intelbras

User's Manual

VIP 3430 B G2
VIP 3430 D G2

intelbras

VIP 3430 B G2 and VIP 3430 D G2 IP Cameras

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

Intelbras IP cameras are security cameras with 2 megapixel resolution and high definition images for IP video monitoring and surveillance systems. They can be used with Intelbras CCTV systems, for a safe, stable and integrated monitoring system. Their installation and management can be done through the web interface quickly and easily.

Care and Safety

- **Electrical safety:** installation and operations must be in compliance with local electrical safety codes. We are not responsible for fire or electrical shock caused by improper handling or installation.
- **Transport safety:** care must be taken to avoid damage caused by weight, violent vibrations, or splashing water during shipping, storage, and installation. We are not responsible for any damage or problems arising from the use of integrated packaging during transport.
- **Installation:** do not touch the camera lens in order not to affect the video quality.
- **Need for qualified technicians:** the entire installation process must be conducted by qualified technicians. We are not responsible for any problems arising from unauthorized modifications or repair attempts.
- **Environment:** the camera must be installed in a location protected from exposure to flammable, explosive or corrosive substances.
- **Camera Care:** do not install the camera on unstable places. The camera may fall, possibly causing serious injury to a child or adult. Use it only with the bracket recommended by the manufacturer. Do not aim the camera at the sun as this may damage the CMOS. Do not install the camera in locations where the temperature exceeds the levels allowed in the technical specifications. Avoid exposing the camera to strong magnetic fields and electrical signals.
- **Accessories care:** always use the accessories recommended by the manufacturer. Before installation, open the packaging and check that all components are included. Contact your local reseller immediately if you cannot find a component in the package.
- **Save the packaging for future use:** carefully save the Intelbras VIP camera packaging in case it needs to be sent to your local reseller or to the manufacturer for maintenance services. Packaging other than the original may cause damage to the device during transport.
- **LGPD - General Personal Data Protection Law:** this product has the option of encrypting data in transit and cannot encrypt it while idle. Intelbras does not access, transfer, capture, or perform any other type of personal data processing with this product, with the exception of data required to operate the services. For more information, see the chapter on equipment security methods.

  The use of this Product allows you to collect personal data from third parties, such as facial image, biometrics, vehicle identifier, email, phone. Therefore, in order to process such data you must comply with local legislation ensuring the protection of the rights of the personal data subjects by implementing measures including, but not limited to: informing, in a clear and visible way, the personal data subject about the existence of the surveillance area and providing contact information for any questions and rights guarantees.

Attention:

- Use a dry cloth to clean the dome and/or the transparent camera lens protector. If any dirt is difficult to remove, use a mild (neutral) detergent and wipe gently. Do not clean the dome and/or transparent lens protector with any other type of product (e.g. alcohol), as this may stain the equipment, impairing image viewing;
- To ensure the recording of images, it is recommended to use the regular recording mode and not the motion detection mode;
- Avoid installing the camera in environments with frequent movement, for example, bushes and foliage, since they could block the images of interest and could also consume storage (processing) unnecessarily;
- For use in critical scenarios, such as high security or law enforcement situations, use the regular recording mode. Do not use motion detection recording for critical scenarios.

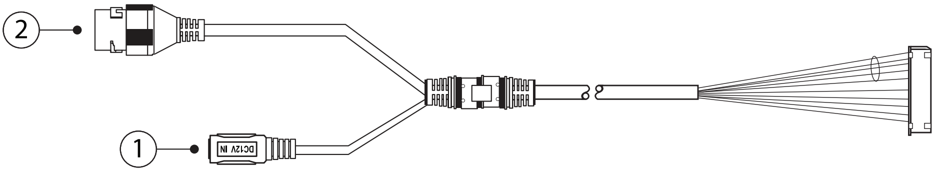
Summary

1. Products

1.1. VIP 3430 B G2 and VIP 3430 D G2

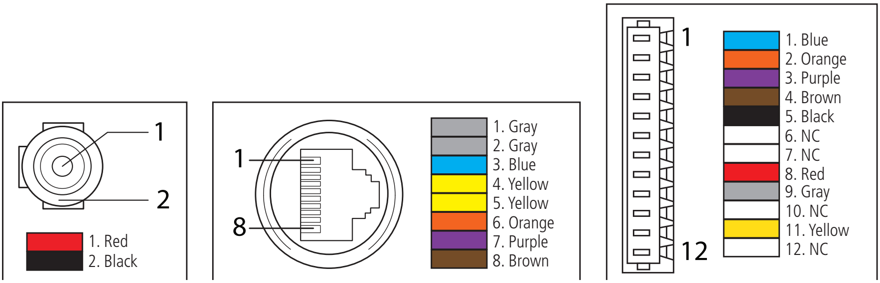
Connections

The following figure illustrates the camera's multi-function cable.



VIP 3430 B G2 and VIP 3430 D G2 multifunction cable

Model	Function	Connector	Description
1	Power Supply	P4	12 V Direct Current power input
2	Network and PoE	RJ45	*Ethernet* network input, PoE power (802.3af)

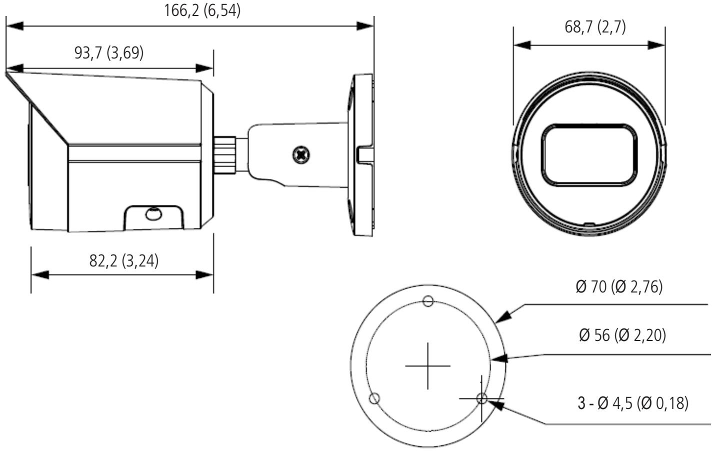


VIP 3430 B G2 and VIP 3430 D G2 multifunction cable

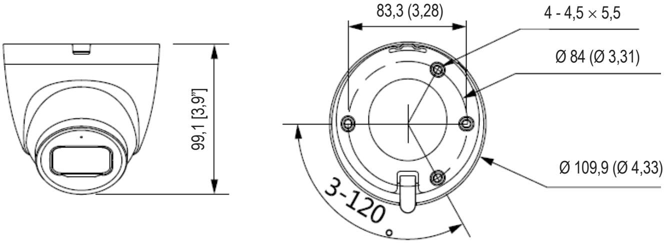
Attention: in the event of cable breakage, the above color guide can be used for the maintenance of the connectors. It is recommended that this procedure be done by an authorized technical service.

1.2. Physical features of the camera

» Use the following images as a reference for the dimensions of the camera. Units are in millimeters (mm).

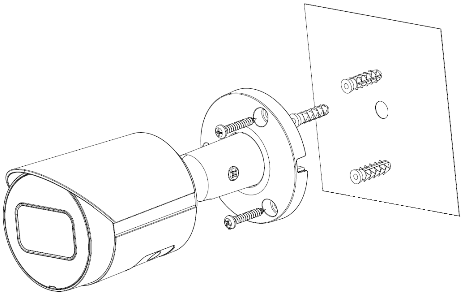


VIP 3430 B G2

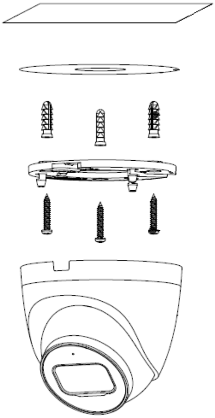


VIP 3430 D G2

Attach the camera using the screws and plugs that come with the product. The following illustration shows the details:

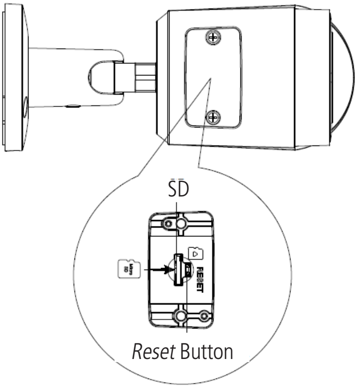


Detailed view VIP 3430 B G2

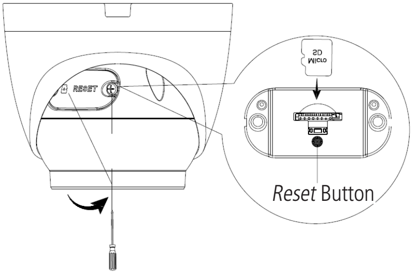


Detailed view VIP 3430 D G2

On the bottom of the camera there is a cover that can be opened, where the camera reset button is located (in case of loss of password, the user can perform a factory reset by pressing and holding this button for more than 10 seconds) and the micro-SD card slot (not included). The camera supports cards of up to 256 Gb.



Bottom Cover VIP 3430 B G2



Bottom Cover VIP 3430 D G2

1.3. Installation requirements for intelligent video analytics

The VIP 3430 G2 camera has video analytics features that provide a more complete and reliable monitoring system. Please observe the following details during installation to use video analytics:

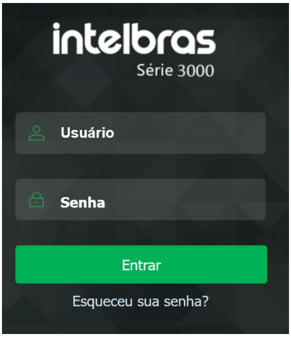
- In bright environments it is recommended to use WDR or another compensation feature to balance the lighting, in dark environments auxiliary lighting should be used.
- Install the camera firmly to avoid shaking.
- Avoid placing the camera in locations with mirrors, water or other reflective surfaces.
- Avoid installing the camera in places that are obstructed by bushes, foliage, and the like, since these not only block the objects of interest but also consume unnecessary bandwidth.

Keep in mind that the video analysis functions have the following limitations:

- They are dependent on the free processing of the camera, and other functions such as motion detection, high resolution and high bit rate can compromise the performance of this feature.
- The accuracy rate is approximately 80%, but can be higher or lower depending on the installation and processing parameters.
- Fast moving objects such as cars and motorcycles are difficult to detect.
- Weather conditions such as rain and fog can impair the performance of the detections.
- Video analysis functions should not be used in critical scenarios, life or death situations, or for law enforcement.
- It is recommended that motion detection recording be done in scenarios that do not have constant motion.

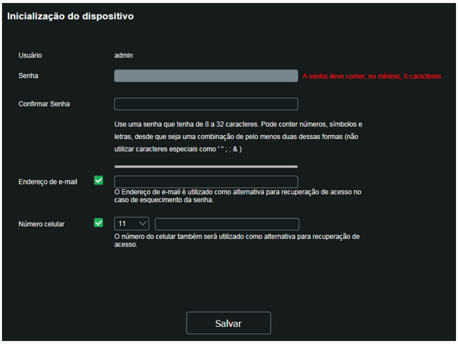
2. Access to the interface

The interface provides the user with all the camera controls. To access it, simply double-click on the camera in the Ip Utility Next program or simply type the camera's IP in a web browser.



Access interface

Note: *the client is asked to set up a password on first access.*



Inicialização do dispositivo

Usuário admin

Senha A senha deve conter, no mínimo, 8 caracteres.

Confirmar Senha

Use uma senha que tenha de 8 a 32 caracteres. Pode conter números, símbolos e letras, desde que seja uma combinação de pelo menos duas dessas formas (não utilizar caracteres especiais como ' " ; : &)

Endereço de e-mail ☑

O Endereço de e-mail é utilizado como alternativa para recuperação de acesso no caso de esquecimento da senha.

Número celular ☑ 11

O número do celular também será utilizado como alternativa para recuperação de acesso.

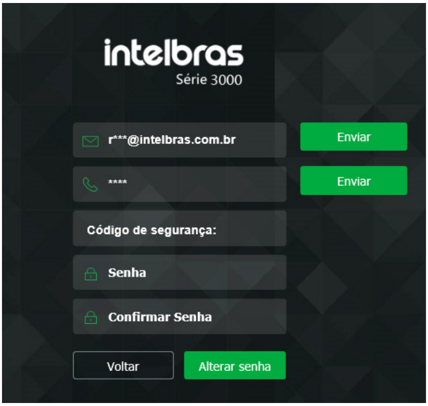
Startup Configuration

Note: *» After 5 login attempts with an incorrect password, the system automatically blocks further attempts for this user for 30 minutes.*

» When accessing the camera for the first time, you will be prompted to download and install the video viewer plugin in Internet Explorer.

» If the camera is connected to a network with no DHCP server, the camera's default IP is: 192.168.1.108.

» By clicking on the item Forgot your password?, below the Password *field, a message will be displayed as shown in the following image, so that it can be sent to the registered e-mail and cell phone, containing a security code (the Send button must be clicked for the camera to send the e-mail). The security code received in the registered e-mail must be filled in the Security Code field and then go to the next step, where the password must be changed. The e-mail must be defined on first access, as the figure User Configuration shows.*



r***@intelbras.com.br

****

Código de segurança:

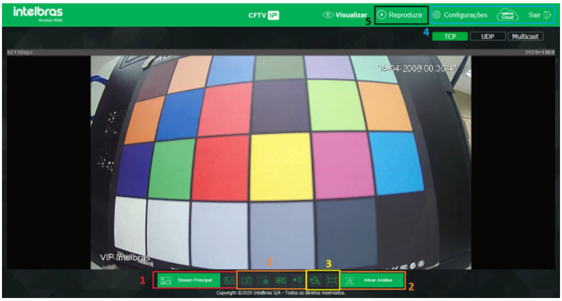
Senha

Confirmar Senha

Change Password

3. View

Once logged into the camera, you will be in the *View* tab:



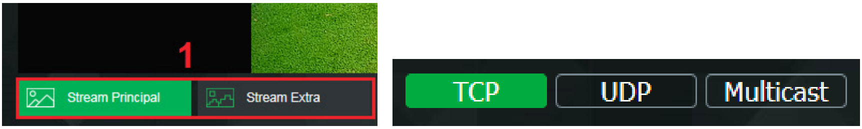
View

1. Stream setup.
2. Camera Functions.
3. Video display control.
4. System menu.
5. Play.

3.1. Stream setup

The cameras have two video streams: the main stream and the extra stream.

You can select which stream to display in the browser, as well as which protocol will be used for display.

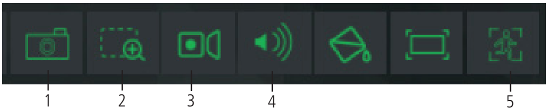


Stream configuration

Function	Description
Main stream	For use in an environment with available bandwidth. Can record video files and be used in monitoring softwares
Extra stream	For use in a limited bandwidth environment, as it has lower video resolution. Can record video files and be used in monitoring software
Protocol	You can select the media control protocol. The available protocols are *TCP/UDP/Multicast*

3.2. Camera Functions

In the *View* interface you can perform some functions such as recording the displayed video and taking pictures. These functions are listed below.



Camera Functions

1. **Photo:** takes a picture of the video being played. The photos are saved[1] in the directory specified in item 5.8 *Media destination.*
2. **Digital Zoom:** after clicking on this icon, select an area in the video to digitally zoom into it.
3. **Record:** when clicked, the video being played starts being saved[1] in the directory specified in item 5.8 *Media destination.* To stop recording, click the icon again.
4. **Audio:** enables/disables receiving audio coming from the camera's microphone.
5. **Enable Analysis:** when clicked, the Video Analysis rules will appear in the video that is being displayed. It is important to note that this is only a function for viewing the rules, not for enabling or disabling the function.

