command becomes the conference manager and only he can insert and remove participants.

To insert another participant, just repeat the same procedure, that is, the conference manager dials a new extension or line (Flash + number), leaving the others in the conference. Only when the new extension answers does the manager press the command Flash + # + 700 again, returning with the new guest. All invitees are entered individually.

Note: » *During the conference, beeps are sent every 30 seconds indicating the conference status and that participating extensions cannot be barred.*

» *The system allows up to 5 simultaneous conferences with up to 5 participants each. This conference number refers to both the normal, described in this item, and the scheduled one, described in the following item, that is, the sum of the normal and scheduled conferences is limited to 5.*

» *It is not advisable to use more than two analog trunks in a conference made between extensions as the different electrical characteristics of each line can lead to loss of audio level or noise. Not so with digital trunks.*

» *The maximum number of conference participants should not be more than 5, with the limit of two external analog lines.*

Private conversation between the manager and one of the participants

During the conference, the manager can temporarily withdraw to a private conversation with one of the participants. To do this, press Flash + # + 705 + Extension or Line Number + * .

To return to the same reserved conference, the manager must again press Flash + # + 700.

Example:

Extensions 200 (manager), 201 and the external number on line 1 are in conference. To enter into a private conversation with the external number, the manager types the command Flash + # + 705 + 8901 + *.

Exclude participants

For a participant to leave the conference, he just needs to hang up his call. However, the conference manager can delete participants by pressing Flash + # + 701 + Extension or Line Number (89XX) + *.

Note: *the manager cannot perform self-exclusion (must turn it off).*

Transfer conference management

If the manager hangs up the phone, the conference ends. Optionally, manager can transfer management before hanging up by pressing Flash + # + 703 + Extension Number + *.

Transferring a conference call

When the conference has only 3 participants, the manager can withdraw, ending the conference and keeping the call between the remaining 2. To do this, press Flash + # + 707 + *.

4.16. Scheduled conference

The scheduled conference must be programmed in advance, setting the start date and time. The user who schedules the scheduled conference will be the manager and will be able to execute the following commands available in a normal conference:

- » *Flash + # + 701 + extension number you want to exclude from the conference.*
- » *Flash + # + 703 + extension number to which you want to transfer management.*
- » *Flash + # + 705 + the extension number you want to talk to privately.*
- » *Press Flash + # + 707 to transfer a conference call.*

For more details on these operations, see the item *Conferences.*

Schedule a conference

To schedule a conference, press # + 731 + start time + [# + date] + [# + duration] + [# + lock a charge (1)] + [# + calls programmer (1)] + *.

The following variants can be configured:

- » Start time: start hour/minute of the scheduled conference. Uses 24-hour format.
- » Date: start day/month of the scheduled conference (only required if not for the current day).
- » Duration: the scheduled conference can last from 1h to 3h 59 min, with the default schedule being 1 hour.
- » Collect block: block the collect call or not. You only need to enter this part of the command if you want to unblock collect calls. In that case, enter 0. Factory programming is with lockout.

» Scheduler call: defines whether the scheduled conference scheduler will be called when the first participant enters the room. You only need to type this part of the command if you want to call the programmer. In that case, type (1). Factory programming does not call the programmer.

Example 1:

Schedule a conference for March 14th at 4 pm. Duration of 1 hour with DDC lock and no call scheduler: # + 731 + 1600 + # + 1403 + # + # +# + 0 + *.

Example 2:

Schedule a conference for March 14th at 1:30 pm, with default setting: # + 731 + 1330 + *.

Example 3:

Schedule a conference for February 2nd, at 8 am, with a duration of 2 hr 30 min, with DDC lock and call the programmer: # + 731 + 0800 + # + 0202 + # + 0230 + *.

If the programming is correct, the user will hear the number of a password that must be confirmed by the manager through his dialing. This password must be disclosed to conference participants as it will be required upon entering the room.

If the schedule is not accepted due to lack of room available for the desired date and time, or due to a typing error, the user will hear an incorrect programming tone.

Note: » *The schedule can be made up to 10 days in advance.*

» *The extension must have a category to release the conference scheduling.*

» *The system allows up to 5 conferences with 5 participants each. This total of conferences is the sum of normal and scheduled conferences.*

» *It is possible to schedule a conference even if you are outside the company. However, before starting the configuration, you must use the Executive Line feature and go through the authentication process. For this type of configuration, the system does not offer the option of calling the programmer when the first participant enters the room.*

Cancel a scheduled conference

Only the manager can cancel a scheduled conference. To cancel programming: Press #732 + password + * .

The password is provided at the time of scheduling.

Join internal user conference

O usuário interno que conhecer a senha pode entrar na conferência agendada no período programado.

The internal user who knows the password can join the scheduled conference at the scheduled time. Press # + 730 + listen to the message + password + *.

After the code, the system answers the call and asks for the access password. If the password is correct, he will enter the room automatically. If the conference room is full of members capacity, the user will hear message and disable tone.

If any participant enters before the manager, the Scheduled Conference Service can generate a call to the manager, who when answering will also hear the message requesting a password. This call cannot be picked up by other extensions, but can be Diverted always or Divert if no answer. This makes it possible, for example, to schedule a conference and leave the company, leaving an external diversion schedule on your extension. It is important to point out that, in this case, the user will not be able to execute the manager commands, since the central office does not have the Flash key.

Any participant can leave the conference (hang up) and rejoin.

If no user enters the conference room within the scheduled time, the conference will be cancelled. The Scheduled Conference service does not check the category (except the manager), but the access password.

Add extensions to the scheduled conference

The user who knows the password can also add extensions to the scheduled conference. To add, just make a call to the extension you want to include, wait for the answer and type the command: Flash + # + 730 + listen to message + password + *.

To add two extensions: call the first and wait for an answer. Make an inquiry to the second, wait for the service and type the command.

Note: *when you are in a conference and want to look for a new participant, just make an appointment, wait for the service and type the command again. In this case, entry is straightforward as authentication has already been performed once.*

Join scheduled external user conference

The simplest way for an external user to join a scheduled conference is to be entered by an extension that is already there. In this case, the external call (also works for internal) must be answered at the extension of someone you know the code to enter the scheduled conference and be able to send the call to the service. Insertion is always from most recent call. Thus, if a user is in conversation on a call, answers a second call and makes the insertion, the call that is inserted will be the last answer. The extension that answered must inform the password to the external user, as it will be requested after insertion. To insert, press Flash + # + 733 and hang up.

The external user who knows the password can join the scheduled conference in three ways:

» When answered by the operator, transfer to Scheduled Conference Service by pressing Flash + # + 733 and hang up.

The call is answered directly by the Scheduled Conference Service, which will ask for the access password. If the password is correct, he will enter the room automatically.

» Via DDR (Direct Inward Dialing): in this case, the system programmer, through the exchange's Programmer, must provide the Scheduled Conference Service with an access code that is part of the DID numbering, that is, the DID number does not call a extension and yes the Scheduled Conference Service. At the scheduled time, the external subscriber, using DDR, accesses the Scheduled Conference service. The call is answered directly by the service, which will ask for the access password (audible message). If the password is correct, he will enter the room automatically.

» Via DISA: the system programmer configures DISA as an attendant for the subscribers (DISA has priority over DID) or configures DISA at a DID extension (for example, at the manager's extension). Arriving at DISA, the call is answered and the external subscriber then hears an answering message. He enters the Scheduled Conference Service entry code (# + 730), the service asks for the password and, if it is correct, he enters the room automatically.

Note: *DDR is an E1 digital trunking facility available on Impacta switches, with the exception of Impacta 16 and Impacta 40.*

End a scheduled conference

The scheduled conference ends if the manager hangs up or reaches the scheduled time limit. One minute before reaching the limit, the members are alerted through beeps.

Management

As long as the user who programmed the conference does not enter the room, the management will have the system.

Note: » All participants have access to Flash, however, only the manager can access the conference commands.

» *In the scheduled conference, the management can be transferred to any other user through the transfer command (# + 703) performed by the manager.*

4.17. Executive line

Allows access to the extension to make calls even outside the environment where the central is installed.

Call Authentication

For analogue junction (with pre-service via DISA)

The attendant of this bundle must be programmed to have pre-attendance via DISA. After the user dials his extension, if it has the Executive Line function enabled, the user will hear 3 beeps and only then will he be able to authenticate through the command #+ 89 + password (when receiving internal dial tone, allowing access to extension features).

For digital junction (with DDR or with pre-service via DISA)

If the call is routed directly to the DID extension and the latter has the Executive Line function enabled, the call will always be pre-answered and charged.

Authentication can be done through the command # + 89 + password (when receiving the internal dial tone, allowing access to extension functions).

If the call is routed to the operator, it will be necessary to authenticate in the same way as in the previous item.

Examples:

» External access through own codes: 0 for Automatic Route, 81 for Route 1, etc.

» » Environment monitoring through its own code: # + 85 + extension to be monitored.

Note: *in this case, the specific categories for the functions are necessary.*

4.18. Various facilities

Attendance by command

The extension that has this feature programmed will only answer calls through a specific command. When the extension is being called and the user goes off-hook, he will receive an internal dial tone and can give the command to answer or make a new call.

To set it, press # + 76.

Note: » The enabling of this programming is done through the central programmer.

» *For the Service by command service, it is mandatory that the extension has a queue.*

Emergency call

It is a preprogrammed call to a number inside or outside the exchange. It can be used to call the company's security department or the police itself. To perform it, press 190.

Note: » *Emergency call can also be triggered by an external device connected to the switch or by an emergency extension. When this device or extension is activated, the exchange will automatically make a call to the extension, or external number, programmed as the receiver of the emergency call. When the call is answered, a message will be played alerting the emergency call.*

» *If, when triggering the emergency call to an internal number, a busy tone is heard, the exchange will signal this call to the emergency extension by sending 10 beeps. This sequence will continue until the extension programmed to receive the emergency call hangs up on the ongoing call.*

» *The emergency number and extension are programmed in the central's Programmer or via keypad in Impacta 16* and Impacta 40*.*

» *The emergency extension must have a queue.*

» *If more than one emergency is programmed, the call command will be 1901 for emergency 1, 1902 for emergency 2, etc.*

** Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.*

Flash generation on the analog line

The Flash command is a small interruption generated in the power supply of a telephone line or an extension, and is generally used when talking, as it serves to alert the control center about the sending of new signaling. To generate a Flash, press Flash + # + 88.

In this case, the Flash serves for the control to receive the command # + 88, which generates a Flash on the line. Next, you need to enter the command you want for the line. Two applications are provided for this feature:

CPA Facilities

FCPA facilities are services offered by telephone operators to public network subscribers, such as Call Waiting. To use them, depending on the service, you must generate a Flash on the phone line by pressing Flash + # + 88 + wait tone + CPA feature code.

Example:

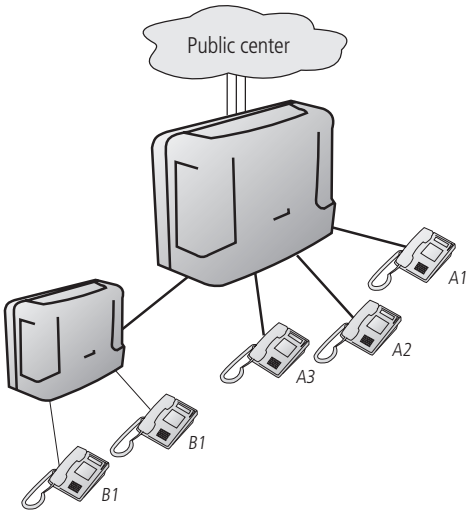
The public network service requires the command Flash + 2. Press Flash + # + 88 + 2.

Operation in subsystem

When a switch is installed on the branches of a larger system to obtain an increase in capacity, the switch is considered to be operating as a subsystem. In this case, to perform operations on the extensions of the main exchange it may be necessary to use the Flash key.

In the following figure, consider the case where an outside call is established with extension B1. To have extension B1 transfer the call to extension B2, press Flash + extension number B2.

To transfer the call to extension A3, Flash must be generated on switch B line, which is switch A extension. To do so, press Flash + # + 88 + extension number A3.



Note: » *For a perfect functioning of the connected lines as subsystems, it is recommended to deactivate the 425 Hz detector on the junction and enable "Do junction-junior transfer" on the extensions.*

» *Flash time can be set between 100 and 900ms, factory default is 300 ms.*

Environment Monitoring

This feature makes it possible to monitor an environment through an extension. It is widely used to monitor the bedroom of children, the elderly, the sick, the disabled and for other particular needs that need monitoring.

Two operations are required:

» In the environment to be monitored, it is necessary to carry out a programming (see item 5.19. Monitoring extension) to place the extension in monitoring status.

» From another extension, you can access the extension being monitored with the following command by pressing # + 85 number from the extension + *.

External monitoring of an environment

To monitor an environment from a location outside the switch, you must use the Executive Line feature. Make a call to the Impacta switch and, when answered by DISA., press # + 89 + extension number + # + extension password + *.

For monitoring, after receiving internal dial tone, press # + 85 + extension number + *.

Music for holdings and waiting

This feature allows you to listen to the music used by the exchange when waiting and holding calls. To listen to the switch's internal music, lift the handset and press # + 86 + 0 +*.

If the control panel is using an external music source and you want to listen to it, lift the handset and press:

+ 86 +1 + * for external music 1 (Impact 16, 40, 68, 68i, 94, 140, 220, 94 R, 140 R, 220 R and 300 R).

+ 86 + 2 + * for external music 2 (Impacts 94, 140, 220, 94 R, 140 R, 220 R and 300 R).

Changing the operating shift (day/night)

Some central programming, especially those related to the category of extensions and attendant extensions, can be differentiated according to the work shift of a company. An example of this occurs with the operator's extension, which, during the work period, has all the privileges and, when the company closes, it becomes a common extension, preventing unidentified people from making unauthorized calls. In the same example, during the company's recess, incoming calls are normally routed to the concierge's extension, which would become the attendant at night.

Normally, two shifts of central operation are defined: day and night. Switching between the two modes of operation can be done manually or automatically at specified times. To do this, press # + 3 + [password + *] + shift number + * (1 for day or 2 for night).

Note: » *This command can only be executed on an operator's extension.*

» *Daytime and nighttime nomenclature is just a convention. A switch can spend the entire weekend in night mode or remain on this shift until it is manually switched to day mode.*

Call to DISA

It establishes a call to the central automatic answering service, being able to listen to messages and enter commands. It can also be used to transfer a call to the Automated Attendant Service.

To place a call to DISA, press #+ 69.

Black list

The Black list function is used to register numbers that will be blocked for service. Once a number has been registered on the black list, it will not be possible to receive a call originating from the registered number.

It allows up to 400 registered numbers. To use this functionality, go to the Routing menu>Answer by number / Black list in the programmer. Enter the calling number to be blocked and select the "Black list" option in the attendant field.

Note: *calls received by the analog bundle are not blocked by the Black list function.*

4.19. Accessory facilities

The following commands and operations refer to accessory features that, depending on the control panel model, may or may not be optional (see item *7. Accessories and options*).

Access to the electronic porter

To access the doorphone and talk to someone who is close by through an extension, press # + 81 + doorman number + *.

Electronic lock opening command

To open the door opener during an intercom call, press Flash + # +*.

Note: *the extensions need a category that allows access to the doorman and opening the lock.*

Access to external work

To control some type of external device, bell, siren or other type of equipment, press # + 83 +
external actuation number + *.

Note: *the external actuation command time is programmable.*

Access to voicemail

To access voicemail to listen to recorded messages, press # + 87 and wait for messages.