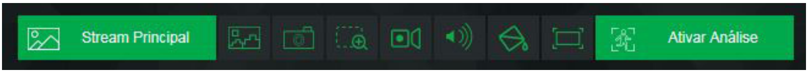
[1] It is necessary to be running Internet Explorer® as administrator for photos or videos to be saved to the hard disk.

[2] Audio function available only in the Dome model.

[3] These functions are all available only in the Internet Explorer® browser.

3.3. Video display control

The video display control buttons are located in the lower left corner of the video stream. They are:

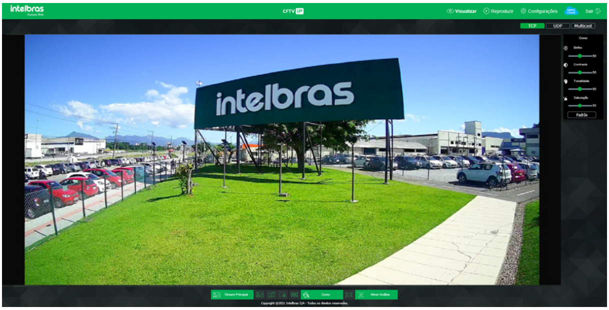


Video display controls

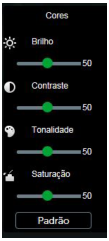
Colors

Cores	Allow changing of color parameters

When you click on the button, a new screen will open, as shown in the following image::



Color Properties



Color adjustment details

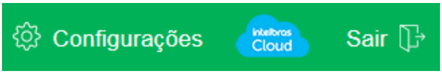
The changes made here apply only to the stream viewed in the browser and to the photos taken using the *Photo* button, seen in item *3.2. Camera Functions.*

Full Screen

Tela Cheia	Expands the video until it takes up the whole screen. This option is affected by the *Video Aspect Ratio* option. The same result is achieved by double-clicking on the video, only in the Internet Explorer browser.

3.4. System Menu

Through the following menu you will have access to the camera´s settings:

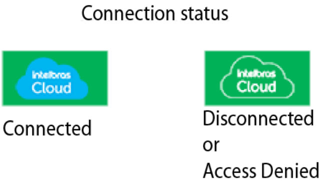


System Menu

Tab	Description
Settings	Used to perform settings for camera, network, event, storage, system, and camera information
Logout	Logs out from the camera´s web page
Intelbras Cloud	Enables you to access your security system quickly and easily, without port redirection and complicated configurations

Intelbras Cloud

Although it does not appear in the *Services* menu, the Intelbras Cloud is a service, and its configuration will be described below. This service allows you to access your security system quickly and easily, eliminating the need for port redirection and complicated configurations.



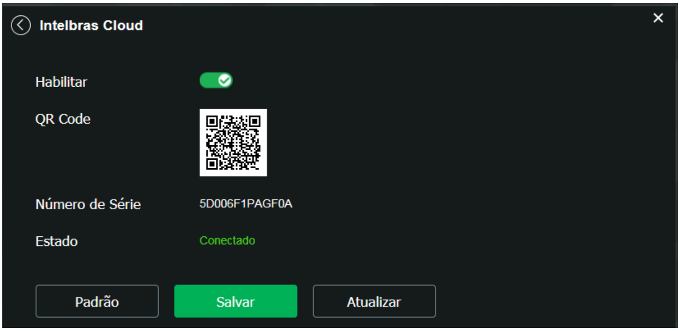
Connection status

- **Connected:** reports that the camera is registered on the Intelbras Cloud server and is ready for use.
- **Disconnected:** reports that the camera is without network access or does not have access to the Intelbras Cloud server. If the camera does not have access to the server, we suggest checking if the Enable field is selected.
- **Access denied:** reports that the camera is not registered on the Intelbras Cloud server.

Note: *The* Disconnected *status can also be reported when the camera has no Internet access. In this case we suggest checking the connections and the local network.*

Intelbras Cloud

- **Enable:** by default this feature comes enabled. If you don’t want to use it, just uncheck the check-box next to the word Enable.
- **Serial Number:** camera serial number, registered in the *Intelbras Cloud* service.
- **Status:** If your network is functioning normally and the serial number is enabled on the server, the Status field will show the status Connected highlighted in green. If there is a problem in your network or serial number, it will show the status Disconnected highlighted in red.


Intelbras Cloud

Habilitar ☑

QR Code

Número de Série 5D006F1PAGF0A

Estado Conectado

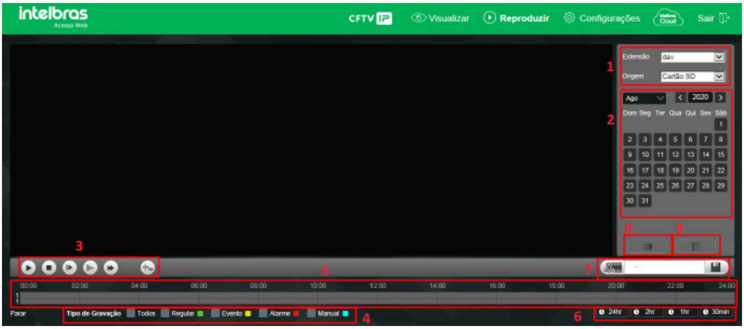
Intelbras Cloud

Attention!

- The Intelbras Cloud service grants access to your device without the need for port redirection.
- To help you remotely manage your device, Intelbras Cloud will be activated. After activating and connecting to the internet, we need to collect the IP address, MAC address, device name, device ID, etc. All information collected is only used for the purpose of providing remote access to the user. If you do not agree to activate the *Intelbras Cloud* feature, please uncheck the option.

3.5. Play

The *Play* tab lets you view and download photos and recordings from a previously configured memory card in the camera. Using the *S.I.M. Next* software you won’t be able to view the recordings from the memory card.


Extensão dav

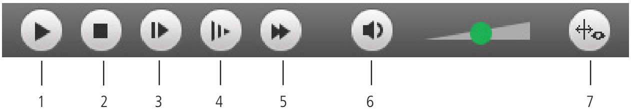
Origem Cartão SD

Playback

1. **Recording Details.**
   - **Extension:** you can choose between viewing video *(.dav)* or photos *(.jpeg).*
   - The *Origin* field is for information only.
2. **Calendar.**

   To find recordings and photos select the desired day (days with available recordings and photos are highlighted in blue).

3. **Playback controls.**



Playback options

Item	Function
1	Play
2	Stop
3	Next frame
4	Slow forward
5	Fast forward
6	Volume
7	Video analysis display

4. **Type of recordings.**

   The system generates the files according to the pre-configured events, there are different search options: *All, Regular, Event, Alarm, and Manual.*

5. **Timeline.**

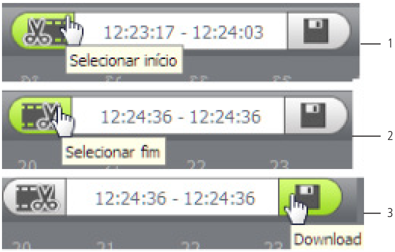
   Choose the time you want to play a recording and the system will start playing the video, the timeline colors are representations of the recording types.

6. **Timeline Scale.**

   Select which interval should be displayed on the timeline.

7. **Download recordings.**

   To download a recording, choose the start time on the timeline and click the *Select start* button (as in image 1), then choose the end time on the timeline and click the *Select end* button (as in image 2), confirm the chosen period and click *Download* (as in image 3).



Video editing example

8. **Display list of recordings.**

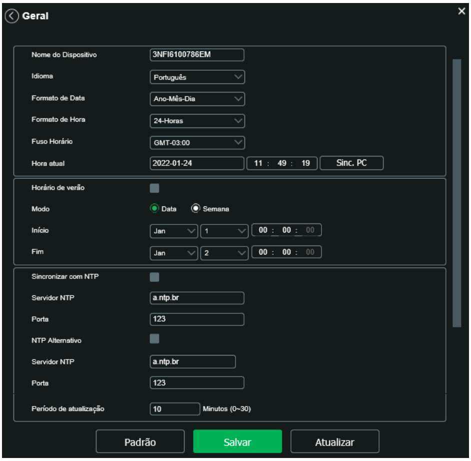
   Displays the recordings and photos in a list and then it will be possible to download directly from the list of recordings, for videos the formats are *.dav* and *.mp4*, for photos the download is in *.jpg* format.

4. System configuration

Through this menu you can make general settings, video, network, maintenance, services, interface, activate analysis, parameters, and of the photos captured by the camera.

4.1. General

Within this item are settings for Device Name, Language, Date Format, Time Format, Time Zone, Current Time, Summer Time, Synchronize with NTP, and Alternative NTP.



Geral

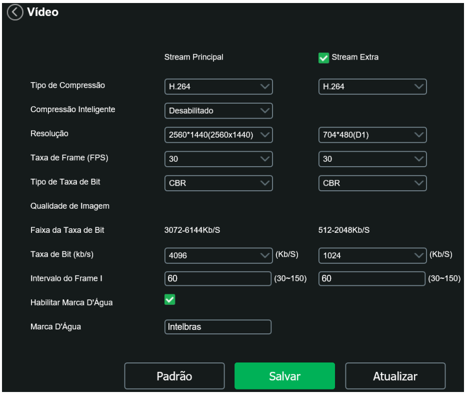
Nome do Dispositivo	3NFI6100786EM
Idioma	Português
Formato de Data	Ano-Mês-Dia
Formato de Hora	24-Horas
Fuso Horário	GMT-03:00
Hora atual	2022-01-24 11 : 49 : 19 Sinc. PC
Horário de verão	□
Modo	● Data ○ Semana
Início	Jan 1 00 : 00 : 00
Fim	Jan 2 00 : 00 : 00
Sincronizar com NTP	□
Servidor NTP	a.ntp.br
Porta	123
NTP Alternativo	□
Servidor NTP	a.ntp.br
Porta	123
Período de atualização	10 Minutos (0~30)

Date and time

- **Device Name:** it is the name of the device, which by default is the serial number.
- **Date format:** it has the options *Year-Month-Day, Month-Day-Year, and Day-Month-Year.*
- **Time Format:** choice of time system: 12-hour or 24-hour.
- **Time Zone:** adjusts the time zone according to the desired region.
- **Current time:** enables manual adjustment or synchronization of the clock to the time of the computer the session is running on.
- **PC Sync:** Synchronizes the camera's time with that of the computer.
- **Summer Time:** selects the start and end date/time of daylight saving time for the current year.
  - **Mode:** sets the summer time period by Date or Week.
- **Synchronize with NTP:** enables clock synchronization with *NTP* servers, being possible to configure up to two servers, a main one and an alternative one, the latter used when the main one is not accessible.
  - **Update period:** time interval in which the device will query the server and synchronize the time.

4.2. Video

In this menu you can make video settings. The device has two streams or viewing planes. The Main Stream is always enabled, while the Extra Stream can be disabled.



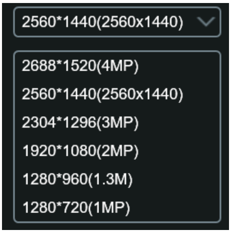
	Stream Principal	☑ Stream Extra
Tipo de Compressão	H.264	H.264
Compressão Inteligente	Desabilitado	
Resolução	2560*1440(2560x1440)	704*480(D1)
Taxa de Frame (FPS)	30	30
Tipo de Taxa de Bit	CBR	CBR
Qualidade de Imagem		
Faixa da Taxa de Bit	3072-6144Kb/S	512-2048Kb/S
Taxa de Bit (kb/s)	4096 (Kb/S)	1024 (Kb/S)
Intervalo do Frame I	60 (30~150)	60 (30~150)
Habilitar Marca D'Água	☑	
Marca D'Água	Intelbras	

Video

- **Compression type:** there are four options: H.264, H264B, H.265 and Smart Compression (H.265+). *H.264B* uses a lower compression level compared to H.264. Smart compression is more efficient than H.264 because, at scale, it requires fewer bits for a sharper image. *H.265+* is a variant of H.265 that lowers the bit rate even further while maintaining the image´s quality.

  Note: *using H.265+ limits some functions (most of the Video Analysis, UDP and Multicast) and requires the device to reboot.*

- **Resolution:** The camera has the following resolution settings:



2560*1440(2560x1440)

2688*1520(4MP)
2560*1440(2560x1440)
2304*1296(3MP)
1920*1080(2MP)
1280*960(1.3M)
1280*720(1MP)

Main stream resolution

  Note: *see MHDX 1108 recorder restriction in section 9. Frequently Asked Questions.*

- **Frame rate:** is the amount of images per second (1~30). When increasing the frame rate, it is necessary to increase the bit rate as well, in order to maintain the same quality in the video.
- **Bit rate type:** there are two options: *CBR* and *VBR*.
  - **CBR:** uses a constant bit rate all the time. However, at times of little movement the image quality could still be the same with a lower bit rate. With CBR it is easy to predict the required storage size.
  - **VBR:** uses variable bit rate, optimizing space use. Allows greater space utilization at times of need, reducing the bitrate to a minimum at times of low traffic.
- **Bit Rate Range:** displays the minimum and maximum rates to be used, based on the selected Compression Type, Resolution, Frame Rate, and I-Frame Interval.
- **Bit rate:** determines the value when the bit rate type is CBR.

  Note: *the bit rate values must respect the minimum and maximum values of their reference.*

- **I-Frame interval:** I-Frame is a frame in the video that has a larger size than the others. The smaller the number of I-Frames, the lower the bitrate, but as a consequence a video that has fast movements (a car at high speed, for example) may be shown with poor quality. The smaller the value, the more I-Frames will be sent.

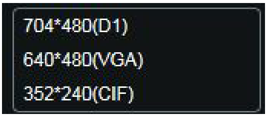
- **Watermark:** watermarks are intended to ensure that a video generated by the camera is not altered. The watermark text can be up to 126 characters long.

  Attention: the watermark is not shown on the video. It can be used to check if the video has been altered using a specific software.

- **Extra Stream**

  Lower resolution stream used to transmit at a lower bitrate. It comes enabled from the factory, but can be disabled by un-checking the checkbox next to the *Extra Stream* column.

  - **Compression type:** there are four options: *H.264B, H.264, MJPEG, and H265*. *H.264B* uses a lower compression level compared to H.264. *H.264* is more efficient than MJPEG because it requires fewer bits for a sharper image. H.265 is more efficient than H.264 because, in scale, it needs fewer bits for a sharper image. If the *MJPEG* encoder is used, the user must increase the bitrate to a higher value than the one used by H.264.
  - **Resolution:** it has lower resolutions compared to the main Stream.



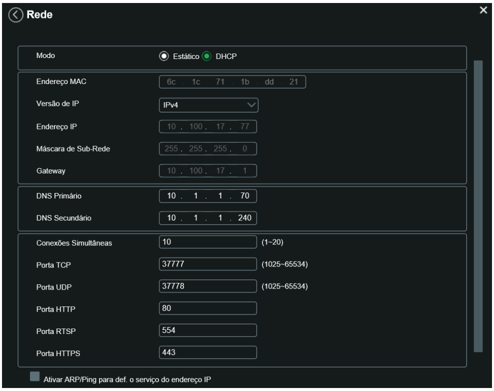
704*480(D1)
640*480(VGA)
352*240(CIF)

Extra stream resolution

Note: *the other settings are similar to those of the main Stream.*

4.3. Network

Under *Network* you will find all the network settings that the camera has. From IP address configuration to port configuration. In this menu IP settings are performed on the camera.



Rede

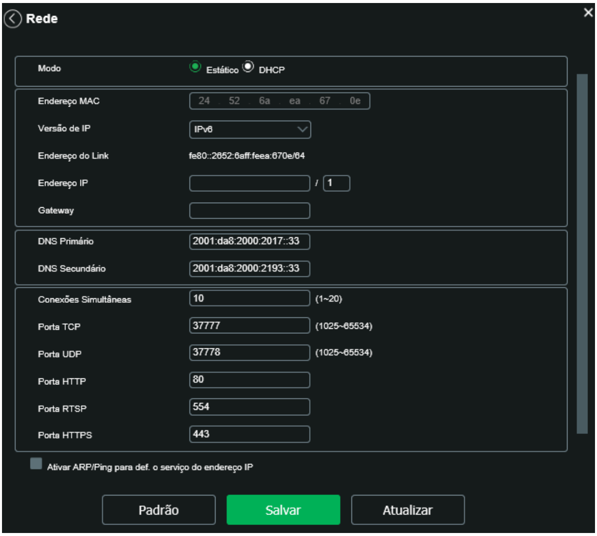
Modo	○ Estático ● DHCP	
Endereço MAC	6c . 1c . 71 . 1b . dd . 21	
Versão de IP	IPv4	
Endereço IP	10 . 100 . 17 . 77	
Máscara de Sub-Rede	255 . 255 . 255 . 0	
Gateway	10 . 100 . 17 . 1	
DNS Primário	10 . 1 . 1 . 70	
DNS Secundário	10 . 1 . 1 . 240	
Conexões Simultâneas	10	(1~20)
Porta TCP	37777	(1025~65534)
Porta UDP	37778	(1025~65534)
Porta HTTP	80	
Porta RTSP	554	
Porta HTTPS	443	

□ Ativar ARP/Ping para def. o serviço do endereço IP

TCP/IP - version 4

- **Mode:** in *Mode* there are two options:
  - **Static:** when *Static* is selected, you need to set the IP Address, Subnet Mask and Gateway manually. These settings will be static and if you move the network camera, you may need to access it to reconfigure these options.
  - **DHCP:** When in DHCP, the camera receives the IP Address, Subnet Mask and Gateway automatically from a server connected to the network. If the camera is moved to another network that also has a *DHCP* server, it will receive these settings from this new server without the need to access it for reconfiguration.
- **MAC address:** field where the camera's MAC address is displayed.

» **IP Version:** the camera operates with both IP protocols, *IPv4*, as shown in *TCP/IP Version 4* image, and *IPv6*, as shown in the following image.



Rede

Modo ● Estático ○ DHCP

Endereço MAC: 24 . 52 . 6a . ea . 67 . 0e

Versão de IP: IPv6

Endereço do Link: fe80::2652:6aff:feea:670e/64

Endereço IP: / 1

Gateway:

DNS Primário: 2001:da8:2000:2017::33

DNS Secundário: 2001:da8:2000:2193::33

Conexões Simultâneas: 10 (1~20)

Porta TCP: 37777 (1025~65534)

Porta UDP: 37778 (1025~65534)

Porta HTTP: 80

Porta RTSP: 554

Porta HTTPS: 443

□ Ativar ARP/Ping para def. o serviço do endereço IP

TCP/IP - version 6

» **IP address:** in *Static* mode you can set the desired IP.

Attention: it is necessary to check an available IP on the network to avoid conflict between two devices.

» **Subnet Mask:** field to configure the subnet mask of the device, when in *Static* mode. This field will only appear when IPv4 is enabled.

» **Local Link:** local IPv6 address for camera access. Each device has its own local link. To access the camera using this address, simply be on the same network as the camera. This option appears only when *IP version - IPv6* is selected.

» **Gateway:** field to set the gateway of the device, when in *Static* mode.

» **Primary DNS:** field to configure the IP address of a *DNS* server.

» **Secondary DNS:** field to configure the IP address of a *DNS* server. This is the alternate server that will be used when the Primary DNS is inaccessible.

» **Simultaneous Connections:** defines the maximum number of simultaneous connections to the camera's web interface. The maximum allowed is 20 connections. For video stream access, for example: via web interface, iSIC, RTSP, etc., the maximum allowed is 4 independent video streams.

» ***TCP* port:** the default value is *37777*. It can be changed to values between 1,025 and 65,535.

» ***UDP* port:** the default value is *37778*. It can be changed to values between 1,025 and 65,535.

» **HTTP Port:** the default value is *80*. It can be changed to other values if necessary.

» ***HTTPs* Port:** port used to access the IP camera via HTTP over an additional security layer. At this layer, data is transmitted, encrypted and the authenticity of the camera is verified using digital certificates. The default value is *443*. It can be changed to values between 1,025 and 65,535.

Note: *To change the HTTPs port, you must disable the HTTPs service so that you are then allowed to change the port.*

» ***RTSP* port:** the default value is 554, but it can be changed.

Note: to access the camera's video stream through software, you can use the camera's RTSP path, which is*:*

» ***For the Main Stream***

rtsp://USER:PASSWORD@IP:PORT/cam/realmonitor?channel=1&subtype=0

» ***For the Extra Stream***

rtsp://USER:PASSWORD@IP:PORT/cam/realmonitor?channel=1&subtype=1

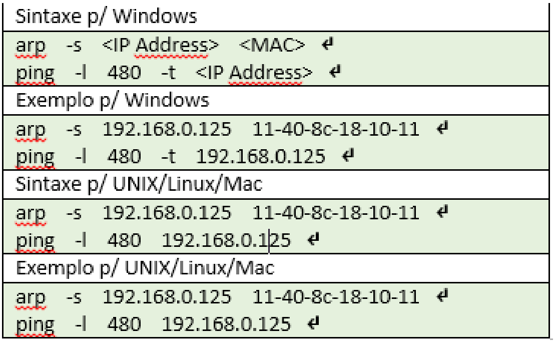
Being:

- *» **IP:** the device's IP address.*
- *» **Port:** port configured in the RTSP Port field. It can be left blank if the default value is 554.*
- *» **User/Password:** username and password for access to the web interface. These fields can also be excluded if verification is not required. In this case the address will be: rtsp://IP:PORT/cam/realmonitor?channel=1&subtype=0*

Because the video is encoded and decoded in real time, there can be a delay of up to 4 seconds between the video stream in the web interface and the video stream over the RTSP protocol.

» **Enable ARP/Ping for setting the IP address service:** with this option enabled, it is possible to modify the camera's IP via ARP/Ping commands. During camera startup, you will be able to configure the camera's IP by this method for 2 minutes.

To make this change open the command terminal and type:

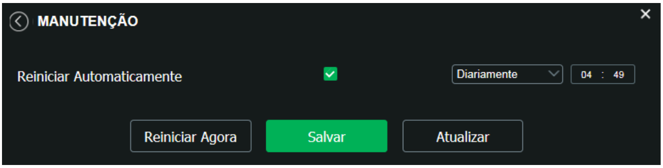


```
Sintaxe p/ Windows
arp   -s   <IP Address>   <MAC>  ↵
ping   -l   480   -t   <IP Address>  ↵
Exemplo p/ Windows
arp   -s   192.168.0.125   11-40-8c-18-10-11  ↵
ping   -l   480   -t   192.168.0.125  ↵
Sintaxe p/ UNIX/Linux/Mac
arp   -s   192.168.0.125   11-40-8c-18-10-11  ↵
ping   -l   480   192.168.0.125  ↵
Exemplo p/ UNIX/Linux/Mac
arp   -s   192.168.0.125   11-40-8c-18-10-11  ↵
ping   -l   480   192.168.0.125  ↵
```

Reboot the camera and try to access it through the new IP you defined.

4.4. Maintenance

This menu makes it possible to restart the device automatically, instant restart.



MANUTENÇÃO

Reiniciar Automaticamente ☑ Diariamente 04 : 49

Maintenance

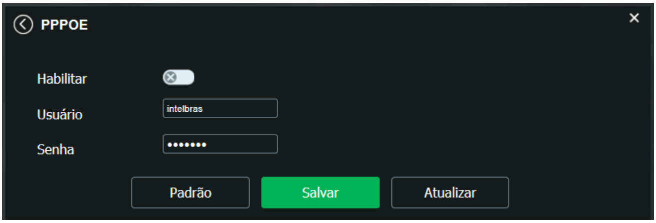
- » **Restart automatically:** sets the time at which the camera will restart.
- » **Restart now:** restarts the camera instantly.

4.5. Services

This menu makes it possible to configure various functions. These are: PPPoE, DDNS, RTSP, Multicast, UPnP®, IP Filter, QoS, IEEE 802.1X ,Bonjour, SIP, Onvif, HTTPs, SMTP (E-mail), RTMP and Security.

PPPoE

In this option the camera's PPPoE authentication settings are made. Simply enter the user name and password and enable the function. It is generally used when the camera is directly connected to a modem.



PPPOE

Habilitar

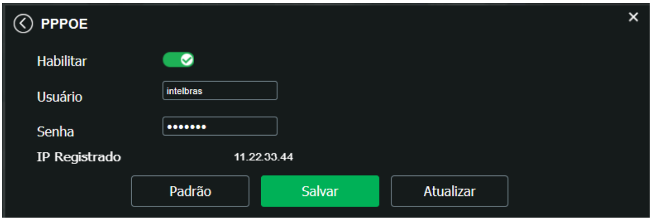
Usuário: intelbras

Senha: •••••••

PPPoE

- **Enable:** enables PPPoE authentication.
- **User:** user of your internet service provider.
- **Password:** password of your internet service provider.

After configuring it with valid data, this same screen will display the IP address that the camera received from the PPPoE server, as shown in the following example.



PPPOE

Habilitar

Usuário: intelbras

Senha: •••••••

IP Registrado: 11.22.33.44

Registered IP

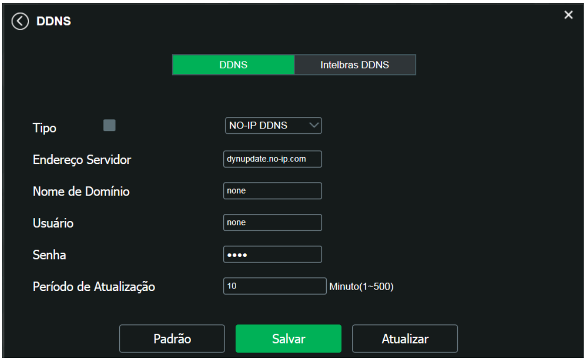
Note: *Only your Internet provider can provide you with the user name and password. This camera model has both PAP and CHAP authentication types.*

DDNS

DDNS references a name to the device's IP, making it easy for the user to access it even with an IP change.

DDNS

The device supports some *DDNS* service providers, which are configured as shown in the following image:



DDNS

Tipo: NO-IP DDNS

Endereço Servidor: dynupdate.no-ip.com

Nome de Domínio: none

Usuário: none

Senha: ••••

Período de Atualização: 10 Minuto(1~500)

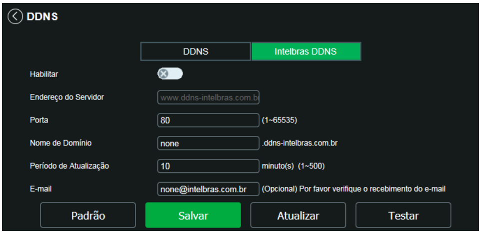
DDNS

- **Server Type:** selects the type of server to be used: No-IP® or DynDNS®.
- **Server address:** reports the server's address.
- **Domain name:** domain name registered in the user account of the *DDNS* provider, including the full domain, as shown in the following example:
  - **Example with DynDNS®:** domainname.dyndns.org.
- **User:** username created for access to the server.
- **Password:** user password created to access the server.
- **Update period:** the device regularly sends signals to the server confirming normal operation. The sending time between each signal can be configured on this interface.

Attention: Before using this function, create a dynamic domain account on one of the supported *DDNS* servers. If the camera's access to the Internet depends on a network router, the router must support the *UPnP®* function, which must be configured and active. Otherwise, the router will need to be configured to redirect the external service ports to the *HTTP, UDP, TCP* and *RTSP* ports used in the camera respectively. The standard used for these ports is *80/37778/37777/554*, but they can be changed.

Intelbras DDNS

Intelbras provides a DDNS service for the user. To use it, simply access the interface as shown in the image:



Habilitar

Endereço do Servidor: www.ddns-intelbras.com.b

Porta: 80 (1~65535)

Nome de Domínio: none .ddns-intelbras.com.br

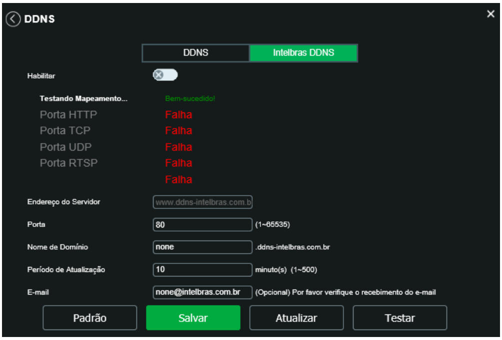
Período de Atualização: 10 minuto(s) (1~500)

E-mail: none@intelbras.com.br (Opcional) Por favor verifique o recebimento do e-mail

Intelbras DDNS

- **Enable:** enables the Intelbras DDNS server.
- **Server Address:** Intelbras DNS server address: www.ddns-intelbras.com.br.
- **Port:** port through which the access will be made. The default is 80.
- **Domain name:** user or domain name created on the server.
- **Update period:** the device sends signals regularly to the server confirming normal operation. The sending time between each signal can be configured in the interface.
- **E-mail address:** e-mail for registration of the Intelbras DDNS service. When using it for the first time, an e-mail will be sent to this configured address, so that the user creates a registration and his domain name does not expire.
- **Test:** checks the availability of the domain name configured in the *Intelbras DDNS* server and also performs the function we describe as *Easylink*. It facilitates the process of external access to the camera, creating the domain name requested by the user and setting up the port redirections with the user's router.

See below how the information about *Easylink's* status is displayed. The Mapping chart shows the result of port forwarding and the last line highlighted in green or red shows the result of the domain name.



Habilitar

Testando Mapeamento... Bem-sucedido!

Porta HTTP Falha

Porta TCP Falha

Porta UDP Falha

Porta RTSP Falha

Falha

Endereço do Servidor: www.ddns-intelbras.com.b

Porta: 80 (1~65535)

Nome de Domínio: none .ddns-intelbras.com.br

Período de Atualização: 10 minuto(s) (1~500)

E-mail: none@intelbras.com.br (Opcional) Por favor verifique o recebimento do e-mail

UPnP Test

Attention: The router must support the *Easylink* function, and the *UPnP®* configuration must be done and enabled. If the router does not support the *UPnP®* function, the *DDNS* function will still work, but you must manually configure port forwarding.

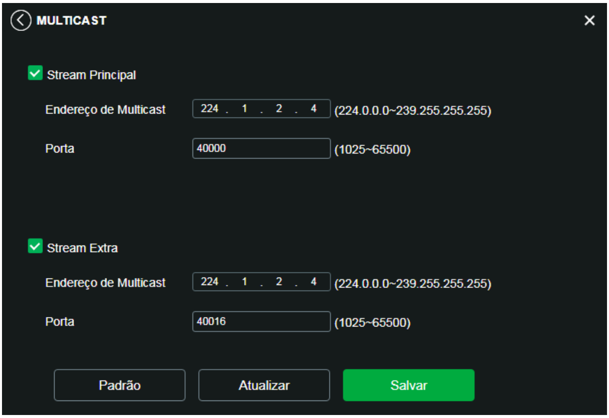
Note: *To access the device through the Intelbras DDNS server, from an external network, just type in the browser's address bar: http://nomededominio.ddns-intelbras.com.br:porta http.*

Attention!
Intelbras DDNS is a standard DDNS service, allowing you to keep the domain address (Hostname) of your equipment up to date with the public IP of your location. For the service to work some information is collected, such as the Hostname, IP address, MAC number, E-mail, etc. The data collected is only that which is strictly necessary and the sole purpose of the collection is the provision of service. You may withdraw your consent at any time by unchecking the option. The equipment allows you to use a DDNS service offered by a third party. When doing this it is important to be aware that your data may be collected.