Transfer to modem

With the modem card installed in the control panel, it is possible to carry out remote communication between the control panel and a microcomputer. Therefore, when carrying out the programming, it is necessary to make a call to the central and, through the automatic answer, establish communication with the modem card. If automatic attendant is not enabled or for any reason the transfer does not take place, the attendant or any other extension must make the transfer.

To transfer a call to the modem installed on the switch, press Flash + # + 60.

Access to the Personal Search service (Impacts 94, 140, 220, 94 R, 140 R, 220 R and 300 R)

Personal Search is a service that connects the exchange to a loudspeaker system, allowing you to announce your message to answer a parked call or to transmit general notices.

To access this service, press # + 68 + *.

Note: *extensions need a category that allows access to this service.*

5. Programmed facilities at the extensions

When operating the switch, various features are programmed at the extensions, such as Recall, Alarm Clock and Call Forwarding. Most of these services can be associated with the use of passwords. The extension itself defines whether or not it wants to use a password in its programming, and once its use is defined, it will be applied to all cases.

Note: *after executing all programming commands described below, a recorded message will indicate whether the programming was correct or not.*

Attention: in the following command descriptions, the [password*] field represents the extension's password entry. If the user has chosen not to use it, the command should be ignored. In factory programming, no extension uses a password.

5.1. Require password

This programming defines whether or not the switch must require the use of a password in all programming.

To program this function, press * + 50 + 1 + *.

To deprogram, press * + 50 + password + * + 0 + *.

To carry out this programming, it is not necessary to use a password, since until then it is not required. However, once

Once the programming is carried out, its use is required in all programming, including to deprogram it. Factory Programming: No extension password required.

5.2. Extension password

This programming defines a numeric password consisting of up to 8 digits unique to the extension. To program it, press * + 10 + password + * + password + *.

To change the password, press * + 10 + password + * + new password + *.

Note: *if you forget the password, it can be removed through the Control Panel Programmer or via keyboard*.*

** Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.*

Factory programming: password not set.

5.3. Recalls

This programming automatically remakes the ongoing call. When programming the callback, the ongoing call will be terminated.

Note: » *The central only accepts the programming of one internal and one external callback at a time, for each extension.*

» *Programming a new callback deletes the previous one of the same type.*

Programming a callback

The procedure for programming a callback is the same for internal and external calls. Over busy tone, ring tone or during conversation, press Flash + # + 22.

To program a call made from an IP extension, when the originating call was not answered, regardless of

If you have a ring tone or busy tone, you must hang up and start a new call to #22.

Make a callback

In case of callback to an extension that is busy, the central automatically calls the extension that programmed the callback and the extension that was busy as soon as it becomes free. If the extension was absent, the procedure is the same, but the callback is only performed after any extension operation.

In the case of an external number, the central will make successive calls until the recipient is called. When this happens, the extension that programmed the callback will be called. If the recipient answers, you will receive a ringtone. If the programming extension does not answer, the call is dropped and recall is suspended until the programming extension user returns. The central only finds out that the user has returned when the extension is busy for any reason.

The callback is only considered executed when both extensions/lines answer the call.

Cancel a callback

To cancel an external callback, press # + 212.

To cancel an extension callback, press # + 211.

To cancel all callbacks, press # + 21 + *.

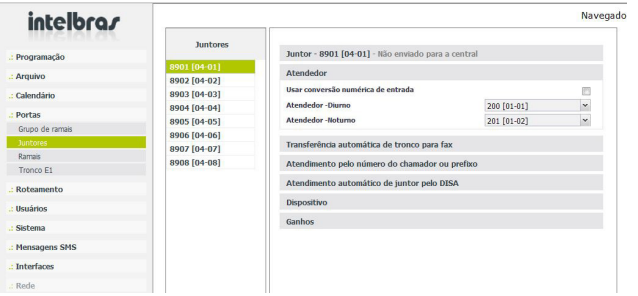
Call Back

This function allows the Impacta switch to make a callback through the E1 Trunk Board, that is, when the switch receives a call through a digital caller, it will identify if the caller's number is in the callback list of the attendant extension of the digital caller. If so, the call will end and then a call will be placed to the identified number (caller's number).

Note: *Impactas 94/94R/140/140R/220/220R/300R also make Call Back through the GSM Trunk Card and GSM/3G.*

Check attendant extension

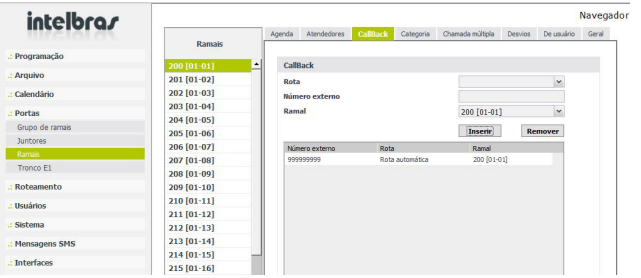
To insert numbers in the callback list, it is necessary to identify which attendant extension of the GSM or digital subscriber will be configured for the Call Back. To identify, access the menu *Ports>Joints* and select the GSM or digital junction that will be configured the Call Back function, access the Attendant submenu, and the attendant extension of the junction for daytime and the attendant extension for nighttime will be displayed.



Entering numbers into the Call Back list

To enter numbers in the callback list, go to the menu Ports>Extensions and select the attendant extension of the GSM junction or digital that the Call Back will be configured, access the Call Back submenu and configure it according to the following procedure:

1. In the Route field, select the Call Back call exit route;
2. In the External number field type the number that will be inserted in the callback list (caller's number);
3. In the Extension field, select the extension to which the incoming Call Back call will be directed;
4. Select the Insert option so that the number is added in the Call Back list;



5. After entering all the numbers, select the Save option and send the settings made through the menu *File>Send Programming*.

Key Features Related to Call Back Facility

- » It is possible to configure up to 50 numbers in the Call Back list of the attendant extension;
- » During callback, only one outgoing call is made, that is, if the external number and/or extension does not answer this call, a second call will not be made to the identified number (caller's number)

5.4. Call diversion

Allows calls received by the extension to be forwarded to be answered by another extension, group, or to an external number.

Note: » *It is necessary to define the category of the extension to program this service. See item Category of extensions for external calls.*

» *The Call Forwarding function is not available for calls originating from an intercom.*

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

Always deviating

All calls directed to the extension will always be forwarded to another extension, group or external number programmed to receive them.

To forward to another internal extension, press * + 43 + [password *] + extension number + *.

To forward to an external number, press *+ 43 + [password *] + route number (0 or 81 to 88) + external number + *.

To branch to a group, press * + 43 + [password *] + 6 + group number + *.

To forward to a post office, press * + 43 + [password *] + #87 + 1 + *.

To deprogram, press * + 43 + [password *] + *.

Note: *when programming Divert always, the extension will have an internal dial tone with warning (continuous tone followed by beeps every second) and will not receive calls until this feature is deprogrammed.*

For call forwarding to an external number, enable the extension to transfer to the trunk and allow external follow-me for calls.

Diversion if busy

Calls directed to the extension will only be forwarded if the extension is busy. The extension with the queue will be considered busy only when the queue is full.

To forward to another internal extension, press * + 44 + [password*] + extension number + *.

To forward to an external number, press *+ 44 + [password *] + route number (0 or 81 to 88) + external number + *.

To branch to a group, press * + 44 + [password *] + 6 + group number + *.

To forward to a post office, press * + 44 + [password *] + #87 + 1 + *.

To deprogram, press * + 44 + [password *] + *.

Note: » *If the incoming call originates from an internal extension, the diversion will only occur after 5 seconds. During this time, the extension that originated the call will receive a waiting tone (1 beep every 0.5 seconds) and you can perform a merge if you have a category for it.*

» *For call forwarding to an external number, you must enable the extension to transfer peer-to-peer and allow external follow-me for calls.*

Diversion if not answered

Programs the call to be forwarded if the extension does not answer after a specified amount of time.

To forward to another internal extension, press * + 42 + [password *] + time to forward (10 to 80 seconds) + extension number + *.

To divert to an external number, press * + 42 + [password *] + time to divert (10 to 80 seconds) + route number (0 or 81 to 88) + external number + *.

To branch to a group, press *+ 42 + [password *] + divert time (10 to 80 seconds)+ 6 + group number + *.

To forward to a post office, press * + 42 + [password *] + time to forward (15 seconds) + #87 + 1 + *.

To deprogram, press * + 42 + [password *] + *.

Note: *for call forwarding to an external number, it must be enabled that the extension transfers together and allows external follow me for calls.*

Direct external call divert

An extension can define whether or not to accept direct outside calls. If you do not want to accept them, you can program a forwarding for an extension or a group of extensions. This is what happens in extensions of users who are in a managerial position and who have a secretary. If a call is made directly to the Chief extension, through its DID number, the call will be answered by the Secretary extension.

To forward the call to an internal extension, press * + 53 + [password *] + extension number + *.

To deprogram the diversion, press * + 53 + [password *] + *.

To forward the call to a group, press * + 53 + [password *] + 6 + group number + *.

To deprogram the diversion, press * + 53 + [password *] + *.

Factory programming: no forwarding of external calls.

5.5. Multiple call

An extension can be programmed so that when receiving an internal or external call, two other external numbers and an internal number can be called simultaneously. When answering the call at one of the configured destinations, calls to the other destinations will be cancelled. To program this feature, access the Multiple Call tab in the desired extension settings.

Make sure that when using this service the time out programming is not configured for the respective joiner.

5.6. Group Call Diversion

This feature allows calls received by the group to be forwarded to be answered by another extension, group or to an outside number.

Note: *the extension must have a category to carry out the programming of diversions for groups. For external diversions, an extension responsible for paying for the call is required. The Search and Router groups do not accept diversions.*

Divert the call always

All calls directed to the group are forwarded to the extension, group or external number programmed to receive them.

To forward to an internal extension, press * + 43 + [password *] + Gp + # + extension number + *.

To forward to an external number, press * + 43 + [password *] + Gp + # + route number (0 or 81 to 88) + external number + *.

To branch to a group, press * + 43 + [password *] + Gp + # + group number + *.

To deprogram, press * + 43 + [password *] + Gp + # + *.

Divert the call if the group is busy

The call is forwarded only when the group is busy.

To branch to an internal extension, press * + 44 + [password *] + Gp + # + extension number + shift+ *.

To Divert to an external number, press *+ 44 + [password *] + Gp + # + route number (0 or 81 to 88) + external number +shift+ *.

To branch to a group, press * + 44 + [password *] + Gp + # + group number + shift + *.

To deprogram, press * + 44 + [password *] + Gp + # + shift + *.

Note: *the group with the queue will only be considered busy when the queue is full.*

Divert call if unanswered

The call is diverted if the group does not answer it after a certain amount of time.

To branch to an internal extension, press * + 42 + [password *] + Tp + Gp + # + extension number + shift + *.

To divert to an external number, press * + 42 + [password *] + Tp + Gp + # + route number (0 or 81 to 88) + external number + shift + *.

To branch to a group, press * + 42 + [password *] + Tp + Gp + # + group number + shift + *.

To deprogram, press * + 42 + [password *] + Tp + Gp + # + shift + *.

5.7. Listen to extension programming

Allows the user to listen to an extension's programming. A message informs you if the extension is programmed with Lock, Do Not Disturb and Forward Always. To listen to the schedules, press * + 86 + *.

Listen to central version

This command allows you to hear the version of the telephone exchange. A message will inform the switch version and the product model.

To hear the version, type the command: * + 60 + 999 + *.

5.8. Programming an extension's private directory

In Impacta exchanges, some extensions can be programmed with particular agendas with 10 memory locations.

Central	Number of extensions
Impacta 16	up to 4 extensions
Impacta 40	up to 12 extensions
Impacta 68 / Impacta 68i	up to 2extensionss
Impacta 94/ Impacta 94 R	up to 20 extensions
Impacta 140/ Impacta 140 R	up to 20extensions
Impacta 220/ Impacta 220 R	up to 20 extensions
Impacta 300 R	up to 20extensions

In the programming of the agenda, two types of accesses can be defined:

- **Individual agenda with access according to the extension category:** makes it possible to record telephone numbers on the extension itself, and the recorded numbers must be according to the extension category.
- **Individual restricted-use agenda:** numbers will be saved in the exchange's Programmer or via keypad* and calls will be made regardless of the extension category.

Note: *this programming is valid for all phonebook numbers.*

To program private phonebook numbers from your own extension, press * + 71 + [password*] + phonebook number (1 to 10) + # + route (0 or 81 to 88) + external number + *.

To deprogram, press * + 71 + [password*] + phonebook number (1 to 10) + # + *.

Note: *the extension must have the individual schedule access schedule (made through the Switchboard Programmer or via keyboard*).*

** Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.*

5.9. Make calls using the extension's private directory

To place a call using your extension's private directory, press # + 71 + directory number (1 to 10) + *.

Example:

See agenda 3: # + 71 + 3 + *.

5.10. Calendar

The central has a calendar in which the date and time are registered for the execution of some features, such as Alarm clock and ticketing.

To configure the calendar, press * + 21 + [password *] + hour (00 to 23) + minute (00 to 59) + day (01 to 31) + month (01 to 12) + year (XX) + *.

Example 1:

An operator extension not configured to require a password wants to program the calendar for 9 h 52 min, November 29, 2005:* + 21 + 09 + 52 + 29 + 11 + 05 + *

Example 2:

An operator extension configured to require a password, which is equal to 555, wants to program the calendar for 17 h 23 min, on January 7, 2006:* + 21 + 555 + * + 17 + 23 + 07 + 01 + 06 + *

Note: *this programming can only be performed on an operator's extension.*

5.11. Alarm clock

It can program the extension to wake up once, on weekdays, every day or every defined period of time.

To program the alarm, press * + 31 + [password *] + alarm code + HH MM + *.

The alarm code could be:

- 1: only once
- 5: business days
- 7: every day
- 9: every defined period of time (minimum 5 minutes)

To cancel the alarm, press* 31 + [password *] + 0 +*.

Example:

Considering that you have chosen not to use the extension password:

Programming	Code
Call alarm at 3 am, once	*31 1 0300*
Call alarm at 5 pm on weekdays	*31 5 1700*
Call alarm at 20:25 every day	*31 7 2025*
Call alarm every 6 hours	*31 9 0600*
Cancel the call alarm	*31 0*

Attention: the calendar must be programmed for the alarm clock to work.

Listen to your extension's alarm clock programming
To hear the alarm schedule, press * + 31 + [password *] + 8 *.

Alarm clock programmed by the operator extension
An operator extension can program the wake-up service for any extension on the exchange. To do this, press * + 31 + [password *] + alarm code + HH MM + extension + *.

5.12. Padlock

Allows you to block the extension so as not to generate external calls. This blocking can be total or according to the chosen category.

To block some call type, press * + 51 + [password *] + 1 + call type + *.

To release a call type, press * + 51 + [password *] + 0 + call type + *.

Types of call:

- 1: Local calls
- 2: Area Code
- 3: DDI
- 4: Regional calls
- 5: Calls to local mobile
- 6: Calls to DDD cell phones
- 7: Calls to IDD cell phones
- 8: Calls to regional cell phones
- 9: Total

Example:

An extension programmed to require a password, being 5454, wants to block calls to cell phones, calls to DDD and DDI. Three schedules must be performed:

- * + 51 + 5454 +* + 1 + 5 +*.
- * + 51 + 5454 + * + 1 + 2 +*.
- * + 51 + 5454 + * + 1 + 3 + *.