Multicast

Multicast is used mainly to decrease network bandwidth consumption and the camera´s CPU processing. It is usually used when there are multiple users accessing the camera to view the video through the web interface.

The IP camera sends a video Stream to a Multicast group address. The clients will then receive a copy of the stream at the Multicast group address and will have no way of accessing the original Stream, which would cause excessive network bandwidth consumption or even camera CPU shutdown.



MULTICAST

☑ Stream Principal

Endereço de Multicast: 224 . 1 . 2 . 4 (224.0.0.0~239.255.255.255)

Porta: 40000 (1025~65500)

☑ Stream Extra

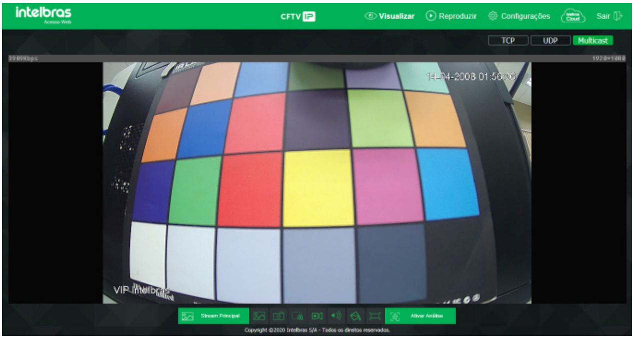
Endereço de Multicast: 224 . 1 . 2 . 4 (224.0.0.0~239.255.255.255)

Porta: 40016 (1025~65500)

Multicast

In the screen above the Multicast IP and port are set, both for the main Stream and the extra Stream.

To view the Multicast Stream, you need to access the *View* tab and select the protocol as shown in the following image:



View multicast

UPnP®

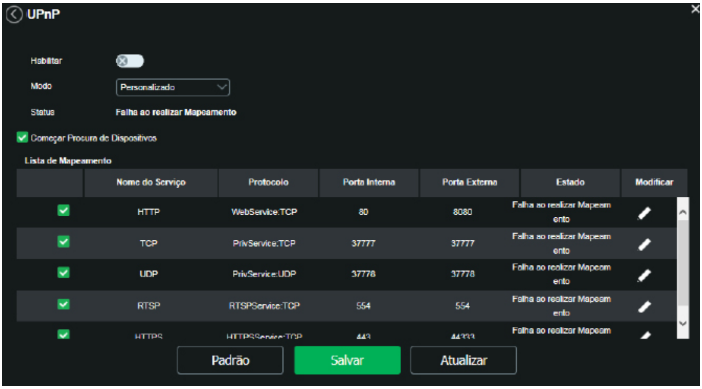
Universal Plug & Play (UPnP®) simplifies the process of adding a camera to a local network. UPnP® uses open standard web-based protocols that define a set of *HTTP* services for handling discovery, description, control, events and presentation of devices.

The VIP 3430 G2 camera uses the discovery treatment through SSDP (Simple Service Discovery Protocol) to be found by the Intelbras IP Utility Next software, which uses as search the UPnP® protocol.

Once connected to the LAN, the camera exchanges discovery messages with control points. These messages contain specific information about the camera, such as IP and MAC address, of which Intelbras IP Utility Next uses three: IP, MAC, and Camera model.

With the *UPnP®* function active, the camera exchanges port forwarding information automatically (only routers compatible with the function).

Note: *remember that to create, modify or remove a rule you must change the mode to* Custom.



UPnP

Habilitar

Modo: Personalizado

Status: Falha ao realizar Mapeamento

☑ Começar Procura de Dispositivos

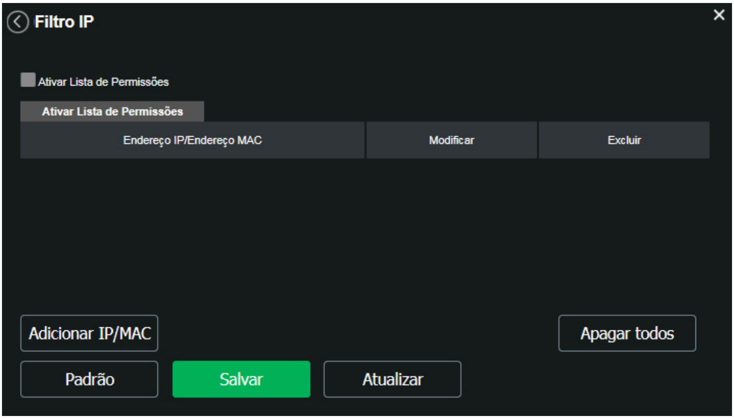
Lista de Mapeamento

	Nome do Serviço	Protocolo	Porta Interna	Porta Externa	Estado	Modificar
☑	HTTP	WebService:TCP	80	8080	Falha ao realizar Mapeamento	✎
☑	TCP	PrivService:TCP	37777	37777	Falha ao realizar Mapeamento	✎
☑	UDP	PrivService:UDP	37778	37778	Falha ao realizar Mapeamento	✎
☑	RTSP	RTSPService:TCP	554	554	Falha ao realizar Mapeamento	✎
☑	HTTPS	HTTPSService:TCP	443	44333	Falha ao realizar Mapeam	✎

UPnP®

IP Filter

The camera makes it possible to create a list of IPs and MACs in order to limit access to the camera to selected devices only.



Filtro IP

□ Ativar Lista de Permissões

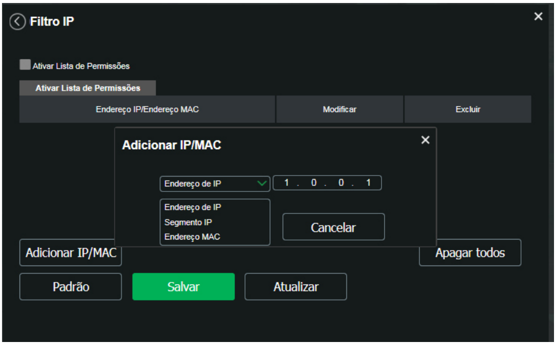
Ativar Lista de Permissões

Endereço IP/Endereço MAC	Modificar	Excluir

IP Filter

Note: *the option will be active only when the check-box Allowed IPs/MACs is enabled.*

In the following image you can see how rules are created for a specific IP Address, IP Segment (to select an IP address range) and MAC (to specify a physical address).



Filtro IP

□ Ativar Lista de Permissões

Endereço IP/Endereço MAC	Modificar	Excluir

Adicionar IP/MAC

Endereço de IP: 1 . 0 . 0 . 1

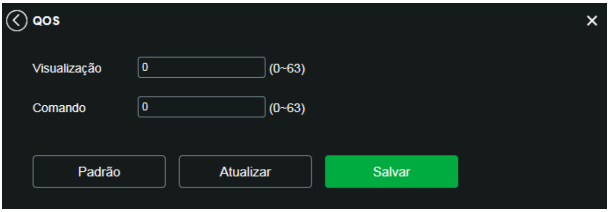
Add IP/MAC

QoS

QoS (*Quality of Service*) is a network security mechanism, a technology that corrects problems related to delays, congestion, packet loss, etc.

With QoS, you can guarantee the necessary bandwidth, reduce delays and packet losses, and increase the quality of the services.

IP's DSCP (Differentiated Services Code Point) is used to differentiate and prioritize data packets so that the router provides different services for each type. According to the priority, the bandwidth required to transmit each row of packets is defined. Discarding is also done when there is congestion.



QOS

Visualização: 0 (0~63)

Comando: 0 (0~63)

QoS

In this screen you can set the DSCP for the camera's View and Command related packets, giving priority to your packets.

Using the respective fields, you can prioritize your packets coming from the IP camera. Choose values between 0 and 63 (DSCP values in decimal system, as seen in the *DSCP chart*) to rank the priorities of the data packets travelling over the network.

DSCP (Binary)	DSCP (Hexadecimal)	DSCP (Decimal)	Class DSCP/PHB
0	0X00	0	none
1000	0X08	8	cs1
1010	0X0A	10	af11
1100	0X0C	12	af12
1110	0X0E	14	af13
10000	0X10	16	cs2
10010	0X12	18	af21
10100	0X14	20	af22
10110	0X16	22	af23
11000	0X18	24	cs3
11010	0X1A	26	af31
11100	0X1C	28	af32
11110	0X1E	30	af33
100000	0X20	32	cs4
100010	0X22	34	af41
100100	0X24	36	af42
100110	0X26	38	af43
101000	0X28	40	cs5
101110	0X2E	46	ef
110000	0X30	48	cs6
111000	0X38	56	cs7

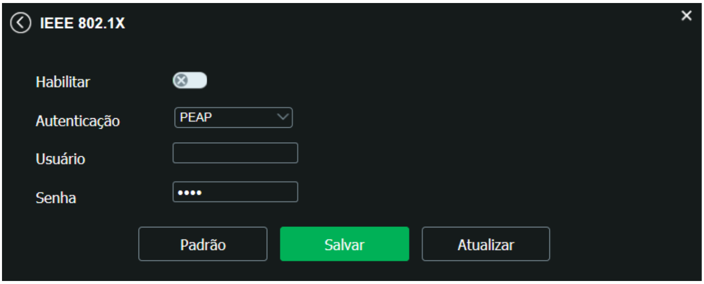
DSCP Chart

Obs.: *the priority of packets is highly influenced by the switches and/or routers in the network. The chart above presents predefined values for the QoS standard, and it is possible to configure different values from those described. However, when using different values from the chart, you must configure your switch/router for it to work properly.*

IEEE 802.1X

IEEE 802.1X is a standard that aims to define a standardization mainly for local area networks (LAN) providing an authentication mechanism for devices that wish to connect to LAN and WLAN networks, for example.

In this field the user can configure the PEAP authentification protocol (Protected Extensible Authentication Protocol), which is used as an authentication method using encryption.



IEEE 802.1X

Habilitar: ○

Autenticação: PEAP

Usuário:

Senha: ••••

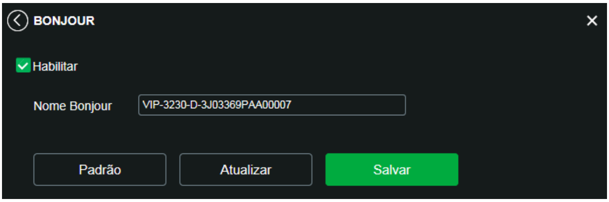
IEEE 802

- **Enable:** enables/disables the function.
- **Authentication:** sets the PEAP authentication type for the user.
- **User:** name of the user created in the PEAP authenticator.
- **Password:** user authentication password.

Bonjour

Bonjour provides a method of discovering devices on a local area network (LAN). It is also used on devices such as computers and printers.

The service uses the default *UDP port 5353*. If you use a firewall, you may need to configure it to allow this port.



☑ Habilitar

Nome Bonjour: VIP-3230-D-3J03369PAA00007

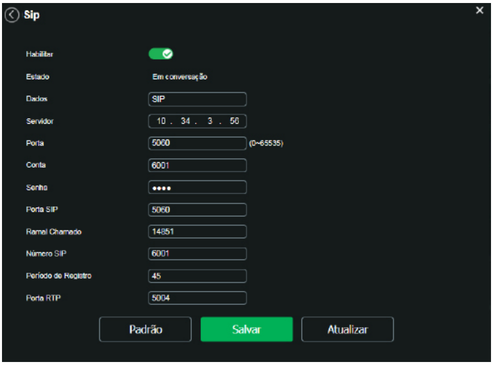
Bonjour

- **Bonjour Name:** the name the device will display when found by software using Bonjour.

SIP

SIP (Session Initiation Protocol) is a signaling protocol for establishing calls and conferences over networks via IP Protocol. A typical example is VoIP. SIP is an application protocol that uses the request-response model, similar to HTTP, to initiate interactive communication sessions between users.

With this service integrated into the camera, the user will be able to perform activities such as: making a call to the camera and receiving video and audio (when available) on a smartphone, for example, and receiving a call from the camera after an event has occurred.



Habilitar: ✓
Estado: Em conversação
Dados: SIP
Servidor: 10 . 34 . 3 . 56
Porta: 5060 (0~65535)
Conta: 6001
Senha: ••••
Porta SIP: 5060
Ramal Chamado: 14851
Número SIP: 6001
Período de Registro: 45
Porta RTP: 5004

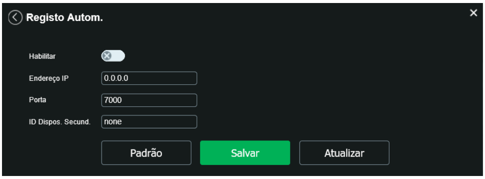
SIP

- **Enable:** select this item to enable the *SIP* protocol function in the camera.
- **Status:** displays the current status of the *SIP* service in the camera, that is, it informs the user if the camera succeeded in registering the SIP extension with the *SIP* server and if it is in conversation.
- **Data:** camera identification name.
- **Server:** enter in this field the IP address or domain name of the SIP Server, whose registration the camera will request, or enter the address of your Intelbras SIP central.
- **SIP Number:**it is the name of the extension, and serves as the ID, used with the server. In general, this field is configured with the same information as the account´s.
- **Account:** the user must enter in this field the extension number to be used by the camera to register with the *SIP* server. This extension must have its settings previously done on the server, i.e. this is the extension number to which the camera will be associated.
- **Password:** enter in this field the password to be used for registration with the *SIP* server. This password is set up in the *SIP* server whet the extensions are defined. The camera will use this information together with the information in the Account field to request the registration from the server.

- **SIP port:** As with most protocols, there is a communication and access port to the SIP service. This field is for the port number to access the SIP server. The port that must be used is the default SIP protocol: port *5060.*
- **Called Extension:** enter here the extension the camera should call when an event such as motion detection or a signal at the alarm input occurs.
- **Registration period:** this is the interval in which the camera sends a registration request packet to the server. This sending of logging from time to time has the purpose of informing the server that the extension, defined in the *Account* field, is active.
- ***RTP* Port:** enter here the *RTP* port you want the camera to use for sending video and audio over *SIP*.

Automatic registration

With the function enabled, the device will report its address to the specified server that acts as an intermediary to facilitate the connection between the client software and the device.



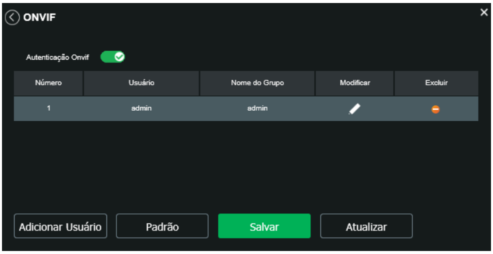
Registo Autom.

Habilitar	☒
Endereço IP	0.0.0.0
Porta	7000
ID Dispos. Secund.	none

- **Enable:** enables the *Automatic Registration* function.
- **IP address:** IP address of the Server the camera must connect to.
- **Port:** the port for automatic registration.
- **Secondary Device ID:** ID associated with the device by the server.

Onvif

In this menu you can enable and disable authentication via Onvif, as well as create/modify/delete exclusive Onvif user accounts.



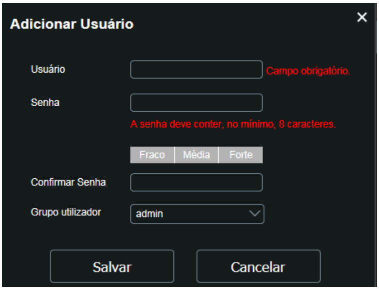
ONVIF

Autenticação Onvif ✓

Número	Usuário	Nome do Grupo	Modificar	Excluir
1	admin	admin	✎	⊖

Onvif

- **Add user:** To create a new user, click the *Add User* button. A screen will appear as shown below:



Adicionar Usuário

Usuário Campo obrigatório.

Senha

A senha deve conter, no mínimo, 8 caracteres.

Fraco | Média | Forte

Confirmar Senha

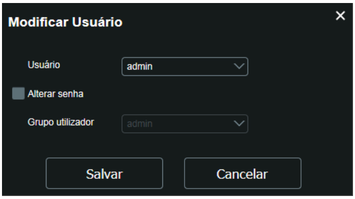
Grupo utilizador: admin

Add user

Note: on this screen the name and password for Onvif access are set.

- There is one default user, *admin,* which is the administrator user with full access.

- **Change:** allows you to change the password of the selected user.



Modificar Usuário

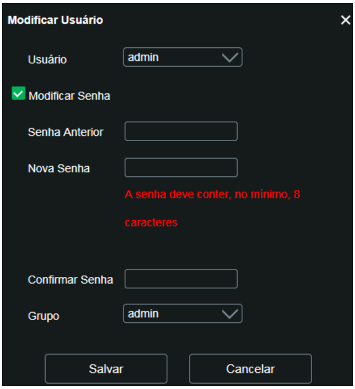
Usuário: admin

□ Alterar senha

Grupo utilizador: admin

Change Onvif User

- **Change Password:** by selecting the field *Change password* you can change the password of the corresponding user, by entering the old password and the new password twice, as shown in the following image:



Modificar Usuário

Usuário: admin

☑ Modificar Senha

Senha Anterior:

Nova Senha:

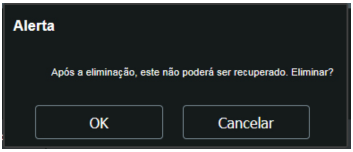
A senha deve conter, no mínimo, 8 caracteres

Confirmar Senha:

Grupo: admin

Change password

- **Delete:** allows you to delete a user.



Alerta

Após a eliminação, este não poderá ser recuperado. Eliminar?

Confirmation to delete user

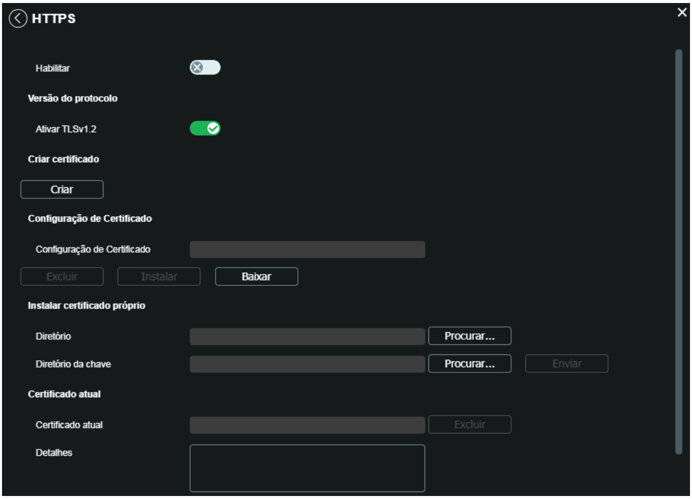
***Note:** The logged-in user must have the* Account *field selected in his list of authorities in order to proceed with these settings.*

- Usernames must contain a maximum of 31 characters.
- Passwords must contain a maximum of 32 characters.
- Valid characters are: letters, numbers, and special characters.

HTTPS

If the user wants to connect to the camera via a secure internet link it is necessary to create the HTTPS certificate.

- **Enable:** select this item to enable the HTTPS protocol function in the camera.
- **Activate TLSv1.2:** changes the HTTPS protocol version to TLSv1.2.



HTTPS

Habilitar ☒

Versão do protocolo

Ativar TLSv1.2 ☑

Criar certificado

Configuração de Certificado

Configuração de Certificado

Instalar certificado próprio

Diretório

Diretório da chave

Certificado atual

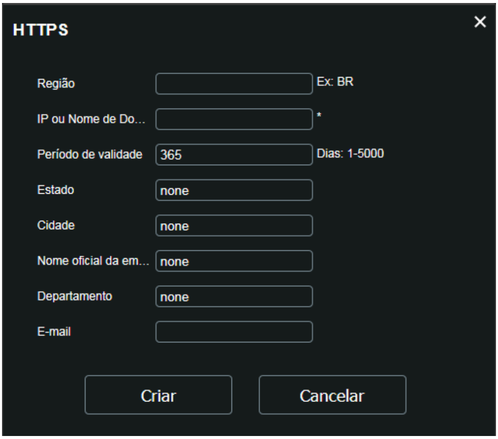
Certificado atual

Detalhes

Activate TLSv1.2

- **Certificate Configuration:**
  - **Delete:** deletes the configured certificate when there is a loaded configuration in the field.
  - **Install:** installs the certificate created in the previous items.
  - **Download:** downloads the certificate created in the previous item.

To create the certificate, the user must click on Create. After clicking *Create*, the screen for configuring the creation will open, as shown below:



HTTPS

Região		Ex: BR
IP ou Nome de Do...		*
Período de validade	365	Dias: 1-5000
Estado	none	
Cidade	none	
Nome oficial da em...	none	
Departamento	none	
E-mail		

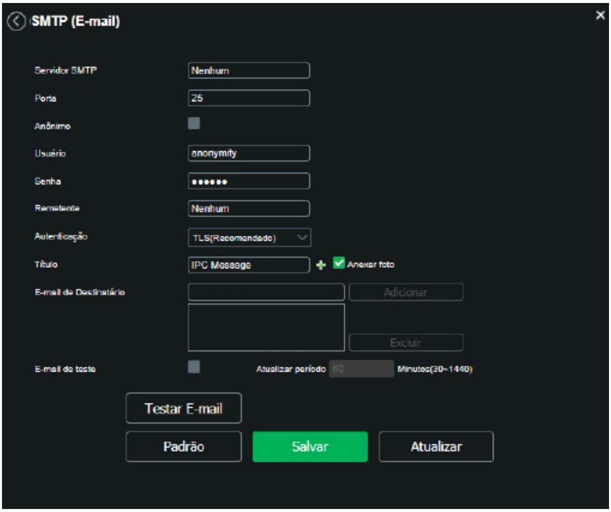
Create HTTPS certificate

  - **Region:** place of hosting, for example BR.
  - **IP or domain name:** IP or domain name for creating the certificate, being the camera a device, the IP of the device.
  - **Validity period:** Total number of days that the created certificate is valid.
  - **State:** state of residence (optional).
  - **City:** user's city (optional).

    - **Official company name:** name of the user company (optional).
    - **Department:** user's department (optional).
    - **E-mail:** registration e-mail for the digital signature of the responsible party
    - **Create:** after completing the entry, creates the certificate.
- **Install own certificate:** when you already have a valid previous certificate and you want to register this certificate for the camera, you can load the certificate by using this menu.
- **Current certificate:** shows the current registered certificate and digital signature details.
- **Save:** Save settings and enable/disable HTTPS.

SMTP (e-mail)

By setting up an *SMTP* server, you can configure the camera to send e-mail when an event such as motion detection occurs.



SMTP (E-mail)

Servidor SMTP: Nenhum

Porta: 25

Anônimo: □

Usuário: anonymity

Senha: ••••••

Remetente: Nenhum

Autenticação: TLS(Recomendado)

Título: IPC Message ☑ Anexar foto

E-mail de Destinatário:

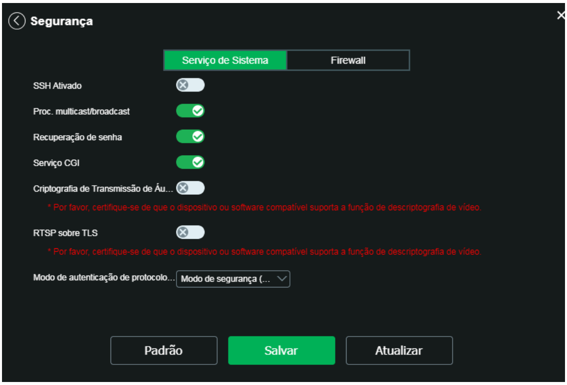
E-mail de teste: □ Atualizar período 60 Minutos(30~1440)

SMTP

- ***SMTP* Server:** enter the *SMTP* server. Example: *smtp.gmail.com.*
- **Port:** service port of the *SMTP* server. The default value is *587*, but can be changed if the server is configured to use another port.
- **Anonymous:** for servers that support this feature.
- **User:** username (authentication) of the sender e-mail.
- **Password:** password of the sender e-mail.
- **Sender:** sender's e-mail address.
- **Authentication:** Supports *None, SSL* and *TLS*.
- **Title:** set the subject of e-mails.
- **Attach photo:** when enabled, sends a photo of the event attached to the e-mail.
- **Recipient E-mail:** e-mail delivery address. Up to three recipients can be entered. To add a new address, enter it in this field and click the + symbol. To delete, select the desired address in the following quadrant and click the - symbol.
- **Update period:** the camera sends an e-mail when an event occurs and keeps sending e-mails respecting this interval as long as this same event is still happening . If no consecutive events occur, only one e-mail will be sent. This function is often used to avoid overloading the e-mail server. The field supports values from 0 to 3,600 seconds.
- ***E-mail test:*** enable this function so that the camera keeps sending test emails for the period configured in the *Update period* field.
- **Test e-mail:** When you press this button, the camera checks that the information you have set up in this section is correct and sends an e-mail. If any settings are wrong, a message will be displayed warning of the error.

Security

In this menu you can configure the security functions.



Segurança

SSH Ativado ✕

Proc. multicast/broadcast ✓

Recuperação de senha ✓

Serviço CGI ✓

Criptografia de Transmissão de Áu... ✕

* Por favor, certifique-se de que o dispositivo ou software compatível suporta a função de descriptografia de vídeo.

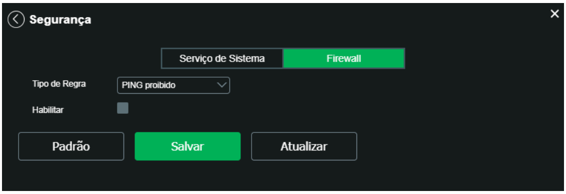
RTSP sobre TLS ✕

* Por favor, certifique-se de que o dispositivo ou software compatível suporta a função de descriptografia de vídeo.

Modo de autenticação de protocolo... Modo de segurança (...

Security

- **System Services:**
  - **SSH:** The *SSH* function is intended for authorized technical assistants, in order to facilitate the identification of the camera. By default this function is disabled and for security reasons should only be enabled during maintenance. By keeping this function disabled, you will be preserving the security of your device.
  - **Multicast/broadcast Proc.:** with this function disabled the camera stops sending broadcast packets. It will no longer be possible to find the camera by some software like IP Utility, for example.
  - **Password Recovery:** it is possible to disable the function of password recovery by e-mail, it is recommended to keep it enabled.
  - **CGI service:** with this option disabled the camera will no longer respond to CGI commands (camera APIs).
  - **Audio and video transmission encryption:** enables audio and video transmission encryption. Software that does not have the ability to decrypt data will not be able to communicate with the camera.
  - **RTSP over TLS:** enables TLS encryption when transmitting audio and video via RTSP. Software that does not have the ability to decrypt data will not be able to communicate with the camera.
  - **Private protocol authentication mode:** allows you to change the camera access authentication. The options are *Security Mode* and *Compatibility Mode*. If *Secure Mode* is selected, only software and applications that support authentication will be able to connect to the camera.
- **Firewall:**
  - **Forbidden Ping :** with the function enabled the camera will no longer respond to ping requests.
  - **Prevent Semijoin:** Semijoin is the name given to connections established with the camera that are not terminated and remain in an intermediate state, consuming camera resources. With the function enabled, the camera will recognize these connections and prevent them.



Segurança

Tipo de Regra: PING proibido

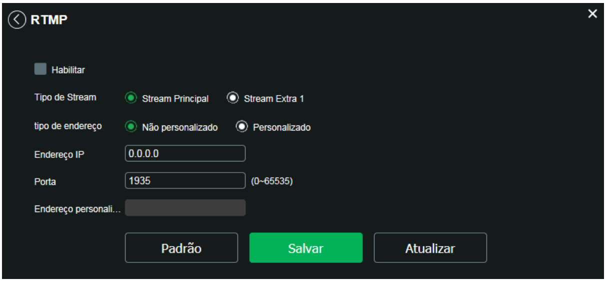
Habilitar □

Firewall

RTMP

This service provides the user with the possibility to share the video stream through a third party software or platform.

Cameras with no audio input or built-in microphone may be incompatible with some streaming platforms. To avoid incompatibility please refer to the regulations provided by the software or platform developer.



□ Habilitar

Tipo de Stream ● Stream Principal ○ Stream Extra 1

tipo de endereço ● Não personalizado ○ Personalizado

Endereço IP 0.0.0.0

Porta 1935 (0~65535)

Endereço personali...

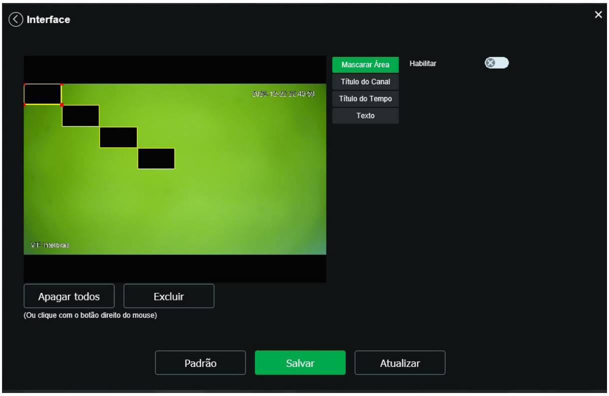
RTMP Service

- **Enable:** enables or disables the RTMP service.
- **Stream Type:** selects the type of stream that will be transmitted. Remember that the better the quality of the stream, the more bandwidth will be required.
- **Type of address:** the user can select whether the address will be given by an IP address or by an internet link. The IP address is given as non-custom and the internet link as custom.
- **IP address:** in this field the user informs the IP address of the RTMP server.
- **Port:** in this field the user informs which port is enabled to receive the service.
- **Custom address:** in this field the user informs which internet link will receive the service. The link must be placed in the following format Transmission_URL + / +Stream_key. The link must not contain special characters.

4.6. Interface

This is where video overlay options are configured.

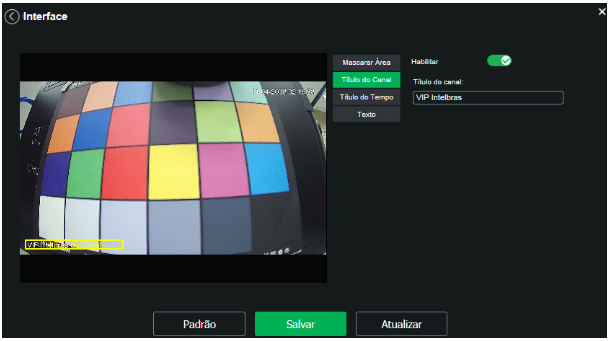
- **Mask Area:** adds a mask over the desired part of the image, which prevents the image at that location from being seen. You can set up to four masking areas, as shown below.



(Ou clique com o botão direito do mouse)

Mask area

- **Channel Title:** used to visually identify which camera is showing the video in question. You can configure the title and the position it is in. Maximum length 63 characters.