Then, to release the lock, press * + 51 + 5454 + * + 0 + 9 + *.

Factory programming: padlock not programmed and all calls released.

5.13. Padlock programmed by the main extension (programmer)

Allows you to enable the lock for extensions via the programming extension.

» Programming the padlock through the main extension: At the main extension, take the phone off the hook, dial: *51 +[Password + *] + 1 + Call type + Extension + *.

» Disabling the lock via the main extension: At the main extension, take the phone off the hook, dial: *51 +[Password + *] + 0 + Call type + Extension + *.

Call Type:

» 1: Local calls
» 2: Area Code
» 3: DDI
» 4: Regional calls
» 5: Calls to local mobile
» 6: Calls to DDD cell phones
» 7: Calls to IDD cell phones
» 8: Calls to regional cell phones
» 9: Total

5.14. Timed padlock

It allows programming a time for the padlock to be disabled, this time can be programmed from 2 to 9 minutes. After the programmed time, the lock will be enabled again on the extension.

In order to program the timed lock function, the extension MUST have a password configured. Refer to 5.1 Require Password and 5.2 Extension Passwords and check how to set the extension password.

After enabling the lock, make the programming as indicated below:

» **If the extension requires a password in all programming:**
*51 +[Extension Password + *]+ Time + 9 *

» **If password is not required in all schedules:**
*51 + Time + Extension Password + *

Example 1: after programming an extension with a total lock and to request a password, which is "20". The user wants to release the extension for 5 minutes to make calls. The following programming must be performed: * 51 + 20 * 5 + 9 *

Example 2: after programming an extension with a cell phone lock and also setting the extension password as "123". The user wants to release the extension for 2 minutes to make a cell phone call. The following programming must be performed: * 51 + 2 + 123 *

5.15. Do not disturb

To activate the Do Not Disturb function, press * + 61 + [password *] + 1 + *.
To cancel, press * + 61 + [password *] + 0 + *.

Example 1: an extension that does not require a password wants to program the Do Not Disturb feature: * + 61 + 1 + *.

Example 2: an extension that requires a password wants to deprogram the Do Not Disturb feature: * + 61 + [password*] + 0 + *.

Note: » *The alarm clock and callback will continue to function normally.*

» *The extension with Do Not Disturb programmed will receive an internal dial tone with warning (continuous tone followed by beeps every second).*

» *The Do Not Disturb function has priority over deviations, that is, deviations will not occur if activated.*

5.16. Hotline

It allows access to an extension, a line of a route, a group or an external number, immediately after going off-hook, without the need for any command.

There are two configurations: with or without delay. In the option with delay, a time is defined (1 to 7 seconds) in which the user can make another call before executing the programmed hotline. In non-delay programming (time of 0 seconds), the call or access to the programmed route is carried out immediately.

- » To program a hotline for an extension, press * + 41 + [password*] + time (0 to 7 s) + extension number + *.
- » To program a hotline for an external number, press * + 41 + [password*] + time (0 to 7 s) + route (0 or 81 to 88) + external number + *.
- » To program a hotline for a route, press * + 41 + [password*] + time (0 to 7 s) + route (0 or 81 to 88) + *.
- » To program a hotline for a group, press * + 41 + [password*] + time (0 to 7 s) + group + *
- » To deprogram a hotline, press * + 41 + [password *] + *.

Note: *the command to deprogram the hotline is only valid for the delayed hotline. The non-delay hotline must be deprogrammed via Impacta programmer.*

Example 1: programming a non-delay hotline for extension 210 at an extension that does not require a password: * + 41 + 0 + 210 + *.

Example 2: programming a hotline with a delay of 5 seconds to the number 33224455 via route 0, at an extension that requires a password (99): * + 41 + 99 + * + 5 + 0 + 33224455 + *.

Exemplo 3: unprogram a hotline at an extension that requires a password (99): * + 41 + 99 + * + *.

5.17. Telemarketing extension

When an extension receives an Intrusion (another user joins the ongoing call) it is notified of this procedure by generating beeps during the conversation. This facility has the function of disabling these beeps through the following procedure:

- » To activate the telemarketing extension (and not generate the beeps), press * + 58 + [password *] + 1 +*.
- » To disable the telemarketing extension (and generate the beeps), press * + 58 + [password *] + 0 + *.

5.18. Timings

Call held time

Through this feature it is possible to determine the time an external call will remain on hold before returning to your extension. To do this, press * + 62 + [password *] + time (5 to 90 seconds) + *.

Factory programming: 15 seconds.

Extension flash time

To program the Flash time, press * + 65 + [password *]. After you hear a beep, press Flash.

5.19. Extension under monitoring

This feature sets the extension to Monitoring mode, through which another extension or an external number can monitor the audio from the location where the telephone is located.

To program, press * + 85 + [password *] + 1 + *.

To deprogram, press * + 85 + [password *] + 0 + *.

After programming, the handset must be off-hook. In the case of a terminal, the phone can

go on-hook, as the speakerphone is automatically activated when monitoring is triggered by another extension.

To access an extension being monitored, press # + 85 + extension number + *.

To monitor an extension, the Monitor category must be activated.

Note: » *Only one extension at a time can monitor an environment.*

» *Several extensions of a switch can be monitored at the same time.*

5.20. Listen to recorded messages (only for operator extension)

To listen to recorded messages, press * + 60 + message number + *.

Message numbers:

- 1: daytime DISA service message.
- 2: DISA night service message.

If you want to listen to all messages, do not enter any message numbers.

5.21. Listen to the central time

To hear the switchboard time, press * + 30 + *.

5.22. Allow transferred callback

This feature defines whether or not you are allowed to return transferred calls. If the transferred call is not accepted, it will be ended.

To enable callback, press * + 52 + [password *] + 1 + *.

To deprogram and no longer allow callback, press * + 52 + [password *] + 0 +*.

Factory Programming: all extensions accept Transferred Callback.

5.23. Temporary Outgoing Extension from Attendant Group Multi-ring

The Multi-ring group is configured so that all extensions are called at the same time when a call is received. This programming applies to extensions belonging to the Multi-ring group.

An extension can schedule you to leave the group and return when desired. To exclude yourself from a group, press * + 81 + [password *] + 0 + *.

To return to a group, press * + 81 + [password *] + 1+ *.

Note: *the programming of the extensions that belong to each of the groups of the exchange is carried out in the Programmer of the Central or via keyboard*.*

** Via keyboard only for Impacta 16 and Impacta 40 from firmware version 3.08.40.*

5.24. Bell Types for Extensions

In Impacta exchanges there are 5 types of calls: external call, internal call, recall, transfer and notice. For each of them, the central has a different cadence already defined in the system that can be changed.

The change may be useful for some models of cordless phone and FAX machines that cannot identify certain ring cadences. In such cases, the ringer can be changed to a type identifiable by the device in question. To change the ringtone, press * + 54 + [password *] + call type + ring type + *.

The type of call can be:

- 1: warning
- 2: external call
- 3: internal call
- 4: callback
- 5: transfer

The bell type can be:

Cód.	Name	Cadence	Ring duration
1	warning bell	1 long press with 4 s of silence	1 s
2	external call bell	1 long press with 4 s of silence	1 s
3	internal call bell	2 shortpresss with 4 s of silence	330 ms
4	callback bell	1 long and 1 short press, and 4 s of silence	long: 180 ms short: 590 ms
5	transfer bell	1 short and 1 long press, and 4 s of silence	long: 590 ms short: 180 ms
6	alarm bell	3 short press and 4 s of silence	200 ms
7	user defined bell	2 short and one long and non-repeating	long: 1 s short: 200 ms
8	porter bell	3 short rings and 4 s of silence	180 ms
9	scheduled conference bell	1 long press and 4 s of silence	1 s

Factory programming: each type of call is associated with the type of ringer of the same name.

5.25. Listen to the extension number

To hear the extension number, press * + 87 + *.

5.26. Types of Music for the Extensions

You can select the music heard by the held call.

To do this, press * + 54 + [password*] + 9 + music + *.

- » Music 1: internal
- » Music 2: music 1
- » Music 3: music 2 (only for Impacta 94, 140, 220, 94 R, 140 R, 220 R and 300 R exchanges)

5.27. Active extension

Impactas centrals allow each extension to have up to four numbers, each with its own settings (Category, Follow-me, Deviation, etc). For one of these numbers to use your categories in calls, it must be active. To activate an extension, press * + 55 + extension number + *.

Note: » *The programming of the numbers is made only by the central programmer.*

» *This feature is only valid for analog and digital extensions.*

6. Programming

6.1. Central Impacta 16 and Impacta 40

Impacta 16 and Impacta 40 from version 3.08.40 onwards allow basic configurations to be easily performed via keyboard.

Enter General Programming mode

Factory programming: General password 1234.

All central programming must be done in General Programming mode. To access this mode, press * + 12 + general password.

To exit General Programming mode, go on-hook.

The central's programming can be done in sequence, it is not necessary to go on-hook for each programming performed. Just type new commands over the correct or incorrect programming message. If you want to anticipate receiving the message, type *, then the codes for the other schedule.

Change of general password

Factory programming: General password 1234.

With this programming, it is possible to define a new general PABX password whenever necessary. This new four-digit password can be made up of any number you choose.

At the Operator extension, lift the handset, enter General Programming mode, enter 32 + current password + new password, wait for the correct programming message.

Example: to change the general password to 2222, enter General Programming and enter 32 + 1234 + 2222.

Line configuration

When carrying out this programming, it will be defined as the way of dialing the line (signaling) that your exchange will operate, you can also block and enable a line.

Factory programming: analog lines released and programmed to operate in multifrequency signaling, receiving and making calls via automatic route 0.

Here's how to identify the type of signaling on your phone line:

Make a call to a regular telephone with the T (tone) and P (pulse) switch in the T position:

- » If there is a good operation, your line has multi frequency signaling, therefore, if the factory programming does not meet these needs, perform the programming described for multifrequency signaling.
- » If the call is not completed successfully, it is because your line has decadic signaling. In this case, before changing the signaling of your switch to decadic, check with the Telephone Company the possibility of changing from decadic to multi frequency signaling, which provides faster dialing and the possibility of accessing various services offered (such as Fallow-me, Call waiting, etc.). If the telephone line does not offer the possibility of changing the signaling of the telephone line to multifrequency, program your exchange for decadic signaling.

Line blocking

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 0, wait for the correct programming message.

Enable line

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 9, wait for the correct programming message.

Make a call in decadic signaling mode

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 1, wait for the correct programming message.

Make a call in multifrequency signaling mode

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 2, wait for the correct programming message.

Only receive calls (does not make calls)

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 3, wait for the correct programming message.

Make and receive calls in decadic signaling mode

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 4, wait for the correct programming message.

Make and receive calls in multifrequency signaling mode

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 5, wait for the correct programming message.

Example: to program line 1 to receive and originate calls in decadic mode, enter General programming and type 31 + 1 + 4.

- » **Line:** 1, 2, 3, 4, 5, 6, 7 or 8, depending on the line you want to program, or 9 to program all lines at once.

Block receiving collect calls - Block DDC

Factory programming: receive collect calls freed for day and night periods.

Whenever the call is received at the trunk or extension programmed with lock, after answering the call, the exchange will open the line momentarily (1 s) and then connect it. Thus, when DDC blocking is active on an analog bundle, every incoming call will have a one-second interruption right after the answer. If the incoming call is collected, this PABX procedure, according to Anatel rules, will cause that call to be dropped. If the call is not collected, it will remain and the conversation will take place normally.

Blocking of receiving a collect call by line

At the Operator extension, lift the handset, enter General Programming mode, dial 4 + line + 81, wait for the correct programming message.

Release receipt of collect call by line

At the Operator extension, lift the handset, enter General Programming mode, dial 4 + line + 80, wait for the correct programming message.

Blocking the reception of a collect call by extension

At the Operator extension, lift the handset, enter General Programming mode, dial 161 + extension, wait for the correct programming message.

Release receipt of collect call per extension

At the Operator extension, lift the handset, enter General Programming mode, dial 160 + extension, wait for the correct programming message.

- **Line:** 1, 2, 3, 4, 5, 6, 7 or 8, depending on the line you want to program, or 9 to program all lines at once.
- **Extension:** default 20 to 31 for Impact 16 and 200 to 231 for Impact 40, accepts the second name of the extension to program.

Caller ID

Identification of calls received on the PBX

Factory Programming: DTMF-enabled caller ID on the line.

This programming enables and selects the type of signaling for subscriber identification in the PBX. It is possible to define some or all lines to receive this feature.

Enable caller ID for DTMF signaling

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 7, wait for the correct programming message.

Enable caller ID for FSK signaling

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 8, wait for the correct programming messages.

Disable caller ID

At the Operator extension, lift the handset, enter General Programming mode, dial 31 + line + 6, wait for the correct programming message.

- **Line:** 1, 2, 3, 4, 5, 6, 7 or 8, depending on the line you want to program, or 9 to program all lines at once.

Note: *for this programming to work, ask your telephone company to send the telephone numbers received on your line.*

Identification of calls received at the extension

Factory programming: Caller ID disabled on analog extensions.

It is the way the identification is generated at the extensions (no identification, DTMF or FSK). If this extension is using a telephone that allows caller ID, simply define whether this ID will be DTMF or FSK. If there is no phone that has the caller ID facility, it is recommended to leave no caller ID.

An extension will only receive the identification of the telephone number that it is calling, when it, even though it is part of a group, receives the ringing on the extension.

Enable DTMF caller ID at extension

At the Operator extension, lift the handset, enter General Programming mode, dial 3797 + extension, wait for the correct programming message.

Enable FSK caller ID on extension

At the Operator extension, lift the handset, enter General Programming mode, dial 3798 + extension, wait for the correct programming message.

Disable caller ID on extension

At the Operator extension, lift the handset, enter General Programming mode, dial 3796 + extension, wait for the correct programming message.

» **Extension:** default 20 to 31 for Impact 16 and 200 to 231 for Impact 40, accepts the second name of the extension to program.

Note: *in digital extensions it is not necessary to do this programming.*

Change of numbering of extensions

Factory programming: numbering of extensions 20 to 31 for Impacta 16 and 200 to 231 for Impacta 40. This programming allows the exchange of numbering between two existing extensions.

At the Operator extension, lift the handset, enter General Programming mode, enter 51 + extension + # + extension, wait for the correct programming message.

Example: two managers have switched rooms and want to continue with their extension numbers, one of the managers has extension 22 and the other has extension 28. Therefore, after entering General Programming mode, type 51 + 22 # 28 or 51 + 28 #22.

Note: » *A few seconds after putting the phone on-hook, the panel will restart.*

» *With this command all the configurations of the extension remain the same.*

Attending calls

Factory programming: Impacta 16, extension 20 programmed as an attendant for all lines in the day shift and the extension 21 for the night shift. It impacts 40, extension 200 programmed as an attendant for all lines in the day shift and extension 201 for the night shift.

With this programming, it is possible to define which extension or group of extensions will be configured as a line attendant.

Program an extension as an attendant on the day shift

At the Operator extension, lift the handset, enter General Programming mode, dial 4 + line + 1 + extension, wait for the correct programming message.

Schedule group as an attendant for day shift

At the Operator extension, go off-hook, enter General Programming mode, dial 4 + Line + 16 + Group No., wait for the correct programming message.

Program an extension as an attendant for the night shift

At the Operator extension, lift the handset, enter General Programming mode, dial 4 + line + 2 + extension, wait for the correct programming message.