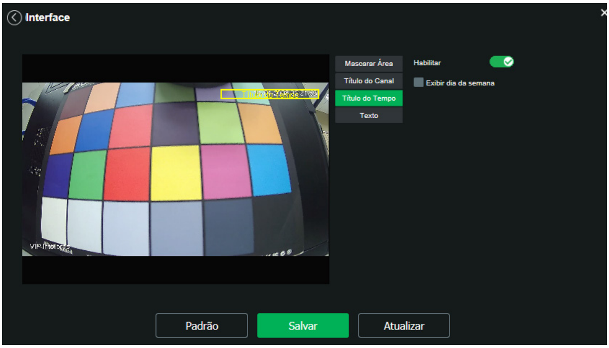


Habilitar

Título do canal: VIP Intelbras

Channel Title

» **Time Title:** positions and sets the date/time information in the displayed video. By selecting the *Weekly display* option, the day of the week will be displayed along with the date and time.

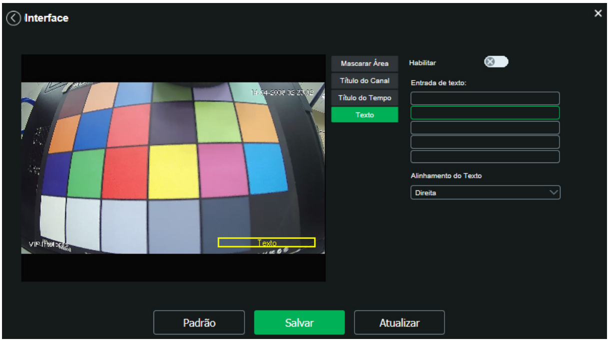


Habilitar

□ Exibir dia da semana

Time title

» **Text:** in this option it is possible to add texts of up to 45 characters in each field, and it is also possible to position and define the alignment, as seen in the following image:



Habilitar

Entrada de texto:

Alinhamento do Texto: Direita

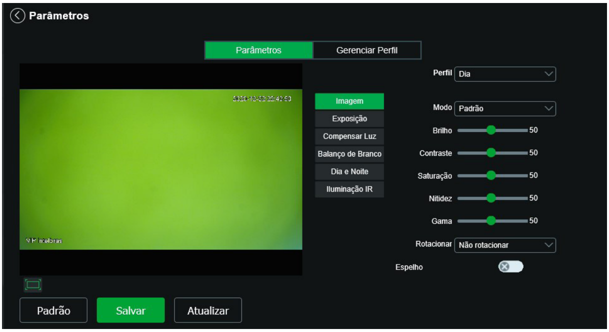
Text

4.7. Parameters

Viewing and configuration of image patterns.

Parameters

- **Profile**: selects the Day or Night profiles, and the settings displayed on this page refer to the selected profile.



Perfil: Dia

Modo: Padrão

Brilho: 50

Contraste: 50

Saturação: 50

Nitidez: 50

Gama: 50

Rotacionar: Não rotacionar

Espelho

Parameters

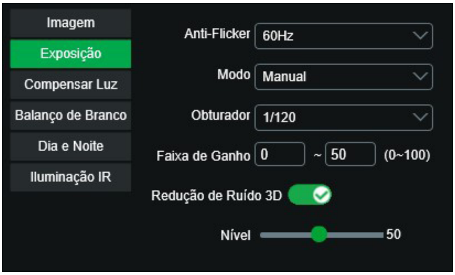
Note: the adjustments in the following fields are applied directly to the image display, and can be viewed in real time in the web browser, softwares, and video players.

Setting	Description
Brightness	The function should be used when the video is too bright or too dark. The video may become blurred when the brightness level is too high.
Contrast	It has a brightness balancing function that regulates the difference between bright and dark. Video can become blurred when the value is below the standard. When raised, the dark section of the video loses brightness by compensating for the lighter section.
Saturation	Responsible for the perception of color in the image. The higher its value, the more the colors come alive. When it approaches the minimum, the image completely loses the presence of color.
Sharpness	Increases the amount of detail in the image. The more sharpness applied, the more details and noise are displayed.
Gamma	It reduces or increases the noise caused by too much brightness in the image. What is bright stays bright, and objects with darker tones lose brightness.
Mirror	It inverts the image giving the feeling of looking into a mirror.
Rotate[1]	It rotates the image all around, making it possible to position the camera in different environments and in different ways.

[1] It is only possible to enable this function if the camera has HD, 1.3MP or Full HD resolution, for the rest it is not possible.

Exposure

Sets the time the camera sensor will be exposed to light, presenting a few options.



Anti-Flicker: 60Hz

Modo: Manual

Obturador: 1/120

Faixa de Ganho: 0 ~ 50 (0~100)

Redução de Ruído 3D ✓

Nível: 50

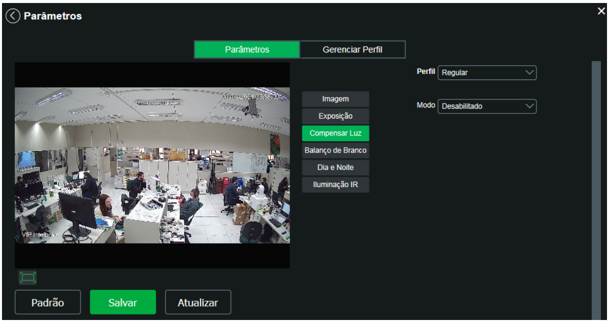
Exposure

- **Antiflicker:** this function is used to remove flicker (difference in synchronism with lighting) when the camera's signal format does not match the frequency of the power supply that is being used. The options are *50 Hz, 60 Hz and Outdoor* (automatic).

- **Mode:** enables the choice of some methods for shutter configurationr:
  - **Automatic:** the device takes care of setting the exposure time automatically, trying to make the image look visibly good.
  - **Gain Priority:** level from 0 to 100 of the set priority (can be lower limit greater than 0).
  - **Shutter Priority:** becomes valid after setting the shutter, the exposure compensation and the WDR.
  - **Manual:** time is described by 1 second/aperture value. Taking 1/60 for example, we can conclude that the camera sensor will be sensitive to light for 1 second divided by 60, or one sixtieth of a second. The shorter the exposure time, the darker the image will be. The longer the exposure time, the lighter.
  - **3D noise reduction:** makes the video image sharper when it is noisy.
  - **Level:** intensity with which the noise is reduced or increased.

Light Compensation

Its purpose is to display details of dark areas of the video when the image is subjected to a very bright backlight. It has the following options: *Off, BLC, HLC, and WDR.*



Perfil: Regular

Modo: Desabilitado

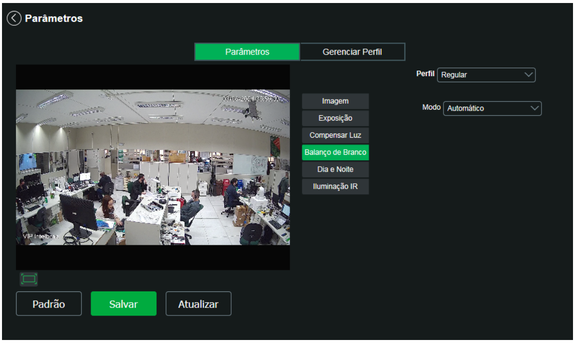
Compensation

- **Disabled:** no light compensation will be performed.
- **BLC:** compensates the image completely, saturating the entire visible area in order to provide better viewing in situations where excess brightness obscures an area or object. It has two options: *Standard* and *Custom*, where *Custom* allows you to select an area of the image, to have as a reference.
- **HLC:** is an image compensation technology that reduces the impact of intense light sources in dark scenes, for example, a car headlight at night. It is recommended to use this function at the maximum level for best results. It has a variable level from 1 to 100, where 1 is less intense and 100 is more intense.
- **WDR:** it is a technique used to provide sharp images in environments where the lighting varies too much, for example, one area too bright and another too dark. It has a variable level from 1 to 100, where 1 is less intense and 100 is more intense.

White Balance

It has an effect on the overall tone of the video by setting the white balance control. It has the following options:

- **Auto:** white balance is active. It automatically adjusts the image dots in relation to the white dots, avoiding excess reflection or brightness in the image highlights. Thus the scenes captured in the device correspond exactly to the original colors of the image being captured.
- **Natural:** recommended for places where natural light predominates.
- **Automatic Exterior:** recommended for places where public lighting is used (standard Blue).
- **Outdoor:** suitable for outdoor locations.
- **Manual:** makes it possible to manually set the blue and red colors, in case *Auto* mode does not work.
- **Custom:** allows the selection of an area of the image to have as reference.



Perfil: Regular

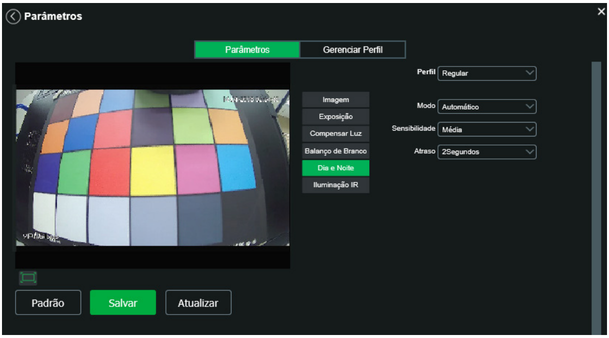
Modo: Automático

White Balance

Day & Night

Selects when the video will be black and white or color. Presents the following options:

- **Mode:** The options are *Color, Black & White, and Auto.*
  - **Color:** the image will always be in color.
  - **Black and White:** the captured image will always be in black and white.
  - **Auto:** The device automatically selects whether the video will be black and white or color. This automatic choice is made according to the brightness of the captured image or whether IR (InfraRed) is active or not.
- **Sensitivity:** the *Sensitivity* function controls the level of illumination required for the camera to switch from *Day to Night* or *Night to Day* profiles. The user can choose between low, medium and high. When the sensitivity is high the camera will switch from the *Day* profile to the *Night* profile with a higher ambient light, and when the sensitivity is low the camera will only switch to the *Night* profile when the ambient light is very low.
- **Delay:** The delay allows the user to set the time it will take the camera to switch from the *Day* profile to the *Night* profile. The time range goes from 2 to 10 seconds.



Perfil: Regular

Modo: Automático

Sensibilidade: Média

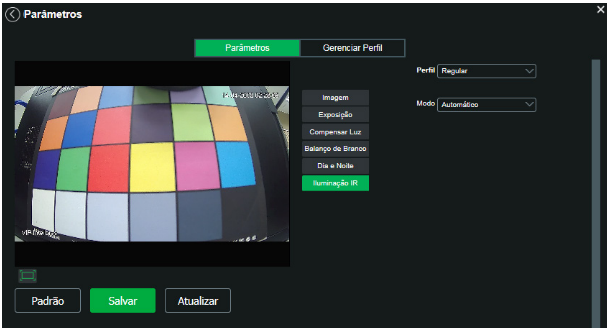
Atraso: 2Segundos

Day and Night

IR Illumination

Provides three configuration modes for IR actuation.

- **Manual:** has the possibility to adjust the IR level and keep it fixed.
- **Automatic:** compensates the IR according to the distance to the subject.
- **Disabled:** disables the IR function.



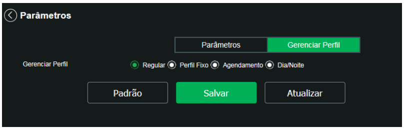
Perfil: Regular

Modo: Automático

IR Illumination

Manage profile tab

In this tab you can define which type of profile will be used:

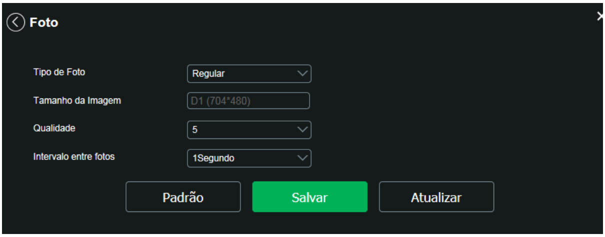


Gerenciar Perfil: ● Regular ○ Perfil Fixo ○ Agendamento ○ Dia/Noite

- **Manage profile:** defines which profile will be used. It has the following options:
  - **Regular:** defines that the Normal profile will always be used.
  - **Fixed profile:** allows you to define whether it will always be the Day profile or the Night profile.
  - **Scheduling:** determines a time range for the use of the Day and Night profiles, automatically alternating them according to the determined schedule.

4.8. Photo

This tab sets up the photos that the camera captures:



Tipo de Foto: Regular

Tamanho da Imagem: D1 (704*480)

Qualidade: 5

Intervalo entre fotos: 1Segundo

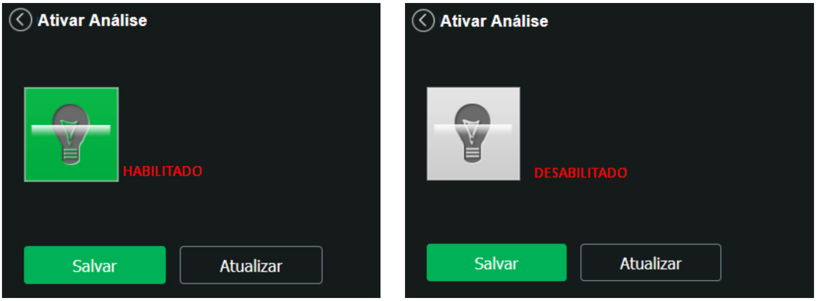
Photo

- **Photo Type:** refers to the capture mode. The options are *Regular* and *Event*. *Regular* will capture photos constantly. In the *Event* option, photos will be captured only after some event happens(*Motion or Alarm*). For these modes to take effect, it is necessary to select the period of operation in *Calendar>Scheduled Photo.*
- ***Image Size:*** it is not configurable. It has the same setting selected for the Main Stream in the *Video>Resolution* menu.
- **Quality:** on a scale of 1 to 6, the higher value has higher quality in the capture and amount of detail in the image.
- **Interval between photos:** current time between one photo and another.

4.9. Activate analysis

In this menu it is possible to enable or disable video analytics (Intelligence) such as Virtual Line, Virtual Fence and Area of Interest.

Note: *If this option is disabled, none of the above functions will work.*

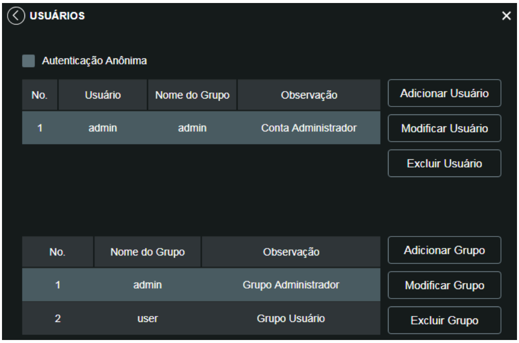


Enable/Disable Analysis

5. Configure settings

5.1. Users

Configure user to control access to the interface. Enables creating, editing and removing them.



□ Autenticação Anônima

No.	Usuário	Nome do Grupo	Observação
1	admin	admin	Conta Administrador

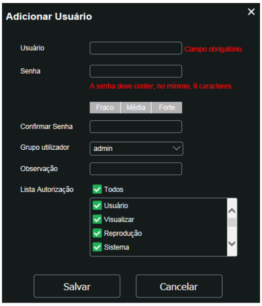
No.	Nome do Grupo	Observação
1	admin	Grupo Administrador
2	user	Grupo Usuário

Users

» **Anonymous authentication:** if enabled, allows access to the video preview without the need to log in to the camera. However, to perform other settings you will need to authenticate with a valid account.

Note: to log in with a valid account while accessing with anonymous authentication, simply click Logout and then enter the account's Username and Password.

» **Add User:** To create a new user, click on the *Add User* button. A screen will appear as shown below:



Adicionar Usuário

Usuário: Campo obrigatório.

Senha: A senha deve conter, no mínimo, 8 caracteres.