Programming a group as an attendant for the night shift

At the Carrier extension, go off-hook, enter General Programming mode, dial 4 + Line + 26 + Group No., wait for the correct programming message.

» **Line:** 1, 2, 3, 4, 5, 6, 7 or 8, depending on the line you want to program, or 9 to program all lines at once.

» **Group:** attendant group of lines 1 to 5.

Note: *even disabled groups can be programmed as attendants.*

Automatic attending

Factory Programming: auto attendant not enabled.

Impacta centrals have a messaging system and automatic call answering called DISA. It can be set for the switch to forward all incoming calls to the bundle programmed for that answer. In case an incoming call goes through this service, the procedure will be as follows:

1. The PABX detects the reception of the call;
2. Answer the call and release the message;
3. Wait for the user to dial;
4. Transfer to the desired extension.

The automated attendant system will not perform the transfer, and the call will be forwarded to the line's attendant extension, in the following cases:

1. The calling user of the line does not enter anything;
2. The calling user on the line enters a non-existent, incorrect, or incomplete extension number;
3. The calling user's telephone uses the pulse dialing system, which is incompatible with the automated attendant system.

Programming DISA as an attendant

At the Operator extension, go off-hook, enter General Programming mode, dial 4 + line + 31, wait for the correct programming message.

Unprogram DISA as a line attendant

At the Operator extension, go off-hook, enter General Programming mode, dial 4 + line + 30, wait for the correct programming message.

Note: *when DISA is enabled, DTMF will be read and the control panel will not drop the call if it cannot be properly transferred by the DISA function.*

External call leak

Note: *this programming is only available for Impacta16 and Impacta 40.*

Missed external call leak (overflow)

Factory programming: No extension has a pre-configured leak.

Defines the extension, group or device of the PBX (for example, Voice Mail) that will receive an external call divert, if not answered within the configured time, regardless of the shift (overflow attendant).

Escape to an extension (overflow)

At the Operator extension, lift the handset, enter General Programming mode, enter 18 + time + extension to forward + # + destination extension, wait for the correct programming message.

Group Escape (overflow)

At the Operator extension, lift the handset, enter General Programming mode, enter 18 + time + extension to forward + # + 6 + Group No., wait for the correct programming message.

Escape to mail (overflow)

At the Operator extension, lift the handset, enter General Programming mode, enter 18 + time + extension to forward + # + #87, wait for the correct programming message.

Escape to DISA (overflow)

At the Operator extension, lift the handset, enter General Programming mode, enter 18 + time + extension to forward + # + #69, wait for the correct programming message.

- **Time:** defines the time for bypassing the connection, performing the leak. Ranges between 01 and 80 seconds.
- **Extension to be diverted:** extension that, when receiving the call and not being answered within the programmed time, will divert the call to the destination extension.
- **Destination extension:** extension that will receive the call.
- **Group number:** group that will receive the call.

Note: *programming the same extension to receive the leak, it is cancelled.*

Extension access category for external calls

Factory programming: extensions with category 2 for day and night.

In order for an extension to be able to access the external line through the PABX, it must program the external call category, defining the type of call (local, regional, DDD or IDD) that it will be able to make.

See below for how to program.

Note: this schedule is only available for Impacta16 and Impacta 40.

For the day shift

At the Operator extension, lift the handset, enter General Programming mode, dial 351 + category + extension, wait for the correct programming message.

for the night shift

At the Operator extension, lift the handset, enter General Programming mode, dial 361 + category + extension, wait for the correct programming message.

For the day and night shift

At the Operator extension, lift the handset, enter General Programming mode, dial 371 + category + extension, wait for the correct programming message.

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

Category:

1. Extension makes internal, external, local, regional, DDD, IDD calls and can receive external calls.
2. Extension makes internal, external, local, regional, DDD calls and can receive external calls.
3. Extension makes internal, external, local, regional calls and can receive external calls.
4. Extension makes internal, external local calls and can receive external calls.
5. Extension makes internal calls and can receive external calls.
6. Extension makes internal calls only.
7. Extension does not make internal calls or inquires to other extensions with this same category, but can receive external calls.

Note: *in category 6, where the extension only makes internal calls, it cannot pick up external calls.*

Attendant extensions of intercom 1 (IP700)

Factory programming: Impacta 16, extension 20 programmed as a day doorman attendant and extension 21 as night. It impacts 40, extension 200 programmed as a daytime intercom attendant and extension 201 as night.

Opening time 1 s and waiting time 15 s.

» Extension: 20 to 31 for Impacta 16 and 200 to 231 for Impacta 40.

With these settings, it is possible to determine an extension, group or external telephone number to handle intercom calls during the day and night. When the porter is activated, the PBX will automatically call one of these numbers.

Programming an extension as an attendant porter

At the Operator extension, lift the handset, enter General Programming mode, enter 53 + hold time + open time + extension, wait for the correct programming message.

Programming a group as an attendant porter

At the Operator extension, go off-hook, enter General Programming mode, enter 53 + hold time + open time + 6 + Group No., wait for the correct programming message.

Programming an external number as an attendant porter

At the Operator extension, lift the handset, enter General Programming mode, enter 53 + hold time + open time + route + External No., wait for the correct programming message.

» Waiting time: waiting time (15 to 90 s).
» Opening time: gate opening time (1 to 5 s).
» Extension: 20 to 30.
» Group number: groups 1 to 5.
» Route: access code to the route (0.81 to 88).

Note: » *Even disabled groups can be programmed as porter attendants.*

» *It accepts programming in any route (0, 81 to 88), even if they are not created.*

» *The attendant porter does not allow call forwarding.*

General Directory

Factory programming: no number programmed.

This programming allows the creation of a collective phonebook containing general use and privileged use numbers to be used by extensions. In this agenda, up to 100 telephone numbers can be memorized, which will be identified by numbering from 01 to 100.

» General directory: available to all extensions of the PBX, as long as they have an external access category (local, regional, DDD or DDI) that allows completing the call.

» Privileged directory: only available to extensions that have a privileged directory access category. The extension categorized to use the General Privileged Use Directory will have external access regardless of its external calling category (local, regional, area code or IDD). For example, your extension might be categorized for local calls only and be categorized for accessing a long distance number via the general privileged use directory.

Note: *to use the general and/or privileged schedule, it is also necessary to configure the system's output beam (Routing - Association of bundles to routes).*

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

Save number in the general Directory

At the Operator extension, go off-hook, enter General Programming mode, dial 70 + position + # + route + No. external, wait for the correct programming message.

Save number in privileged Directory

At the Operator extension, go off-hook, enter General Programming mode, dial 71 + position + # + route + No.

external, wait for the correct programming message.

Erase numbers from the general or privileged Directory

At the Operator extension, go off-hook, enter General Programming mode, dial 70 + position, wait for the correct programming message.

» Position: position of the number in the phonebook (1 to 100).

» Route: access code to the route (0, 81 to 88).

Privileged Directory access category and doorman access category

This programming defines whether an extension has access to the Privileged Agenda and defines a category for the extensions to have access to doorman 1 (IP 700), allowing its opening of the lock.

Category of access to the privileged useDirectory and category of access to porter for daytime

At the Operator extension, lift the handset, enter General Programming mode, dial 359 + category + extension, wait for the correct programming message.

Privileged use Directory access category and night porter access category

At the Operator extension, lift the handset, enter General Programming mode, enter 369 + category + extension, wait for the correct programming message.

Privileged Use Directory Access Category and Porter Access Category for Day and Night At the Operator extension, lift the handset, enter General Programming mode, dial 379 + category + extension, wait for the correct programming message.

Category:

0. Extension does not have access to the privileged use Directory and does not access porter 1.
1. Extension does not have access to the privileged use Directory has porter access 1.
2. Extension has access to the privileged use Directory and does not access porter 1.
3. Extension has access to the privileged use Directory and has porter access 1.

Group of extensions

The Impacta switch allows you to group extensions in order to facilitate the answering and routing of calls. This feature acts as a call forwarder for the extensions that are members of this group. The switch distributes calls directed to the extensions that are members of the group differently depending on the type of group created.

Extensions that are members of a group can belong to more than one group. For example: in a company there is a sales group and a supervisor group. The extension of the sales supervisor can be added to the sales group and also to the supervisor group. In this way, it is possible to call it via the sales group and also via the supervisor group.

Types of groups that can be configured via keyboard:

» **Distributor:** forwards the incoming call to one member at a time. As members are called, they lose priority on the next call. When a call goes through all the members and no one answers, it goes back to the first member, circling, depending on the availability of the group members.

» **Hierarchical:** just like the distributor group, the call is routed to one member at a time. However, members have a fixed priority to be called. When a call goes through all the members and no one answers, it goes back to the first member, circulating according to the availability of the group members.

» **Multi-ring:** all group members are called simultaneously, however the rings are not synchronized. The time the call will remain on each member is the total time of the call or until one of the members is answered. The extension that is a member of this group can be programmed not to ring calls destined for the group, but can answer them by making a pickup.

Create group

At the Operator extension, go off-hook, enter General Programming mode, dial 96 + Group No. + Group type, wait for the correct programming message.

Insert extensions into group

At Carrier extension, go off-hook, enter General Programming mode, enter 95 + Group No. + 1 + extension, wait for the correct programming message.

Exclude extension from group

At Carrier extension, go off-hook, enter General Programming mode, enter 95 + Group No. + 0 + extension, wait for the correct programming message.

Cancel group

At the Operator extension, lift the handset, enter General Programming mode, enter 90 + Group No., wait for the correct programming message.

» **Group number:** groups 1 to 5.

» **Group type:** 1 for distributor, 2 for hierarchical, 3 for multiple rings.

Note: » *In the Distributor and Hierarchical groups, the standard service time at the extensions is 15 seconds, which can be changed by the PC Programmer.*

» *Whenever it's want to create a group, you must first program the group type.*

Boss secretary

Chief-Secretary programming allows quick access between extensions that need to communicate constantly. Up to 4 groups can be formed with the following compositions: a chief and a secretary; a chief and two secretaries; two bosses and a secretary and two bosses and two secretaries.

Program group and position of each extension in this group

At Operator extension, go off-hook, enter General Programming mode, enter 93 + Group No. + Group extension position + Extension No., wait for the correct programming message.

» **Group number:** groups 1 to 4.

» **Position of the extension in the group:**

1. To chief 1.
2. To chief 2.
3. For secretary 1.
4. For secretary 2.

Example: to program a Boss-Secretary Group (Group 1) formed by two Bosses (Extension 22 - Boss 1 and Extension 23 - Boss 2) and a secretary who will be Extension 21. Enter General Programming, enter 12 + General Password (4 digits) and program:

» Extension 22 as boss 1, dial 93 + 1 + 1 + 22.
» Extension 23 as boss 2, dial 93 + 1 + 2 + 23.
» Extension 21 as secretary 1, dial 93 + 1 + 3 + 21.

Note: *it is mandatory to configure boss 1 and secretary 1.*

Deprogram a chief-secretary group

At the Operator extension, lift the handset, enter General Programming mode, enter 93 + Group No. + 0, wait for the correct programming message.

» **Group No.:** groups 1 to 4.

Conference

Factory Programming: Uncategorized extension to create conference. This programming allows you to categorize the extensions to create simple conferences.

Category for Day shift conference

At the Operator extension, lift the handset, enter General Programming mode, dial 355 + category + extension, wait for the correct programming message.

Category for Night shift conference

At the Operator extension, lift the handset, enter General Programming mode, dial 365 + category + extension, wait for the correct programming message.

Category for Day and Night shift conference

At the Operator extension, lift the handset, enter General Programming mode, dial 375 + category + extension, wait for the correct programming message.

Category:

0. Extension does not conference.
1. Extension conferences.

Access category for Intercalation

Intrusion allows you to enter an ongoing call from another extension. This feature is very useful for extensions that need to communicate urgently and cannot wait for the other extension to free up.

When configured that the extension barges in, it means that it can "join" an ongoing call from another extension.On the other hand, the programming Cannot be intrusion defines that the extension cannot be intrusion.

Factory programming: extensions do not barge and can be barred.

Day shift Intercalation category

At the Operator extension, lift the handset, enter General Programming mode, enter 350 + category + extension, wait for the correct programming message.

Night shift Intercalation category

At the Operator extension, lift the handset, enter General Programming mode, dial 360 + category + extension, wait for the correct programming message.

Intercalation category in the day and night shift

At the Operator extension, lift the handset, enter General Programming mode, dial 370 + category + extension, wait for the correct programming message.

Category:

0. Extension does not merge and can be barred.
1. Extension merge and can be merged.
2. Extension does not merge and cannot be barred.
3. Merge Extension and cannot be intrusion.

Extension Data Protection

Activates and deactivates data protection for the extension. In this way the extension does not receive warning beeps, the extension tone becomes similar to the line tone and the ringing of the extension becomes similar to the ringing of incoming external calls.

Data Protection Category

At the Operator extension, lift the handset, enter General Programming mode, dial 378 + category + extension, wait for the correct programming message.

Category:

0. Extension does not have data protection.
1. Extension has data protection.

Category for external diversion

When configuring the extension to have an external divert category, we allow the extension to program External Follow--me, External Divert and Escape from internal or external calls.

At the Operator extension, lift the handset, enter General Programming mode, enter 55 + category + extension, wait for the correct programming message.

Category:

0. Disable.
1. Enable.

Extension Account Code

The account code is a way of concentrating phone calls on a specific account number in order to make accounting for expenses easier. An example of application would be the association of the code to a project account, so that at the end of the project, the cost related to phone calls can be calculated. Every account code has a password to use.

Note: *to use the account code, it is also necessary to configure the system's output beam (routing – association of beams to routes).*

Number of accounts from Impacta 16 and Impacta 40: 150 accounts.

Account code definition

At the Operator extension, go off-hook, enter General Programming mode, dial 74 + account code + # + category + route + password, wait for the correct programming message.

Note: *the password and account code cannot start with the number 0 (zero).*

Cancel Account code

At the Operator extension, lift the handset, enter General Programming mode, dial 74 + account code, wait for correct programming message.

Account code: codes from 1 to 150.

Category:

1. Local, regional, DDD, IDD, local cell, regional cell, DDD cell and IDD cell.
2. Local, regional, area code, local cell, regional cell, and area code.
3. Local, regional, local cell and regional cell.
4. Locations and mobile location.
5. Local, regional, DDD and DDI.
6. Local, regional and area code.
7. Local and regional.
8. Locals.

Route: route access code (ex.: 0 = automatic route access).

Password: code password must be a maximum of 4 digits.

Economic extension

When programming the maximum time for the duration of calls made or received, the PBX will start counting from the minutes of the internal clock, disregarding the fraction of seconds, so the call can be disconnected 01 to 59 seconds before the programmed time.

Example: the maximum time for the duration of calls made or received has been programmed to 5 minutes. You received (or placed) a call at 5:40:30 pm and the call will be dropped at 5:45:00 pm. If you place (or receive) a call at 8:00:20 the call will be dropped at 8:05:00.

Programming the maximum time for the duration of calls made

At the Operator extension, lift the handset, enter General Programming mode, dial 91 + time + extension, wait for the correct programming message.

To deprogram

At the Operator extension, go off-hook, enter General Programming mode, dial 9100 + extension, wait for the correct programming message.

Programming maximum time for duration of incoming calls

At the Operator extension, lift the handset, enter General Programming mode, dial 92 + time + extension, wait for the correct programming message.

To deprogram

At the Operator extension, go off-hook, enter General Programming mode, dial 9200 + extension, wait for the correct programming message.