Fraco | Média | Forte

Confirmar Senha

Grupo utilizador: admin

Observação

Lista Autorização: ☑ Todos

☑ Usuário
☑ Visualizar
☑ Reprodução
☑ Sistema

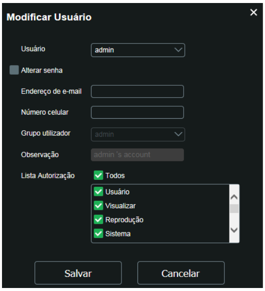
Add user

Note: On this screen you can define name, password and group. You can add a note, which will be displayed on the accounts display screen.

The permissions will be displayed and may be assigned according to the previously configured authorities in the selected group.

Admin is the factory default administrator user, with full access.

» **Change User:** allows you to change the password of the selected user.



Modificar Usuário

Usuário: admin

□ Alterar senha

Endereço de e-mail

Número celular

Grupo utilizador: admin

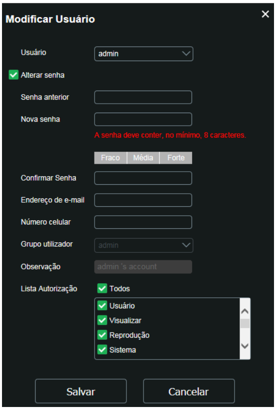
Observação: admin 's account

Lista Autorização: ☑ Todos

☑ Usuário
☑ Visualizar
☑ Reprodução
☑ Sistema

Change

» **Change Password:** by selecting the *Change Password* field you will be able to change the password of the corresponding user, by entering the old password and the new password twice, as shown in the following image:



Modificar Usuário

Usuário: admin

☑ Alterar senha

Senha anterior

Nova senha: A senha deve conter, no mínimo, 8 caracteres.

Fraco | Média | Forte

Confirmar Senha

Endereço de e-mail

Número celular

Grupo utilizador: admin

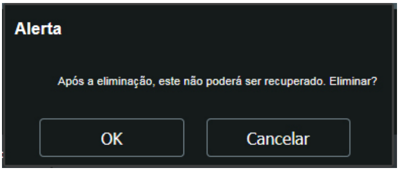
Observação: admin 's account

Lista Autorização: ☑ Todos

☑ Usuário
☑ Visualizar
☑ Reprodução
☑ Sistema

Change Password

- **Delete User:** allows you to delete a user.


Alerta

Após a eliminação, este não poderá ser recuperado. Eliminar?

Confirmation to delete user

Note: *the logged-in user must have the Account field selected his list of authorities in order to continue with these procedures.*

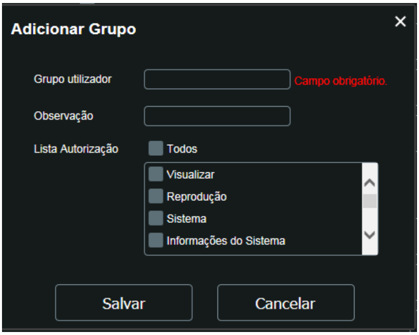
- User and group names must contain a maximum of 32 characters.
- Password must contain a maximum of 32 characters.
- Valid characters are: letters, numbers and special characters.
- You can create 8 groups and 18 users.
- Every user is associated with a group and has the permissions pertaining to the associated group.

In the *Group* area you can create, remove and edit group settings.

By default, the device already has two groups:

- **User:** which has restricted, view-only access.
- **Admin:** is the group administrator, with full access.

To introduce a new group, simply click on the *Add Group* button. The configuration screen will be displayed.


Adicionar Grupo

Grupo utilizador Campo obrigatório.

Observação

Lista Autorização □ Todos

□ Visualizar
□ Reprodução
□ Sistema
□ Informações do Sistema

Add groups

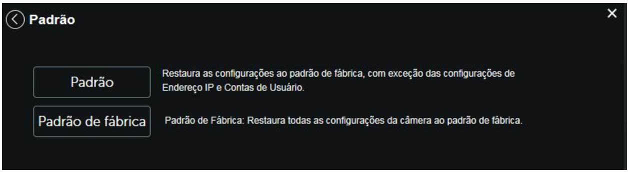
As in the users' configuration, there is a field to enter comments.

In the *Authority List* option, you must enable the permissions that will be made available to the users. They are: *View, Playback, System, System Information, File Backup, Location Configuration, Event, Network, Peripherals, AV Parameter, Security, Maintenance.*

Note: there are options to modify and remove groups that work the same way as modifying and removing users.

5.2. Default Configuration

Under Default Configuration you can undo all changes you have made to the camera and restore the factory default configuration. By pressing the *Default* button, only the *TCP/IP session settings* (4.3. *Network* and *5.1. Users*) will not be restored to the factory default.

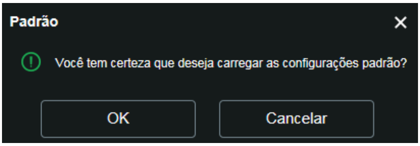

Padrão

Padrão — Restaura as configurações ao padrão de fábrica, com exceção das configurações de Endereço IP e Contas de Usuário.

Padrão de fábrica — Padrão de Fábrica: Restaura todas as configurações da câmera ao padrão de fábrica.

Default Configuration

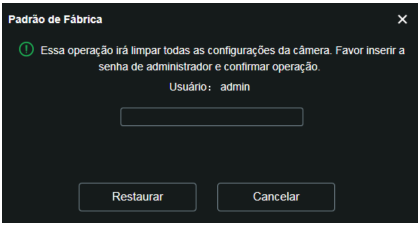
When you press the Default button, you will be prompted for confirmation.



Você tem certeza que deseja carregar as configurações padrão?

Confirmation for default setting

If you also want to restore the *TCP/IP* and *Accounts* settings, you should use the *Factory Default* function, which resets all settings to the factory defaults. Pressing the button *(General Default or Factory Default*) will prompt you for the user password.



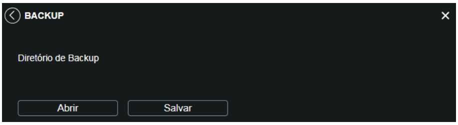
Essa operação irá limpar todas as configurações da câmera. Favor inserir a senha de administrador e confirmar operação.

Usuário： admin

Confirmation for factory configuration

5.3. Backup

In the *Backup* menu you have the option to save and open backup files of your device´s settings.



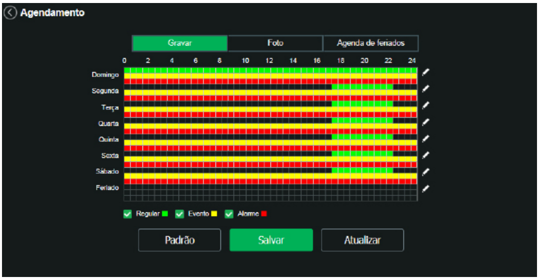
Configuration backup

- **Open:** clicking *Open* will open a screen for selecting the previously saved backup file, and the camera will be reconfigured according to the information it contains.
- **Save:** clicking *Save* will prompt you to choose a directory and the name of the backup file. This file has all the camera settings except the network settings of the *TCP/IP* page and the account settings.

5.4. Scheduling

This function allows you to create video and photo recording routines that will be saved on an external *FTP server* or *SD card.* In addition to the function of manually recording videos or photos through the viewing screen, you can program the device to perform these functions automatically at predetermined hours, as shown in the following sections.

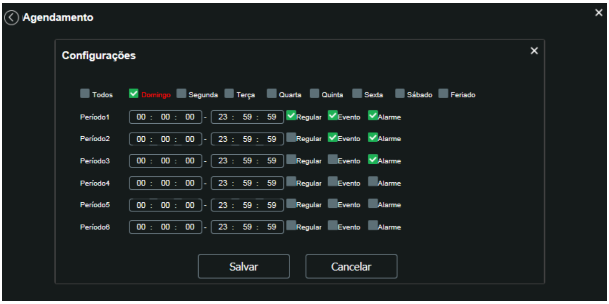
Scheduled Recording



Scheduled Recording

You can schedule up to six periods for each day, as shown in the following image, each with up to six different time ranges. There are two recording modes:

- **Regular:** the device captures video constantly.
- **Event:** the device captures video only when there is motion detection or a video masking event, if previously configured.
- **Alarm:** the device captures video only when an alarm is triggered, when previously configured.



Agendamento

Configurações

☐ Todos ☑ Domingo ☐ Segunda ☐ Terça ☐ Quarta ☐ Quinta ☐ Sexta ☐ Sábado ☐ Feriado

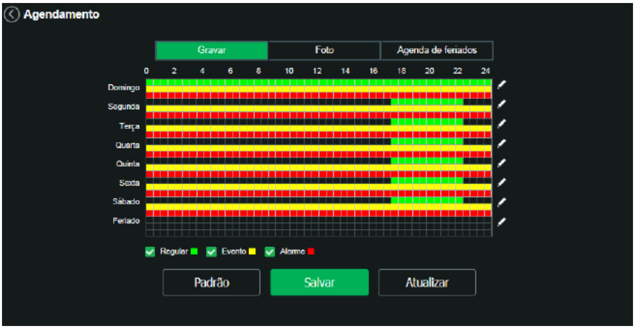
Período1	00 : 00 : 00	- 23 : 59 : 59	☑ Regular	☑ Evento	☑ Alarme
Período2	00 : 00 : 00	- 23 : 59 : 59	☐ Regular	☑ Evento	☑ Alarme
Período3	00 : 00 : 00	- 23 : 59 : 59	☐ Regular	☐ Evento	☑ Alarme
Período4	00 : 00 : 00	- 23 : 59 : 59	☐ Regular	☐ Evento	☐ Alarme
Período5	00 : 00 : 00	- 23 : 59 : 59	☐ Regular	☐ Evento	☐ Alarme
Período6	00 : 00 : 00	- 23 : 59 : 59	☐ Regular	☐ Evento	☐ Alarme

Weekday Scheduling

By default, all days are already configured to perform video recording in regular, event and alarm modes in full period: from 00h to 24h. To edit this setting, enter the range(s) of start and end times and, to validate the period setting, enable the corresponding check-box, otherwise it will not be analyzed and motion detection will not be done in that time frame.

If the period schedule is the same for other days of the week, you can replicate it by clicking on the check-box for the corresponding day. If it is the same for all days, just click on the check-box of the *All* field.

After finishing the settings, click the *Save* button. You can view the schedules through the colored bars, as highlighted in the following image. It shows that during service hours, from 8am to 6pm, the camera records video by motion detection, and outside of these hours, on weekends and holidays, it records regularly.



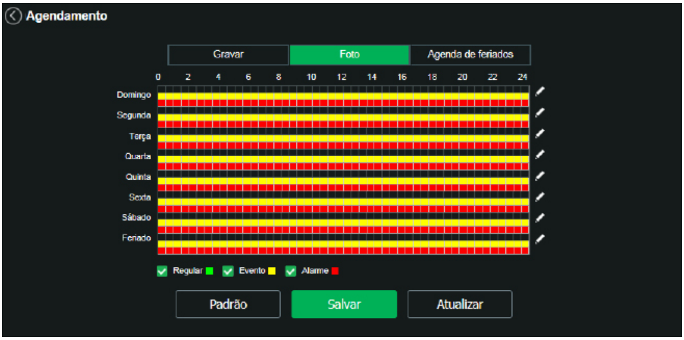
☑ Regular 🟩 ☑ Evento 🟨 ☑ Alarme 🟥

Scheduled Recording set up

ATTENTION!
The recording of images is limited to the previously configured scheduled period. That is, the system will not record any footage after the end of the scheduled period. Thus, the recording period in the schedule can influence the time and size of the recording of the triggering event, ending any footage when the scheduled period comes to an end.

Scheduled Photo

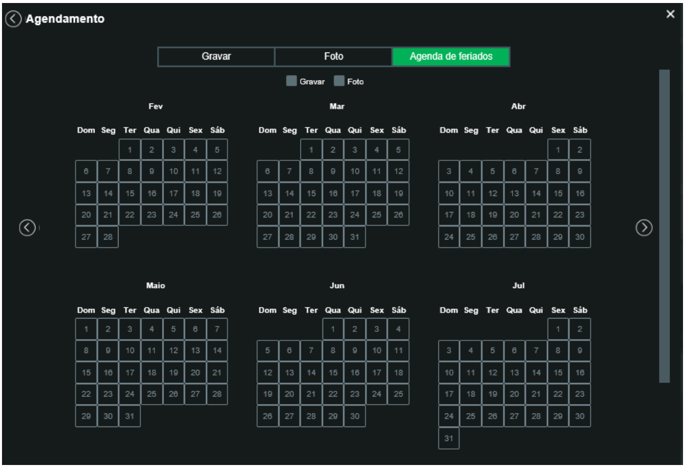
***Note:** the settings are the same as for the previous item.*



Scheduled Photo

Holiday Schedule

This tab configures the holiday days for use in Scheduled Recording and Scheduled Photo, as seen earlier. The interface is shown in the following image.



Fev

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Mar

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Abr

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Maio

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Jun

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Jul

Dom	Seg	Ter	Qua	Qui	Sex	Sáb
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Holiday Schedule

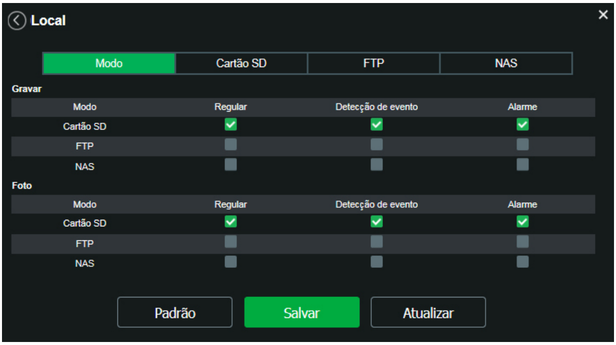
In this tab you can select the holiday days, associating them to the option *Record* and/or *Photo*.

5.5. Location

This interface allows you to enable and disable the function of saving to an *FTP* server or to a *Micro-SD* card the video and photo files, that are created according to the schedules configured in the *Scheduling* menu. Furthermore, here you can configure the recording mode, and in which storage directory the images will be saved, which can be on the micro-SD card ,FTP server or NAS server.

Mode

On this tab you can select *Record* and *Photo* modes for the event types (*Regular, Event Detection* and *Alarm*), which can be done directly on the *SD card* or on a configured *FTP server.*



Gravar

Modo	Regular	Detecção de evento	Alarme
Cartão SD	☑	☑	☑
FTP	□	□	□
NAS	□	□	□

Foto

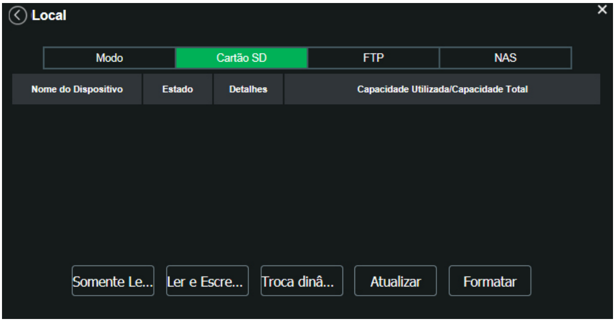
Modo	Regular	Detecção de evento	Alarme
Cartão SD	☑	☑	☑
FTP	□	□	□
NAS	□	□	□

Location - mode

- **Regular:** records video and photos, constantly, when previously configured.
- **Event:** records video and photos, only when there is motion detection, when previously configured.
- **Alarm:** records video and photos, only when there is an activation of the alarm input, when previously configured.