Time: de 00 to 59 min.

Programming holidays

Holiday programming is necessary for the features: automatic night, automatic activation and alarm clock. Saturdays and Sundays should not be included in this schedule, except when a Saturday or Sunday holiday occurs.

Holiday program at the central

At the Operator extension, lift the handset, enter General Programming mode, dial 152 + day + month, wait for the correct programming message.

Cancel holiday programming

This command deletes all registered holidays.

At the Operator extension, lift the handset, enter General Programming mode, dial 153, wait for the correct programming message.

- **Day:** from 01 to 31.
- **Month:** from 01 to 12.

Programming of time for Saturday

Factory programming: working Saturday until 12:00.

With this schedule you will be able to define until what time Saturday will be considered a working day.

At the Operator extension, lift the handset, enter General Programming mode, dial 17 + hour + minute, wait for the correct programming message.

- **Time:** from 00 to 24.
- **Minute:** from 00 to 59.

Example: for Saturdays to be considered working days until 3:00 pm and from that time onwards to be considered holidays, enter 17 + 1500.

Automatic night attendant

There are situations in which it is necessary for the PBX to change the operating shift (day or night mode) allowing the line attendants to be changed and/or the extension categories to change. If these situations always happen at the same time, use the automatic shift mode. In this mode, the PBX changes the shift automatically at pre-programmed times. Remembering that changing a shift implies considerable changes in the behavior of the central and extensions.

For example, some extensions may have the category to make DDI calls during the period in which the exchange is in daytime and, during the night period, these extensions no longer make DDI type calls.

Example:

Normally, most companies in Brazil start work at 8:00 am, stop for lunch at 12:00 pm, return at 2:00 pm and close at 6:00 pm. This is during the week, from Monday to Friday, that is, weekdays. On Saturday, the office starts at 8:00 am and goes on until 12:00.

Saturdays are partially working days.

Sundays and holidays are closed. Sundays and public holidays are considered non-working days. The ideal is to create the following times to meet this table:

- One working day at 8:00 am.
- One working day at night time at 12:00.
- One day working day at 14:00.
- One weekday night time at 6:00 pm.

This serves the period Monday through Friday (business days) and the beginning of Saturday (partial business day).

Also create a non-working day night time at 12:00 (this will cover Saturdays from noon, Sundays and holidays).

Time programming

At the Operator extension, lift the handset, enter General Programming mode, dial 86 + shift + control + time + minute and wait for the correct programming message.

Cancel programming

At the Operator extension, lift the handset, enter General Programming mode, dial 86 and wait for the correct programming message.

Shift: 0 = Day or **1 =** Night.

Controle:

0. Disabled.
1. Business day.
2. Non-working day.

ACCESS VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE.**

External work access category

Factory programming: extensions do not have access to external operations for day and night periods. It is possible to program the extensions to have access to external operations.

Category of access to external work in the daytime

At the Operator extension, lift the handset, enter General Programming mode, dial 357 + category + extension, wait for the correct programming message.

Category of access to external work at night

At the Operator extension, lift the handset, enter General Programming mode, dial 367 + category + extension, wait for the correct programming message.

Category of access to external work during the day and night

At the Operator extension, lift the handset, enter General Programming mode, dial 377 + category + extension, wait for the correct programming message.

Category:

0. Extension does not have access to external work.
1. Extension has access to external work.

Automatic external work

It allows activating or deactivating external actuation (ITA 700) through the PABX.

A good example of using the ITA 700 external actuation is using it to command the activation of a siren in a school at predetermined times (change of classes, breaks).

In this example, the ITA 700 will activate its internal relay, closing contacts, which will activate the siren at the times defined in this schedule.

Note: *the time the ITA 700 relay will be activated is programmable. Ranging from 0 (zero) to 30 seconds. For safety reasons, if the time is programmed in 0 (zero) seconds, the automatic actuation will interpret as if the maximum time was programmed.*

Definition of schedules for external performance

No ramal *Operadora*, retire o fone do gancho, entre no modo *Programação geral*, digite *84 + dia semana + hora + minuto,* aguarde a mensagem de programação correta.

To deprogram:

At the Operator extension, lift the handset, enter General Programming mode, dial 84, wait for the correct programming message.

- **Weekday:** (1 = Sunday to 7 = Saturday).
- **Time:** from 00 to 23.
- **Minute:** from 00 to 59.

Time in which the external work will be activated

At the Operator extension, lift the handset, enter General Programming mode, dial 14 + time, wait for the correct programming message.

Time: from 00 to 30 s.

Emergency button

Factory setting: For Impacta 16, extension 20 is pre-configured to receive an emergency message during the day and extension 21 during the night.

For Impacta 40, extension 200 is preconfigured to receive an emergency message during the day and extension 201 at night.

It is a device (ITA 700 alarm output) which, when activated, makes the PBX execute a pre-programmed call in which, after being answered, a message is heard saying that there is an emergency and which device was activated.

One use would be, for example, a button on a boss' desk that, when pressed, calls the company's security extension. Upon answering the call, one of the security guards would listen to the emergency message and, knowing where the device is, would immediately send the security guards to the boss's office.

The following settings change the extension/External No. that received the emergency, both during the day and at night.

Programming the extension that will receive the emergency message

At the Operator extension, lift the handset, enter General Programming mode, dial 54 + extension, wait for the correct programming message.

Programming the external number that will receive the emergency message

At the Operator extension, go off-hook, enter General Programming mode, dial 54 + Route + External No., wait for the correct programming message.

- **Extension:** default 20 to 31 for Impact 16 and 200 to 231 for Impact 40, accepts the second name of the extension to program.
- **Route:** access code to the route (ex.: 0 = access to automatic route).

To deprogram:

At the Operator extension, lift the handset, enter General Programming mode, dial 54, wait for the correct programming message.

Emergency call

Factory programming: extension 20 on Impact 16 and extension 200 on Impact 40, pre-configured to receive emergency calls.

The objective of the emergency service of the Impacta exchanges is to activate an extension, group or external number upon the entry of a certain number (by default 190, as it is the same as the public number for access to the police throughout the Brazilian territory), sending it to the receiving an emergency message and then releasing the conversation.

Program the extension that will receive the emergency call

At the Operator extension, lift the handset, enter General Programming mode, enter 52 + extension, wait for the correct programming message.

Program external number that will receive the emergency call

At the Operator extension, go off-hook, enter General Programming mode, dial 52 + Route + External No., wait for the correct programming message.

» **Extension:** default 20 to 31 for Impact 16 and 200 to 231 for Impact 40, accepts the second name of the extension to program.

» **Route:** access code to the route (ex.: 0 = access to automatic route).

To deprogram:

On Operator extension, go off-hook, enter General Programming mode, dial 52, wait for the correct programming message.

Billing

Factory setting: Outgoing Answered Call Logging activated.

The ticketing serves so that, for each operation carried out by the PABX, it issues tickets that are most used in billing software.

Activate incoming and answered call billing

At the Operator extension, lift the handset, enter General Programming mode, dial 221, wait for the correct programming message.

Disable Incoming and Answered Call Billing

At the Operator extension, lift the handset, enter General Programming mode, dial 220, wait for the correct programming message.

Activate billing for incoming and missed calls

At the Operator extension, lift the handset, enter General Programming mode, dial 231, wait for the correct programming message.

Disable Incoming and Missed Call billing

At the Operator extension, lift the handset, enter General Programming mode, dial 230, wait for the correct programming message.

Activate billing of calls received by the PBX and identified

At the Operator extension, lift the handset, enter General Programming mode, dial 201, wait for the correct programming message.

Deactivate billing of calls received by the PBX and identified

At the Operator extension, lift the handset, enter General Programming mode, dial 200, wait for the correct programming message.

Activate billing of outgoing and answered calls

At the Operator extension, lift the handset, enter General Programming mode, dial 211, wait for the correct programming message.

Deactivate the recording of outgoing and answered calls

At the Operator extension, lift the handset, enter General Programming mode, dial 210, wait for the correct programming message.

Activate billing of outgoing and missed calls

At the Operator extension, lift the handset, enter General Programming mode, dial 251, wait for the correct programming message.

Deactivate outgoing and missed call accounting

At the Operator extension, lift the handset, enter General Programming mode, dial 250, wait for the correct programming message.

Enable buffer full lock

At the Operator extension, pick up the handset, enter General Programming mode, dial 241 and wait for the correct programming message.

Disable full buffer blocking

Causes the blocking of outgoing external calls from the PBX if the billing buffer is full.

There is the possibility of programming in the extensions category so that an extension can make outgoing external calls even with the buffer lock active (only by the PC Programmer).

This type of situation, blocking, occurs when the PBX does not download its tickets and this is the result of a problem either in the serial printer or ICTI.

At the Operator extension, lift the handset, enter General Programming mode, dial 240, wait for the correct programming message.

Cancel via Operator extension

Cancel extension password

At the Operator extension, lift the handset, enter General Programming mode, enter 61 + extension, wait for the correct programming message.

Cancel Follow me from extension

At the Operator extension, lift the handset, enter General Programming mode, dial 62 + extension, wait for the correct programming message.

Cancel Do Not Disturb Extension

At the Operator extension, lift the handset, enter General Programming mode, enter 63 + extension, wait for the correct programming message.

Cancel extension lock

At the Operator extension, lift the handset, enter General Programming mode, dial 64 + extension, wait for the correct programming message.

Cancel Extension Password, Follow Me, Do Not Disturb, and Lock all at once

At the Operator extension, lift the handset, enter General Programming mode, dial 65 + extension, wait for the correct programming message.

Cancel internal and external hotline

At the Operator extension, lift the handset, enter General Programming mode, dial 67 + extension, wait for the correct programming message.

DDD/Area code prefix for intelligent terminals

Factory programming: no prefix programmed.

This programming is necessary to use the Caller ID feature on Smart Terminals. At the time of programming, zero should not be entered, for example, if location's area code is

048, enter only 73 + 48.

Program DDD prefix/Area code

At the Operator extension, lift the handset, enter General Programming mode, dial 73 + prefix, wait for the correct programming message.

Cancel DDD prefix/Area code

At the Operator extension, lift the handset, enter General Programming mode, dial 73, wait for the correct programming message.

Note: *the limit for setting prefixes carried out through the programmer is 300.*

General reset

The reset commands cause the PBX's electronic circuits to restart their work from the beginning, as if the PBX were reset. In the case of a general reset, in addition to returning to factory programming, it resets the control buffers and circuits of the PBX. This programming may be needed as a last resort when trying to resolve an unresolved problem, or when wanting the PBX to revert to factory programming once it has been changed.

At the Operator extension, lift the handset, dial * 13 + password + * 99 *, wait for the correct programming message. Approximately 12 s after going on-hook the panel will restart.

6.2. Impacta 68, 68i, 94, 140, 220, 94 R, 140 R, 220 R and 300 R Centrals

Impacta centrals allow, in addition to programming routes, attendants, extension categories and other known options, access to a numbering plan that can change all service codes described in this manual. For this reason, the use of the central Programmer is essential for the Impacta 68, 68i, 94,140, 220, 94 R, 140 R, 220 R and 300 A. For these exchanges, the programming made through telephone terminals was reduced to few facilities.

Entering General Programming Mode

All switch programming must be done in General Programming mode. To access this mode, press * + 12 + general password + *.

Attention: the default general password is 1234.

When the extension is in General Programming mode, the following signals will be heard:

- **TPP (Ready-to-Program Tone):** continuous sound with fast intervals.
- **TPC (Correct Programming Tone):** slow beep sequence.
- **TPI (Incorrect Programming Tone):** rapid beep sequence.

To exit General Programming mode, go on-hook.

Note: *the exchange's programming can be done in sequence, it is not necessary to go on-hook for each programming performed. Just type new commands on the correct (TPC) or incorrect (TPI) programming tone.*

Change general password

The central's general password can consist of up to four digits and can be changed whenever desired. To change the general password, press 1 + # + password + # + password + *.

Factory setting: General password is 1234.

Example: to change the general password to 2222, press * + 12 1234 + * (enter programming) + 1 + # + 2222 + # + 2222 + *.

Programming the extensions queue

At the Impacta switchboards, all extensions can have a service queue. There are several configurations for the answering queues for each extension and they are all made with a single command.

To program the queue for an extension, press * + 12 + password + * + 3 + # + Rm + # + Op + IntFil + AtdCmd + NPos.

The following variables must be defined for programming:

- **Rm:** is the extension number for which programming is being carried out.
- **Op:** defines whether the extensions are common (Op = 0) or operator extensions (Op = 1). Operator extensions perform system programming and the system supports multiple operator extensions.
- **IntFil:** defines whether internal calls to the extension, when it is busy, should enter the service queue (IntFil = 1) or receive busy tone (IntFil = 0).
- **AtdCmd:** defines whether the extension will answer a call through a specific command (AtdCmd = 1). If the user goes off-hook, they will receive a dial tone.

» **NPos:** defines the number of positions in the answering queue of an extension. A common extension can have 0 to 4 positions and an operator extension can have 0 to 20 positions.

Example 1:

Command: ** + 12 1234 + * + 3 + # + 25 + # + 1 + 1 + 0 + 7 + *.*

3 # Rm #	Op	IntFil	AtdCmd	NPos
3 # 25 #	1	1	0	7
extension 25	operator	internal calls join queue	call attendant disabled	as 7 queue positions

Exemplo 2:

Command: ** + 12 + 1234 + * + 3 + # + 28 + # + 0 + 0 + 0 + 3 + *.*

3 # Rm #	Op	IntFil	AtdCmd	NPos
3 # 28 #	0	0	0	3
extension 28	common	internal calls don't queue	service by command disabled	has 3 positions in the queue

Factory programming:

» Extensions 20/200/2000 and 21/201/2001 are operator type extensions.

» Internal call enters the service queue.

» Operator extension has four positions in the queue and the others have one position.

Various extension programming

This setting allows you to enable the Executive Line feature at the extension, whether the extension will receive a line tone when going off-hook, enable time delay for outside calls, and enable the Bunker/Birder Transfer feature.

For other extension settings, press * + 12 + password + * + 4 + # + Rm + # + TomLinh + BlqDDC + LnExec + TpEcoSai + TpEcoEnt + TrfJnJn + *.

The following variables must be defined for programming:

» **Rm:** is the extension number for which programming is being carried out.

» **LineTone:** defines whether, when going off-hook, the extension will receive a line tone (ToneLine = 1) or go without tone (ToneLine = 0).

» **BlqDDC:** defines whether the exchange should block collect calls made directly to the extension (BlqDDC = 1) or not (BlqDDC = 0).

» **LnExec:** defines whether the extension can use the executive line feature (LnExec = 1) or not (LnExec = 0).

» **TpEcoSai/TpEcoEnt:** defines whether the switch should drop a call after a programmed period of time.

» **TpEcoSai (outgoing economic call time):** 00 to 59 minutes. This function is not available in version 3.05.xx.

» **TpEcoEnt (economy incoming call time):** 00 to 59 minutes. This function is not available in version 3.05.xx.

To disable, enter 00.

» TrfJnJn: enables the transfer from joiner to joiner (TrfJnJn = 1) or not (TrfJnJn = 0).

Factory programming:

» Extensions receive dial tone when going off-hook and receive collect calls.

Example:

Command: ** + 12 + 1234 + * + 4 + # + 29 + # + 1 + 1 + 0 + 10 + 00 + 1 + *.*

4 # Rm #	TomLinha	BlqDDC	LnExec	TpEcoSai	TpEcoEnt	TrfJnJn *
4 # 29 #	1	1	0	10	0 0	1 *
extension 29	receive line tone when take the phone off the hook	blocks the receiving collect calls	does not have access to executive line	drop calls output of more than 10 minutes	don't drop incoming calls	enable joiner to joiner transfer

Special Extensions Programming

To perform special programming on an extension, press * + 12 + password + * + 38 + # + Rm +# + Rest + SgExtInt + SgExtEn + BlqBil + *.The following variables must be defined for programming:

- **Rm:** is the extension number for which programming is being carried out.
- **Rest:** defines whether the extension receives (Rest = 0) or not (Rest = 1) incoming calls.
- **SgExtInt:** defines whether the extension can (SgExtInt = 1) or not (SgExtInt = 0) make external Follow-me of internal calls.
- **SgExtEn:** defines whether the extension can (SgExtEn = 1) or not (SgExtEn = 0) make external follow-me incoming calls.
- **BlqBil:** defines whether the extension ignores (BlqBil = 1) or not (BlqBil = 0) the billing block and makes external calls.

Factory setting: extensions receive incoming calls.

Category of extensions for external calls

This programming defines what type of calls the extension can make. To perform it, press *12 + password* + 16 + # Rm # + SCelLoc + SCelReg + SaiCelDDD + SaiCelDDI + SLoc + SReg + SDDD + SDDI + shift + *.

The following variables must be defined for extension programming:

- **Rm:** is the extension number for which programming is being carried out.
- **Shift:** sets access as day or night (1: day, 2: night, 0: both).
- **SCelLoc:** defines whether the extension accesses the local cell number (SCelLoc =1) or not (SCelLoc =0).
- **SCelReg:** defines whether the extension accesses a regional cell number (SCelReg=1) or not (SCelReg=0).
- **SaiCelDDD:** defines whether the extension accesses a DDD cell number (SaiCelDDD=1) or not (SaiCelDDD=0).
- **SaiCelDDI:** defines whether the extension accesses DDI cell number (SaiCelDDI=1) or not (SaiCelDDI=0).
- **SLoc:** defines whether the extension accesses the local number (SLoc=1) or not (SLoc=0).
- **SReg:** defines whether the extension accesses a regional number (SReg=1) or not (SReg=0).
- **SDDD:** defines whether the extension accesses DDD number (SDDD=1) or not (SDDD=0).
- **SDDI:** defines whether the extension accesses DDI number (SDDI=1) or not (SDDI=0).

Factory programming: extensions make calls to local, regional and long-distance cell phones and make local and long-distance calls.

Example:

Command: ** + 12 + 1234 + * + 16 + # + 210 + # + 1 + 1 + 1 + 0 + 1 + 1 + 1 + 0 + 2.*

16 # Rm #	SCelLoc	SCelReg	SaiCelDDD	SaiCelDDI	SLoc	SReg	SDDD	SDDI	Turn
16 # 210 #	1	1	1	0	1	1	1	0	2
extension210	make calls to local cell phone	make calls to regional cell phone	does not make calls to IDD cell phones	does not make calls to IDD cell phones	make local calls	calls regional	realiza chamadas paraDDD	does not make calls to DDI	in turn

Note: *If you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending the programming mode, press 16 + # + Rm + # + shift + *.*

- **Turn:** defines which shift the category will be copied to (1: day, 2: night, 0: both).

Category of extensions for accessing auxiliary prefixes

To make calls using Automatic Route or Alternative Routes, it is necessary to define categories of access to routes and access to the prefix or dialed number.

In addition to the categories of access to local, regional, DDD and DDI (landline and cell phone) numbers, through the Programmer. Central, you can add prefixes to up to eight auxiliary categories.

The Aux1 to Aux8 categories can be used to define (restrict) access to any other type of prefix or number that does not fit into the normal categories, such as calling VoIP number access.

Auxiliary categories are already defined at the factory, but do not have any programmed prefix, except for the Aux8 category which is defined by factory default with prefixes for accessing free services such as: 0800,190 and collect calls. To set categories, press * + 12 + password + * + 15 + # + Rm + # + Aux8 + Aux7 + Aux6 + Aux5 +

Aux4 + Aux3 + Aux2 + Aux1 + shift + *.

The following variables must be defined for programming:

- **Rm:** is the extension number for which programming is being carried out.
- **Turno:** sets access as day or night (1: day, 2: night, 0: both).

Factory programming: access to Aux8.

Example:

Command: ** + 12 + 1234 + * + 15 + # + 240 + # +1 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + *.*

15 # Rm #	Aux8	Aux7	Aux6	Aux5	Aux4	Aux3	Aux2	Aux1	Turn
15 # 240 #	1	0	0	0	0	0	0	0	0*
extension 240	make calls	don't make calls	don't make calls	don't make calls	don't make calls	don't make calls	don't make calls	don't make calls	both

Extension category for services and internal calls

General category 1

In this programming, it is possible to define the extension category for internal calls, group call, category for external action and paging.

To configure general category 1, press * + 12 + password + * + 17 + # + Rm + # + IntSem + IntCond + RecInt + 0 + 0 + IntGrp + Search + Act1 + turn + *.

The following variables must be defined:

- **Rm:** is the extension number for which programming is being carried out.
- **IntSem (Internal Always):** enables (IntSem = 1) or not (IntSem = 0) an extension to make calls to any extension regardless of any condition.
- **IntCond (Internal Conditional):** if activated (IntCond = 1), the extension can make internal calls, but only to extensions that accept to receive them. This variable is only analyzed if the IntSem option is not enabled.
- **RecInt (Internal Receive):** enables an extension to receive internal calls from extensions that have the IntCond option active.
- **0:** fixed value (reserve). It must not be omitted from the command.
- **0:** value (reserve). It must not be omitted from the command.
- **IntGrp:** allows (IntGrp = 1) or not (IntGrp = 0) to make internal calls to a group.
- **Paging:** defines whether the extension has access (Paging = 1) or not (Paging = 0) to Paging.

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

- **Atua1:** defines whether the extension has access (Actuation1= 1) or not (Actuation1 = 0) to External Actuation 1.
- **Turn:** sets access as day or night (1: day, 2: night, 0: both).

Factory programming: all branches perform Internal Always, perform and receive Inquiries, and perform Internal for the group in both shifts.

Note: *if you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending the programming mode, press 17 + # + Rm + # +Shift+ *.*

General category 2

With this programming, it is possible to define whether the extension has access to external action 2, 3 and 4. It also defines whether the extension has fidelity to the inbound/outbound conversion rules, it can merge and access the mail category.

To configure general category 2, press 18 + # + Rm + # + Atua2 + Atua3 + Atua4 + Loyalty + Inter + RecInter + Mail + PerNomade + shift + *.

The following variables must be defined:

- **Rm:** is the extension number for which programming is being carried out.
- **Act2:** defines whether the extension has (Act2= 1) or not (Act2 = 0) access to External Act 2. This function is not available in version 3.16.xx.
- **Actua3:** defines whether the extension has (Actuation3= 1) or not (Actuation3 = 0) access to External Actuation 3.

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **Actua4:** defines whether the extension has (Actuation4= 1) or not (Actuation4 = 0) access to external actuation 4.

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **Fidelity:** defines whether the extension complies (Fidelity = 1) or not (Fidelity = 0) to the inbound/outbound conversion rules.

» **Inter:** defines whether the extension can (Inter = 1) or not (Inter = 0) interleave.

» **RecInter:** defines whether the extension receives (RecInter = 1) or not (RecInter = 0) intrusion.

» **Mail:** allows (Mail = 1) or not (Mail = 0) access to mail.

» **PerNomade:** defines whether an extension can (PerNomad = 1) or not (PerNomad = 0) perform the programming of Extension Nomad in another extension. This function is not available.

» **Turn:** sets access as day or night (1: day, 2: night, 0: both).

Note: *the number of external Actuations available in each control unit will depend on the accessories installed in it. Even if the control panel does not have the external actuations defined, the command does not change and the fields ATUA2, ATUA3 and others are configured with any value (0 or 1).*

Factory Programming: Extensions accept Intrusion and obey Fidelity.

Note: *if you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending programming mode press 18 + # + Rm + # + shift + *.*

General category 3

In this programming, it is possible to enable the conference on the extension, enable the extension for environment monitoring, enable direct access to the joiner and access to the general privileged agenda.

To configure general category 3, press * + 12 + password + * + 19 + # + Rm + # + RecNoma + 0 + Conf + ConfAg + Monit + RecMonit + AcAgPri + AcName + shift + *.

The following variables must be defined:

» **Rm:** is the extension number for which programming is being carried out.

» **RecNoma:** defines whether the extension accepts (RecNoma = 1) or not (RecNoma = 0) to receive nomadic extensions. This function is not available in version 3.16.xx.

» **0:** Fixed value (reserve). It must not be omitted from the command.

» **Conf:** allows to participate (Conf =1) or not (Conf =0) of conferences.

» **ConfAg:** allows (ConfAg=1) or not (ConfAg=0) access to the scheduled Conference. This function is not available in version 3.05.xx.

» **Monit:** allows (Monit =1) or not (Monit =0) monitoring.

» **RecMonit:** receives (RecMonit=1) or not (RecMonit=0) the monitoring.

» **AcAgPri:** allows (AcAgPri =1) or not (AcAgPri =0) access to the general privileged agenda.

» **AcNome:** allows (AcNome=1) or not (AcNome=0) the access to the specific joiner.

» **Shift:** sets access as day or night (1: day, 2: night, 0: both).

Note: *if you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending the programming mode press 19 + # + Rm + # + shift + *.*

General Category 4

In this programming, it is possible to allow the extension to capture a call, allow parking, enable callback, and other features that will be implemented.

To configure general category 4, press * + 12 + password + * + 20 + # + Rm + # + PerCap + PerEst + PerGrav + PerRcExt + PerRech + GrvOut + AutGrav + 0 + D/N+ *.

The following variables must be defined:

» **Rm:** is the extension number for which programming is being carried out.

» **PerCap:** allows capturing (PerCap=1) or not (PerCap=0) a call.

» **PerEst:** allows you to park (PerEst=1) or not (PerEst=0) a call.

» **PerGrav:** allows (PerGrav = 1) or not (PerGrav = 0) the use of the recorder. This function is not available in version 3.16.xx.

» **PerRcExt:** allows (PeRcExt = 1) or not (PeRcExt = 0) an external callback.

» **PerRc:** allows (PerRc = 1) or not (PerRc = 0) internal recall.

» **GRvOut:** allows (GRvOut = 1) or not (GRvOut = 0) to record the call by another extension. This function is not available in version 3.16.xx.

» **AutGrav:** authorizes (AutGrav=1) or not (AutGrav=0) the use of the recorder by another extension.

» **0:** fixed value (reserve). It must not be omitted from the command.

» **Shift:** sets access as day or night (1: day, 2: night, 0: both).

Note: *if you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending the programming mode press 20 + # + Rm + # + shift + *.*

Access to porters

This programming defines whether an extension has access to the porters installed on the exchange. It is possible to enable up to 8 porters. Even if the control unit only has one porter, the command does not change and the other fields are defined with any value (0 or 1).

To configure, press * + 12 + password + * + 21 + # + Rm + # + AbPt1 + AbPt2 + AbPt3 + AbPt4 + AbPt5 + AbPt6 + AbPt7 + AbPt8 + shift + *.

The following variables must be defined:

» **Rm: is the extension number for which programming is being carried out.**

» **AbPt1: allows (AbPt1 = 1) or not (AbPt1 = 0) intercom access 1.**

» **AbPt2: allows (AbPt2 = 1) or not (AbPt2 = 0) the intercom access 2.**

» **AbPt3: allows (AbPt3 = 1) or not (AbPt3 = 0) intercom access 3.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **AbPt4: allows (AbPt4 = 1) or not (AbPt4 = 0) intercom access 4.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **AbPt5: allows (AbPt5 = 1) or not (AbPt5 = 0) intercom access 5.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **AbPt6: allows (AbPt6 = 1) or not (AbPt6 = 0) intercom access 6.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **AbPt7: allows (AbPt7 = 1) or not (AbPt7 = 0) intercom access 7.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **AbPt8: allows (AbPt8 = 1) or not (AbPt8 = 0) intercom access 8.**

Note: *only available for central 94/140/220/94 R/140 R/220 R/300 R.*

» **Shift: sets access as day or night (1: day, 2: night, 0: both).**

Note: *if you want to copy the same category from a newly programmed extension to other extensions, do the following programming without ending the programming mode press 21 + # + Rm + # + shift + *.*

Characteristics of the lines A

This programming enables identification on analog lines, defines the direction of the lines, which type of attendant, dialing system and tone system.

To configure the A lines, press * + 12 + password + * + 24 + # + Jn + # + TpDet + TpJn + TpAtd + TpDisc + CallPrg + *.

The following variables must be defined:

» **Jn:** collector number (8901.8902, etc.).

» **TpDet:** type of identifier. Defines the signaling for identifying the calling subscriber number. is valid only for analog lines and requires contracting the service with the telephone company.

» **TpDet = 0:** line without caller ID.

» **TpDet = 1:** line with identifier using FSK system.

» **TpDet = 2:** line without identifier using standard DTMF system.

» **TpDet = 3:** line with identifier using standard DTMF system operator A.

» **TpDet = 4:** line with identifier using standard DTMF system operator B.

» **TpDet = 5:** line with identifier using standard DTMF system operator C.

- **TpJn:** type of joiner. Defines the direction of the calls on each of the exchange lines, which can be:
  - **TpJn = 0:** unused line.
  - **TpJn = 1:** line that only makes calls.
  - **TpJn = 2:** bidirectional line, receives and makes calls.
  - **TpJn =** 3: line that only receives calls.
- **TpAtd:** type of attendant. This programming is valid for analog lines and defines whether any type of signaling will be received on a line indicating the service of the called subscriber. This signaling serves to start billing and must be contracted with the telephone company. In case of lack of this service, the exchange will start charging after the end of the call control tone.
- **TpAtd = 0:** line with normal answer (detected by ring tone).
- **TpAtd = 1:** service line signaled by voice presence detection.
- **TpAtd = 2:** line with service signaling using the polarity inversion system.
- **TpAtd = 3:** line with service signaling using the frequency system.

Note: *on digital lines (link E1), the indication of the service of the called number is already defined in the signaling system.*

Factory Programming: All lines with normal answering (by ring tone) and with 425 Hz detector and all lines are programmed as bidirectional with tones.

- **TpDisc:** defines the dialing system used on the line:
  - **TpDisc = 1: tone dialing.**
  - **TpDisc = 0: pulse dialing.**
  - **TpDisc = 2: dialing by MFC_FWD.**
  - **TpDisc = 3: dialing by MFC_BWD.**
  - **TpDisc = 4: FSK dialing.**
- **CallPrg:** defines the tone system used on the line to signal an ongoing call and detect the user's answer.
- **CallPrg = 0:** no tone system. The service is assumed by TimeOut.
- **CallPrg = 1:** Anatel's 425 Hz system.
- **CallPrg = 2:** Dual Tone system.

Characteristics of Lines B

This programming allows users to define whether the subscriber waits for the condition of the called number, detect dial tone, answer during active ring and block calls.

To configure B lines, press * + 12 + password + * + 36 + # + Jn + # + ECondB + LvBInd + DcrSSn + OcpSSn + AtdRng + BkSai + BkSUrg + BkEnt + BkEUrg + *.

The following variables must be defined:

- **Jn:** joiner number (8902, 8901, etc.).
- **ECondB:** defines to wait (ECondB=1) or not (ECondB=0) for the condition of the called number.
- **LvBInd:** if the condition of the called number cannot be determined, consider it free (LvBInd =1) or not (LvBInd= 0).
- **DcrSSn:** make the call (DcrSSn=1) or not (DcrSSn=0), if it is not possible to detect dial tone.
- **OcrSSn:** defines to remain busy (OcrSSn=1) or not (OcrSSn=0), if you do not receive any busy reply signal.
- **AtdRng:** defines to answer (AtdRng=1) or not (AtdRng=0) an active ring.
- **BkSai:** defines blocking (BkSai=1) or not (BkSai=0) an outgoing call.
- **BkSUrg:** defines blocking (BkSUrg=1) or not (BkSUrg=0) outgoing calls in urgent mode (drops ongoing calls).
- **BkEnt:** defines blocking (BkEnt = 1) or not (BkEnt = 0) an incoming call.
- **BkEUrg:** defines blocking (BkEUrg = 1) or not (BkEUrg = 0) incoming calls in urgent mode (drops ongoing calls).

Line attendant extensions

This programming defines the attendant extension for the day or night shift for a specific subscriber. To configure, press * 12 + password* + 25 + # Jn # + RmAtd + shift + *.

The following variables must be defined:

- **Jn:** subscriber number (8902.8901, etc.).
- **RmAtd:** extension number or attendant group.
- **Shift:** sets access as day or night (1: day, 2: night, 0: both).

Factory setting: The attendant for all lines (joints) is extension 20/200/2000 (daytime) and extension 21/201/2001 (night).

FAX attendant

This programming defines in which extension a FAX device is installed to answer calls of this type. All FAX calls arriving on a particular line are routed to the programmed FAX attendant extension. The same programming also applies to extensions, and you can define where to transfer FAX calls that arrive at an extension.

To configure, press * 12 + password* + 26 + # + joiner or extension + # + FAX attendant extension + 0 + *.

Example:

Command: * + 12 + 1234 + * + 26 + # + 200 + # + 230 + *.

All FAX calls that arrive at extension 200 are transferred to extension 230. To cancel programming, press *12 + password* + 34 + # + together or extension + # + *.

Programming the general phonebook

To program the central phonebook numbers, press * + 12 + password + * + 31 + # + Nag + # + route + Desired Num+ CCat + *.

The following variables must be defined:

- **NAg:** phonebook memory location (1 to 100).
- **Route:** route access code (ex.: 0 = automatic route access).
- **Desired Num:** number you want to store in memory.
- **CCat:** attribute that defines whether, for the stored number, the extension category must be tested in order to make the call (CCat =1) or not (CCat = 0).

To delete a phonebook number, press * + 12 + password + * + 32 + # + Nag + *

Ativar a função DISA

A função DISA (atendimento com mensagem e transferência automática) pode ser ativada individualmente para cada uma das linhas da central e também para ramais.

Para ativá-la, pressione ** + 12 + senha* + 33 + # + juntor ou ramal + # + 1 + tipo DISA + *."*

As seguintes variáveis devem ser definidas:

- **Juntor:** número do juntor.
- **Ramal:** número do ramal.
- **Tipo DISA:**
- **1:** a função DISA atuará em todas as chamadas internas e externas.
- **0:** a função DISA atuará somente nas chamadas ainda não atendidas externas.

Para desativar o DISA, pressione *33 + # + juntor ou ramal + # + 0 + **.

Activate DISA function

This programming defines the way of operating the DISA function. The characteristics will apply to all lines for which the DISA function is active. A variable (DisaLei) defines whether the DISA function reads MF or not, that is, the DISA function can simply play a greeting message and transfer the call to the line attendant extension. Another variable (DisaDer) defines that if the user does not dial a valid extension number after the outgoing message, the call must be dropped.

To program, press * + 12 + password * +35 + # + DisaLeiDia + DisaDerDia + DisaLeiNot + DisaDerNot + *.

The following variables must be defined:

- **DisaLeiDia:** DISA in the daytime without reading (DisaLeiDia = 1) or with reading (DisaLeiDia = 0).
- **DisaDerDia:** DISA during daytime drops a connection (DisaDerDia = 1) or does not drop a connection (DisaDerDia = 0).
- **DisaLeiNot:** DISA at night without reading (DisaLeiNot = 1) or with reading (DisaLeiNot = 0).
- **DisaDerNot:** DISA at night drops call (DisaDerNot = 1) or does not drop (DisaDerNot = 0).

Factory Programming: DISA is programmed to play messages, read signals and not drop calls.

DISA message recording using terminal

The central allows the recording of a personalized message of up to 10 seconds through any extension on the switch. This functionality aims to meet emergency cases in which it is necessary to change the DISA message until a new message is recorded in the studio.

To record the message, press * + 12 + password* + 40 + # + operation + DISA + *

- » Operation: 0 = delete, 1 = record, 2 = listen, 3 = apply
- » DISA: 1 = daytime, 2 = nighttime

Note: *functionality only available for ImPacta 94/140/220 and 300, as an SD Card must be connected to the CPU board for the message to be recorded. Card must be SDHC type, class 6 or higher from one of the following manufacturers: Kingston, Sandisk, Transcend, Toshiba, Samsung and Panasonic. Micro SD cards are not supported. After the message is recorded and activated, the card can be removed if you do not use a call recorder.*

Caller ID Programming

To program caller ID, press * + 12 + password + * + 37 + # + Rm + # + TpDet + IdInt + IdExt + *.

- » **TpDet:** type of detection.
- » **DetTp: 0:** none
- » **TpDet: 1:** FSK Bell
- » **TpDet: 2:** DTMF
- » **TpDet: 3:** FSK MDMF
- » **TpDet: 4:** FSK SDMF
- » **IdInt:** identify (IdInt =1) or not (IdInt =0) internal call.
- » **IdExt:** Identify (IdExt =1) or not (IdExt =0) external call.
- » **Rm:** extension that is being programmed.

Enable group program extension

This programming indicates whether a group member schedules or not. To do it, press * + 12 + password + * + 23 + # + NGp + # + Rm + Pg/Npg + T/C + *.

- » **Ngp:** extension group number.
- » **Rm:** extension number to be entered or excluded from the group.
- » **Pg/Npg:** 0 = unprogrammed extension, 1 = programmed extension.
- » **T/C:** 1 = insert into group, 0 = exclude from group.

Note: *it is not possible to delete the last extension of the group.*

Resetting factory settings

The reset can be specific to a service type or total. To perform a reset, press * +13 + general password + * + reset code + *.

Factory setting: General password is 1234.

Several extensions

To perform a specific reset for an extension, press * + 13 + general password + * + 4 + # + extension number + *.

The following extension characteristics are returned to the factory setting:

- » The extension receives line tone when it is taken off-hook.
- » Collect calls are not blocked.
- » The extension does not access the Executive line.
- » There are no limits on the duration of calls.

Outbound accesses

To reset all extensions to factory default the permissions for calls to local cell, regional cell, area code, local calls, regional calls and auxiliary 8, press * + 13 + general password + * + 15 + *.

Extension Category 1 General

When performing this reset, the following characteristics of all the branches of the exchange will return to the factory programming:

- » The extension performs Internal Always.
- » The extension obeys Fidelity.
- » The extension performs Internal to Group.

To perform this reset, press * + 13 + general password + * + 17 + *.

Characteristics of the lines A

When performing this reset, the following characteristics of all the lines of the switch will return to the factory programming:

- » All lines are programmed as bidirectional with tones,
- » All have normal service
- » » None have caller ID.

To perform this reset, press * + 13 + general password + * + 24 + *.

Line attendants

This reset sets extension 20/200/2000 as an attendant for all telephone exchange lines. To do it, press * + 13 + general password + * + 25 + *.

FAX attendants

This reset deletes all FAX attendant extension programming from the telephone exchange. To do it, press * + 13 + general password + * + 26 + *.

Reset of extension programming

This reset returns all station-related settings to the factory setting. To do it, press * + 13 + general password + * + 97 + *.

Alarm clock

This reset cancels all the alarm schedules existing in the control panel. To do this, press * + 13 + general password + * + 98 + *.

Ticketing Programming

This reset returns to factory billing programming. To do this, press * + 13 + general password + * +29 + *.

Reset ticketing password

This reset erases the central's ticketing password returning to the default password (1234), To perform it, press: *+ 13 + General password+ * 95 *

Note: *this command is available from version 3.16.19.*

Ticket reset

This reset erases the memory of tickets. To do this, press * + 13 + general password + * + 96 + *.

Total Reset

This reset returns the control to the factory programming condition. To do this, press * + 13 + general password + * + 99 + *.

Voicemail Reset

To reset all mailboxes and password, type: * + 13 + general password + * + 5 + *.

Specific mailbox reset

To reset a mailbox, enter: * + 13 + general password + * + 6 + # + extension number + *.

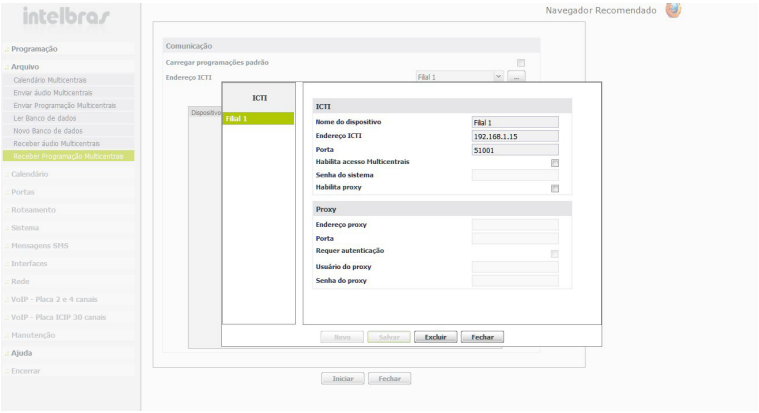
Mailbox password reset

To reset a mailbox password, enter: * + 13 + general password + * + 7 + # + extension number + *.

6.3. Multi-Central Programming

Multicenter Programming is a facility that allows you to use a single PC to program up to 100 PBXs with an ICIP board. For this it is necessary to use the Desktop Programmer from version 2.0.0.4.

When starting the Multicentral programming procedure, you must access the Desktop programmer without any open database. Afterwards, enter the "file" menu, access the "Receive Multi-controller Programming" submenu and press the (...), button, related to the ICTI address, to register the exchanges that will be programmed.

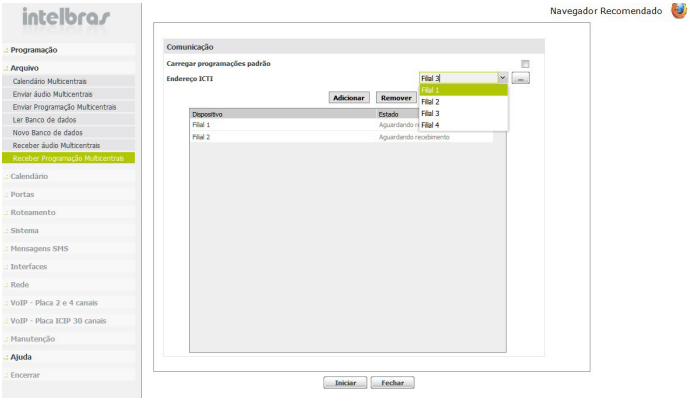


ICTI address registration

For each PABX it is necessary to enter the following information:

- **Device Name:** Enter a name to identify the PBX on the network
- **ICTI address:** enter the IP address of the ICIP board connected to the PBX
  Note: *different IP addresses must be used for each central.*
- **Port:** enter the access IP port (default port is 5001)
- **Enable multi-switch access:** enable this option to allow programming via multi-switches
- **System password:** enter the programming password provided by your PBX
- **Enable Proxy:** enabling this option it will be necessary to register the proxy server

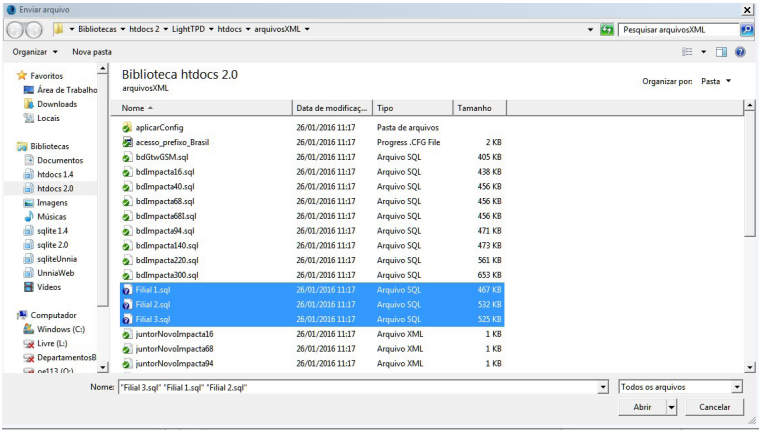
After registering the PABX, it is possible to receive the programming of each PABX. To do this, simply access the "file" menu followed by the "Receive Multicentral Programming" submenu. Press "Start" to receive the programming of the exchanges in the list. At the end of receiving the schedules, the databases will be saved in a computer folder, which will be informed to the user. Each database receives the device name as it was registered.



List of centrals to receive programming

The user can read, edit and save the received databases, using the "Read Database" and "Save Database" functions already in the system.

To send the database to the PABX, the user must click on *File>Send Multicentral Programming* to select the files that were saved in the folder. More than one file can be selected, as shown in the following figure:



Selection of edited databases

Then click on *Program* to send the databases to the respective centers.

7. Accessories and options

7.1. Intelligent Terminals

The terminals feature a set of user-programmable keys, allowing quick access to extensions, lines and all the facilities that the switch offers. These terminals can only be installed in a digital extension position.

Intelligent Terminal TI 4245 / TI 4245i

Features a 4-line, 24-column backlit display, 20 programmable keys, speakerphone and headset jack. It can be connected to additional modules with 64 or 16 keys.

TI 2165 Intelligent Terminal

It features a 2-line, 16-column, 20 programmable-key display, speakerphone and headset connection.

TI 5000 Intelligent Terminal

It has a 128 × 64 pixels graphic display, backlight, 10 programmable keys, speakerphone and headset connection. It can be connected to up to two additional modules of 15 keys each.

7.2. Softwares

Central programmer

Allows the local and remote programming of all the features of the Impacta exchanges through a computer.

Virtual desk

Operator desk that allows full control of calls over Impacta exchanges. This feature is available from version 3.08.24 onwards. An Impacta PBX can support up to 10 virtual tables.

Controller Professional 2.0/Controller Corporate

Responsible for billing and billing of exchanges.

Controller Professional 2.0 and Controller Corporate programming

- Request Extension Balance: *99 51* – Wait to inform the balance.
- Request Account Code Balance: *99 52 + Account Code* - Wait to inform the balance.
- Request Prepaid Code Balance: *99 53 + Prepaid Code* - Wait to inform the balance.

Request statement by email

This command allows the extraction of your extension, account code or prepaid code to be forwarded to the e-mail registered in the controller.

- » Request Extension Statement: *99 54* - After this command, an account statement will be sent to the e-mail registered in the controller.
- » Request Account Code Statement: *99 55 + Account Code* - After this command, an account statement will be sent to the e-mail registered in the controller.
- » Request Prepaid Code Statement: *99 56 + Prepaid Code* - After this command, an account statement will be sent to the e-mail registered in the controller.

Make credit through recharge card

- » Perform Credit at Extension: *99 61 + NumCartãoReg* - Wait for new Balance Information
- » Credit the Account Code: *99 62 + Account Code +#+ NumCartãoReg* - Wait for new Balance Information
- » Perform Credit in the Prepaid Code: *99 63 + Prepaid Code +#+ NumCartãoReg* - Wait for information for new Balance

External access via prepaid code

PTo originate a call via PrePaid Code press: 13 + PrePago Code + # + PrePago Password + * wait for line tone

- » CódPrePago: prepaid code registered in the controller, can be up to 5 digits long
- » PasswordPrePago: prepaid password, can be up to 5 digits long

Note: *these features are available from version 3.10.08 of the switch. And only available in professional 2.0 controllers and corporate controllers.*

IctiManager

Controls the communication between the central and the computer applications in the Impactas centrals

IctiMultisite

Controls the communication of one or more switches remotely. Icti Multisite was developed to be used with Controller Corporate.

Accessories available on the control board base board and CPU board

Impacta control boards have the following accessories on the base plate or CPU board:

Model/Accessories	Impacta 16	Impacta 40	Impacta 68/ 68i	Impacta 94, 140, 220, 94 R, 140 R and 220 R (CPU)/300 R (CPU)
Serial Interface	X	X	X	X
External Music Interface	X	X	X	X (2 types)
Internal music	X	X	X	X
1 IP 700 intercom interface	X	X	X	
1 external performance	X	X	X	
1 alarm sensor	X	X	X	
USB		X	X	X

7.3. Optional accessories

1E1 Board - Central 68 and 68i

The E1 interface boards have a capacity of up to 30 digital lines and allow connection to telephone companies that use the R2 Digital or ISDN communication protocol. The local utility defines the type of protocol used. This E1 board must be installed in slot 12.

Board with 1E1 or 2E1 - Centrals 94*/140/220/94 R*/140 R/220 R/300 R

The E1 and 2E1 Interface Boards have a capacity for up to 30 or 60 digital lines, respectively. They allow connection to telephone companies that use the R2 Digital communication protocols. This board must be installed in the slot next to the CPU.

** Only the 1E1 board can be installed on central panel 94.*

Board with 1E1 R2-ISDN or 2E1 R2-ISDN - Centrals 94*/140/220/94 R*/140 R/220 R/300 R

The E1 and 2E1 Interface Boards have a capacity for up to 30 or 60 digital lines, respectively. They allow the connection with telephone companies that use the RS Digital or ISDN communication protocols. The local utility defines the type of protocol used. This board must be installed in the slot next to the CPU.

**On centrall 94 only the 1E1 board is allowed to be installed.*

Voip Board (Discontinued Board)

The VoIP card has a WAN network interface that allows you to connect externally through an ADSL modem, cable modem or other available form of Internet access.

VoIP Card General Features	
network interface	1 WAN - 10/100BASE-T
Communication protocol	SIP 2.0 Standard (RFC3261) - Supports NAT
VoIP channels	2 or 4
Codecs	G729 A/B – G711A/B
QOS	SIP TOS and Audio TOS
DTMF transport	Inband (G711A/B), Outband (RFC2833) and SIP-NFO
Configuration	Via web (programmer) and web browser
LED 1 (16/40/68/68i) LED 5 (94/140/220)	On: software initialized. Off: startup problem.
LED2 (16/40/68/68i) LED 4 (94/140/220)	On: VoIP card initialization completed, system ready for calls. Off: The system is not ready for VoIP calls.
LED 3 (16/40/68/68i) LED 1 (94/140/220)	On: indicates powered VoIP card. Off: power supply problem.
Versão do software da placa VoIP	This information is available in the control panel's Programmer and in the ITs (System => Version).

A quantidade de banda consumida em upload e download nas ligações VoIP é de 39,2 kbps (considerando um pacote de 20 ms de áudio).

TO ACCESS THE VIDEO WITH THE STEP-BY-STEP OF THIS PROGRAM, **CLICK HERE**.

Base board - ICIP 30 and ICIP 30 68i

Responsible for processing network information, access protocols and connections to the client's network and internet.

Codec Board - ICIP 301 and ICiP 30 68i

Responsible for the VoIP channels available on the ICIP 30 baseboard and for processing the "voice" signals and their conversion into data packets within the network. Each Codec board enables 10 VoIP channels.(total of 30 channels, 10 channels per board).

[1] *Hardware key with extension licenses and IP trunks required for codec release.*

Impacta 68i recording board

The Impacta 68i recording board is an accessory card that can only be used in the Impacta 68i telephone exchange, allowing the recording of up to 8 channels of audio. Audio files are temporarily stored on an SD2 card, connected to the card itself. The management of recordings is carried out through the ICR software – Intelbras Call Recording[2]

[1] *For recordings above 4 audio channels, it is necessary to purchase a license to use.*
[2] *Item not included and required for recording.*

Attention: the Impacta 68i control unit must start with the SD card already connected to the recording card and while it is in operation this SD card cannot be removed. For more information, consult the Impacta 68i engraving plate guide available at www.intelbras.com.br.

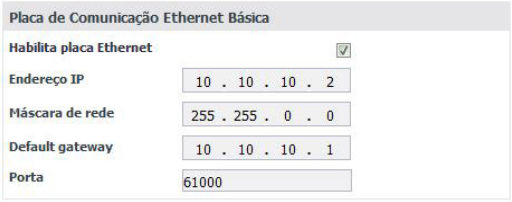
GSM or GSM/3G trunk board - Centrals 94*/140/220/94 R*/140 R/220 R/300 R

The GSM or GSM/3G trunkboard integrates mobile telephony with fixed telephony, facilitating the shared use of the cellular line by your PABX extensions. There are four versions of the board: the one with 4 GSM channels, the one with 4 GSM/3G channels, the one with 8 GSM channels and the one with 8 GSM/3G channels.

Ethernet board

The Ethernet board has the function of guaranteeing remote access to the central office through a network interface. Through the IctiManager software, the central Programmer and the Controller, it is possible to configure and read data in the central. To use the Ethernet board in Impacta 40, jumpers CN27 and CN28 must be in position 1-2, that is, RS232.

Attention: when installing an Ethernet board in the control panel accessories base board, it is necessary to check if the CPU board already has the Ethernet board integrated, as the control panel will prioritize the CPU board. If the CPU Ethernet board is inoperative, the Ethernet board connected to the Accessory Base board will not work.
Impactas 94/140/220/94R/140R/220R/300R, have the Ethernet circuit integrated to the CPU board. In the factory default configuration, the Ethernet board is enabled and configured as shown below:



Programming

Example IP address: 192 168 091 003 (IP numbers always have 3 digits)

NumPort: from 0 to 65000

- For Impacts 68/68i/94/140/220/94 R/140 R/220 R/300 R
  - Program Ethernet board IP number: *12 + password + * + 39 + # + 1 + IP address + *
  - Program Ethernet board mask IP number: *12 + password + * + 39 + # + 2 + mask + *
  - Program Ethernet board gateway IP number: *12 + password + * + 39 + # + 3 + addr. IP gateway + *
  - Program Ethernet board port number: *12 + password + * + 39 + # + 4 + NumPorta + *
- For Impacts 16 and 40
  - Program Ethernet board IP number: *12 + password + 39 + 1 + IP address + *
  - Program the IP number of the Ethernet board mask: *12 + password + 39 + 2 + mask + *
  - Program the IP number of the Ethernet board gateway: *12 + password + 39 + 3 + addr. IP gateway + *
  - Program the port number of the Ethernet board: *12 + password + 39 + 4 + NumPorta + *
- Listen to the IP number of the Ethernet board: * + 60 + 997 + *
- Hear IP netmask from Ethernet board: * + 60 + 996 + *
- Listen to IP number of gateway from Ethernet Board: * + 60 + 995 + *
- Hear Ethernet board port number: * + 60 + 994 + *

Modem (Discontinued Board)

Through the Controller software, the modem board allows the Impacta exchanges to send information referring to billing, transmission and reception of programming at a distance (remote programming) through a computer. This feature is not available in version 3.05.xx.

Voice mail[1] - Centrals 16/40/68/68i/94/140/220/94 R/140 R/220 R/300 R

This accessory diverts calls to a system for recording messages and personalized welcome messages. This feature is not available in version 3.05.xx.

[1] *Consult accessory availability for centrals 94/140/220/94 R/140 R/220 R/300 R.*

Accessory Base Plate - Control Panels 94/140/220/94 R/140 R/220 R/300 R (Discontinued Plate)

This board has three slots for the following boards:

- Voice mail
- Modem
- Ethernet board
- VoIP
- Command board

Note: *» The accessory base board can be installed in any slot on the central.*

» Optional Voicemail, Modem, Voip, Ethernet and Command boards (Discontinued boards).

Command board - Control panels 94/140/220/94 R/140 R/220 R/300 R (Discontinued board)

90 It provides access facilities to the Doorphone, Paging, External activation and alarm sensors.

8. Video tutorials

Below is the complete list of step-by-step tutorials available for the Impacta:

8.1. Installation

i4108: see how to make the Serial cable of the Impactas centrals, used for communication between the central and the computer: *https://goo.gl/lli58d*

i4114: see how to download, install and configure the Web Scheduler and ICTI Manager: *https://goo.gl/sTtiLD*

i4119: see how to configure the Impacta 40 control panel to communicate with the ICTI Manager: *https://goo.gl/cBPBfY*
i4116: see how to perform the hybrid calibration on Intelbras analog lines: *http://goo.gl/0aaWOm i4103 : see how to update the switch's firmware through the Web Programmer: https://goo.gl/tK8lC2*

i4106: see how to interconnect two Impacta exchanges through the VoIP board: *https://goo.gl/hvSll0*

i4104: see how to configure the E1 digital link via Web Programmer: *https://goo.gl/MD5hHg*

i4110: see how to create a bundle, a route, and how to associate the created bundle with the route at the extension: *https://goo.gl/8OWRKT*

i4137: see how to configure a VoIP Operator in Impacta with ICIP card: *https://goo.gl/3HHQXE*

i4138: see how to perform point-to-point configuration on Impacta with ICIP card: *https://goo.gl/cf7yjW*

i4111: see how to configure Intelbras XPE porters in the Impacta switch: *https://goo.gl/o6Qr7f*

8.2. Features

i4131: see how to configure the query for portability of GSM lines in Impacta with ICIP card: *https://goo.gl/LCGLkY*

i4102: see how to configure the extensions category, via Web Programmer and via keyboard: *https://goo.gl/YogtEq*

i4107: see how to configure a group of extensions via Web Programmer: *https://goo.gl/xQcBUB*

i4109: see how to register the Impacta switch in a VoIP Operator, through the VoIP card: *https://goo.gl/sYqQpd*

i4113: see how to configure external follow-me on Impacta switches: *https://goo.gl/GMd8Eh*

i4115: see how to create an account code in the Impacta switch: *https://goo.gl/027fwK*

i4117: see how to configure the General Agenda in the Impacta switches: https://goo.gl/Hjzs8O i4118: see how to configure the shift automatic in Impacta centrals: *http://goo.gl/pq8UKo*

i4141: see how each branch group behaves at Intelbras switches: *https://goo.gl/kpGuwT*

i4143: see how the Call Center group behaves at the Impacta switch: *https://goo.gl/4HsVag*

i4146: see how to configure output conversion by Web Programming wizard: *https://goo.gl/r5HnEX*

i4147: see how to configure the output conversion manually by the Web Programmer: *https://goo.gl/vwXkda*

i4148: see the DISA specs, and how to adjust the audio to send to the Impacta *switch: https://goo.gl/wHZTLs*

i4149: see how to configure DISA, choose attendants from DISA options, and how to configure music from wait at the *switch: https://goo.gl/Cve6kh*

i4151: see how to change the numbering of the Impacta switchboard extensions: *https://goo.gl/JZd4z3*

8.3. Softwares

i4105: vsee how to install and configure the Monitor E1 Software, used to verify the signaling of the E1 digital link with the Telephone Operator: *https://goo.gl/2QUFW0*

i4150: see how to install and configure the Virtual Mesa software: *https://goo.gl/2q7odW*

Warranty term

It is established that this warranty is granted upon the following conditions:

Client's name:
Client's signature:
Invoice number:
Date of purchase:
Model: Serial number:
Retailer:

---

1. All the parts, pieces and components of the product are guaranteed against possible manufacturing defects, which may arise, for the term of 1 (one) year, with a term of 3 (three) months' legal warranty plus 9 (nine) months' contractual warranty –, counting from the date of purchase of the product by the Consumer, as appears in the product purchase bill of sale, which is an integral part of this Term throughout the domestic territory. This contractual warranty includes the free exchange of parts, pieces and components which have a manufacturing defect, including the expenses with labor used in this repair. If there is no manufacturing defect, but defect(s) arising from misuse, the Consumer shall bear these expenses.
2. The installation of the product shall be executed in accordance with the Product Manual and/or Installation Guide. If your product requires the installation and configuration by a qualified technician, seek a suitable specialized professional, the costs of these services not being included in the product amount.
3. Having perceived the defect, the Consumer shall immediately contact the nearest Authorized Service which appears in the report offered by the manufacturer – they are the only ones authorized to examine and remedy the defect during the warranty term foreseen herein. If this is not respected, this warranty shall lose its validity, as it shall be characterized as product infringement.
4. If the Consumer requests home service, it shall contact the nearest Authorized Service to inquire about the technical visit rate. If it is necessary to remove the product, the ensuing expenses, such as those of transportation and insurance of the taking and return of the product, shall be the Consumer's responsibility.
5. The warranty shall lose its validity totally in the occurrence of any of the following cases: a) if the defect is not one of manufacture, but is caused by the Consumer or by third parties foreign to the manufacturer; b) if the damage to the product arises from accidents, disasters, agents of nature (lightning, floods, landslides, etc.), humidity, voltage in the electrical network (excess voltage caused by accidents or excessive fluctuations in the network), installation/use in disagreement with the user's manual or arising from natural wear of the parts, pieces and components; c) if the product has undergone effects of a chemical, electromagnetic, electrical or animal (insects, etc.) nature; d) if the serial number of the product has been falsified or erased; e) if the appliance has been infringed.
6. This warranty does not cover loss of data; therefore, it is advisable that if it is the case of the product, the Consumer makes a backup regularly of the data which appears in the product.
7. Intelbras is not responsible for the installation of this product, or for possible attempts at fraud and/or sabotage in its products. Maintain the updates of the software and applications used up-to-date, if it is the case, as well as the network protection required for defense against hackers. The equipment is guaranteed against defects in its usual conditions of use, it being important to bear in mind that, as it is electronic equipment, it Is not free of fraud and scams which may interfere with its correct functioning.
8. After its useful life, the product must be delivered to an authorized Intelbras service center or directly disposed of in an environmentally appropriate manner to avoid environmental and health impacts. If you prefer, the battery, as well as other unused Intelbras brand electronics, can be disposed of at any Green Eletron collection point (waste management facility to which we are associated). If you have any questions about the reverse logistics process, please contact us at (48) 2106-0006 or 0800 704 2767 (Monday to Friday 8am to 8pm and Saturdays 8am to 6pm) or via -mail support@intelbras.com.br.

These being the conditions of this complementary Warranty Term, Intelbras S/A reserves the right to alter the general, technical and esthetic features of its products without prior notice.

All the images of this manual are illustrative.

Product benefiting from the Legislation of Informatics.

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Support via e-mail: suporte@intelbras.com.br
Customer Service: 0800 7042767
Where to buy? Who installs it? 0800 7245115

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