SD Card

You can manage the *SD card* using this tab:



Nome do Dispositivo	Estado	Detalhes	Capacidade Utilizada/Capacidade Total

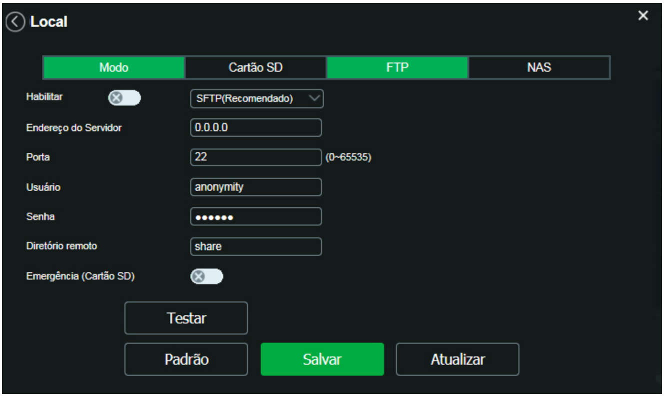
SD Card

- **Read only:** it is used when inserting a card only to play the recorded files.
- **Read and Write:** changes the card attribute to *Read and Write* mode, allowing the camera to play and record data to the card.
- **Dynamic Swap:** used to safely remove the card from the camera.
- **Update:** updates the card data, e.g. Status and Used Capacity.
- **Format:** removes all existing data on the *SD* card.

Note: *the product does not include a micro SD card.*

FTP

In this interface you enter the *FTP* server information where the photos and videos captured by the device will be stored.



Habilitar ○ SFTP(Recomendado)

Endereço do Servidor 0.0.0.0

Porta 22 (0~65535)

Usuário anonymity

Senha ••••••

Diretório remoto share

Emergência (Cartão SD) ○

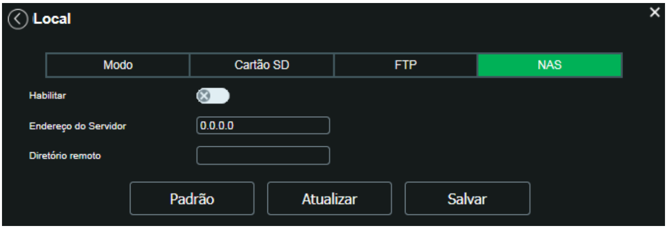
FTP

Enable the FTP server and select the type (SFTP or FTP).

- **Server address:** enter the address of the *FTP* server.
- **Port:** FTP server access port with the default port value *21*, which can be changed to SFTP with the default port value *22.*
- **User:** user name for authentication.
- **Password:** user password for authentication.
- **Remote directory:** this field refers to the directory where the camera will save the photo and video files. If you want the camera to save the files in the directory that corresponds to your serial number, leave this field blank.
- **Emergency (SD card):** the camera will write to the *SD* card, if installed, if the server becomes unavailable.
- **Test:** simulates the execution of an *FTP* server access, warning the user if it was successful or not.

Note: *The device's video files are saved with the .dav extension. To play the files, you must use the Intelbras Media Player®, found on the Intelbras website* (www.intelbras.com.br).

NAS



Habilitar ○

Endereço do Servidor 0.0.0.0

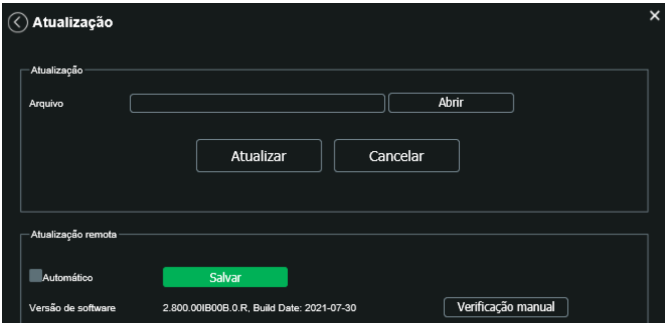
Diretório remoto

NAS configuration menu

- **Enable:** enables storage via a network storage server.
- **Server Address:** you must enter the IP address of the storage server.
- **Remote directory:** you must inform the path of the directory where the storage will be done.

5.6. Update

Update the camera’s firmware using this interface.



Atualização

Atualização

Arquivo [Abrir]

[Atualizar] [Cancelar]

Atualização remota

□ Automático [Salvar]

Versão de software 2.800.00IB00B.0.R, Build Date: 2021-07-30 [Verificação manual]

Update

Click the *Open* option to load a navigation screen and select the update file. Then click *Update* to start the procedure.

After the update is complete, the camera will restart so that the firmware changes are valid.

Attention: when updating, make sure that the file you select is the right one for your camera. Improper updates can result in device malfunctions. During the update, do not close the web page.

The files for updating the firmware are available on the Intelbras web page (*www.intelbras.com.br),* under *Products> Electronic Security>Cameras>IP Cameras.* Select your camera and download the update file.

Note: *a good practice is that when updating the camera to a new firmware version, you should perform a Manual Reset, using the physical button on the camera.*

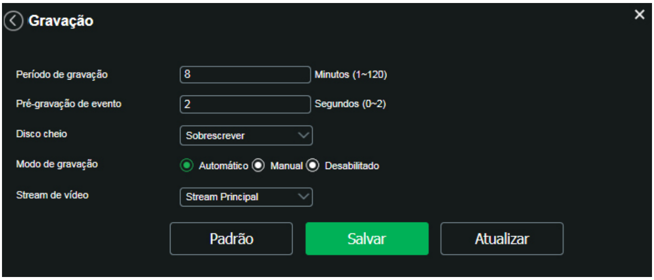
Remote Update

For this feature to work properly, the camera must be connected to a network with internet access.

- **Automatic:** when enabled, the camera automatically searches for the latest firmware version available on the Intelbras server.
- **Manual check:** this option makes an instant query to the Intelbras server to check if there is a newer firmware available.

5.7. Recording

Adjusts the settings regarding video recording:



Gravação

Período de gravação 8 Minutos (1~120)

Pré-gravação de evento 2 Segundos (0~2)

Disco cheio Sobrescrever

Modo de gravação ● Automático ○ Manual ○ Desabilitado

Stream de vídeo Stream Principal

[Padrão] [Salvar] [Atualizar]

Recording

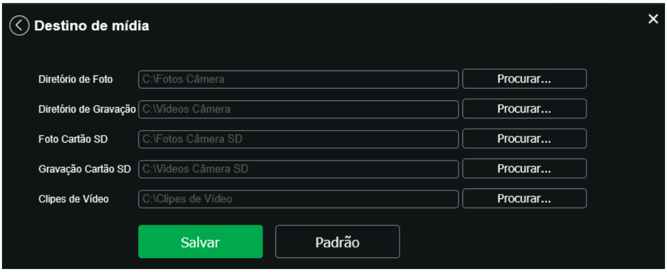
- **Recording period:** determines the size of each video file for all recording types (regular, event and alarm).
- **Event pre-recording:** capture recorded in the camera’s internal memory to merge the recording and not lose the details that occurred before starting an event. Time can be set between 0 and 2 seconds.
- **Full disk:** options for what to do when you reach maximum storage from disk, SD card, FTP or NAS. Overwrite recordings (overwriting the oldest recordings) or stop recording.

- **Recording mode:** *Auto, Manual or Disabled.* In *Auto,* the recording will follow the scheduling configuration. In *Manual*, the camera will record the main stream directly, ignoring the scheduling settings. In *Disabled*, the camera does not do any recording.
- **Video stream:** defines which video Stream will be used in the recording. There are two types, Main Stream and Extra Stream.

5.8. Media destination

Setting the location to save captured photos and videos.

- This function is only available via Internet Explorer.



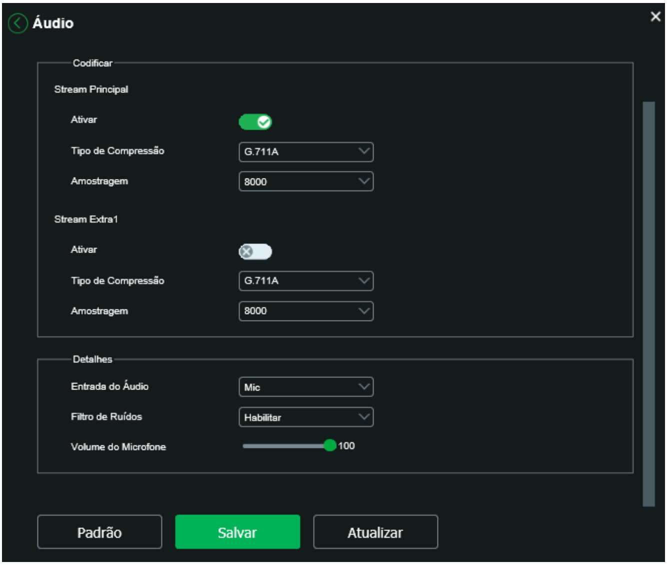
Destino de mídia

Diretório de Foto	C:\Fotos Câmera
Diretório de Gravação	C:\Videos Câmera
Foto Cartão SD	C:\Fotos Câmera SD
Gravação Cartão SD	C:\Videos Câmera SD
Clipes de Vídeo	C:\Clipes de Vídeo

Media destination

5.9. Audio

Available settings for the sound captured by the camera's microphone.



Áudio

Codificar

Stream Principal

Ativar	✓
Tipo de Compressão	G.711A
Amostragem	8000

Stream Extra1

Ativar	☒
Tipo de Compressão	G.711A
Amostragem	8000

Detalhes

Entrada do Áudio	Mic
Filtro de Ruídos	Habilitar
Volume do Microfone	100

Audio

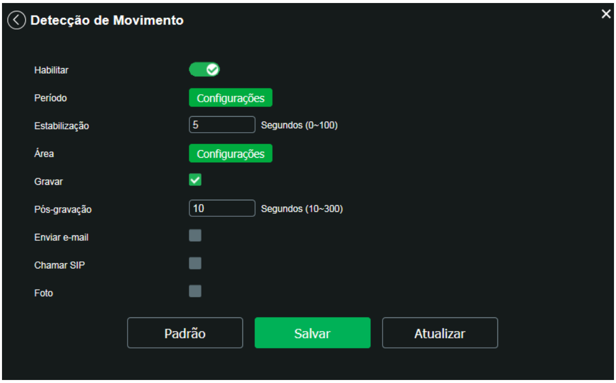
- **Enable:** enables the audio channel available in the camera. If enabled, when recording a video, the audio will be recorded as well.
- **Encoder Type:** Selects the encoder type for each stream. It has 4 options: G.711A, G.711Mu, G.726 and AAC.
- **Sampling:** defines the frequency at which the audio signal is acquired, the higher the frequency, the higher the quality of the signal, however, the camera processing is higher and so is the storage required.
- **Extra stream:** enables the audio in the extra stream, sets the compression type and sample rate.
- **Audio input:** microphone.
- **Noise Filter:** enables digital filtering of ambient noise.
- **Microphone volume:** sets the volume of the microphone.

Note: the average range of the camera's microphone is 10 m.

6. Configure Event

6.1. Motion Detection

In the Motion screen you can configure the motion detection parameters, such as region and sensitivity, as well as the actions the camera will take when it detects motion.



Detecção de Movimento

Habilitar: ☑

Período: Configurações

Estabilização: 5 Segundos (0~100)

Área: Configurações

Gravar: ☑

Pós-gravação: 10 Segundos (10~300)

Enviar e-mail: □

Chamar SIP: □

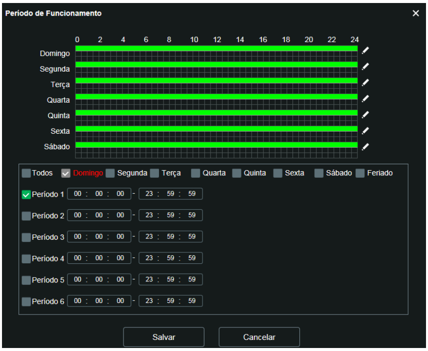
Foto: □

Motion Detection

» **Enable:** if checked, the camera will perform motion detection.

» **Period:** field to define when detection is active.

By clicking on the *Settings* button, a screen will appear as shown in the following image:



Período de Funcionamento

□ Todos ☑ Domingo □ Segunda □ Terça □ Quarta □ Quinta □ Sexta □ Sábado □ Feriado

☑ Período 1 00 : 00 : 00 - 23 : 59 : 59

□ Período 2 00 : 00 : 00 - 23 : 59 : 59

□ Período 3 00 : 00 : 00 - 23 : 59 : 59

□ Período 4 00 : 00 : 00 - 23 : 59 : 59

□ Período 5 00 : 00 : 00 - 23 : 59 : 59

□ Período 6 00 : 00 : 00 - 23 : 59 : 59

Period of operation

The operation period is divided into weekdays, and for each day up to six periods with different time ranges can be created.

Click on the *Configure* button for the respective day of the week and check that it will be highlighted, as shown in the image *Period of operation.*

By default, all days are already configured to perform the movement detection in the full period: 00h to 24h. To edit this setting, enter the range(s) of the start and end times and, to validate the period setting, enable the corresponding check-box, otherwise it will not be analyzed and movement detection will not be made in that time range.

If the period schedule is the same for other days of the week, you can replicate it by clicking on the check-box for the corresponding day. If it is the same for every day, just click on the check-box of the *All* field.

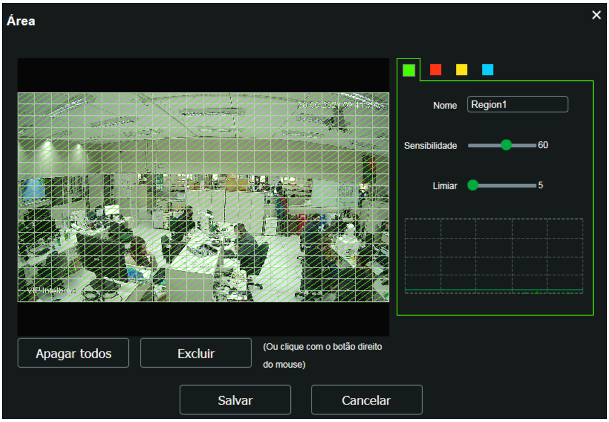
After finishing the settings, click on the *Save* button. You can view the schedules through the colored bars, as highlighted in the image *Period of operation.*

- **Stabilization**

The camera memorizes only one event during the stabilization period. This prevents a motion detection event from generating multiple events. This value ranges from 0 to 100 seconds.

- **Area**

In this option it is possible to configure up to four monitoring regions for motion detection, as shown in the following image:



Área

Nome: Region1

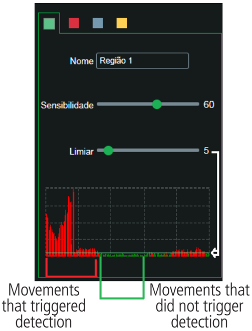
Sensibilidade: 60

Limiar: 5

(Ou clique com o botão direito do mouse)

Detection area

- **Area:** select the area where you want to check for movement.
- **Region:** there are four regions, each with a different Area, Name, Sensitivity and Threshold setting.
- **Name:** you can give a name to the region. This name will be sent in the event email, if so configured.
- **Sensitivity:** This option regulates how sensitive the camera is to motion. The higher the sensitivity, the less movement is required to activate detection. You can check how good the sensitivity is with the Motion Detection Graph.
- **Threshold:** The Threshold dictates the amount of motion required to activate the event. It appears as a line in the Motion Detection Graph, seen below, and if motion is significant and exceeds this threshold, the motion detection event will be activated.
- **Motion Graph:** the following is the Motion Detection Graph. Here we have, in green, movements made within the selected detection area that were not enough to reach the Threshold line and activate motion detection. If you want one of these movements to trigger motion detection, you can lower the threshold line or increase the sensitivity. We also have, in red, the movements that activated motion detection by exceeding the threshold line.



Nome: Região 1

Sensibilidade: 60

Limiar: 5

Movements that triggered detection
Movements that did not trigger detection

Motion Detection Graphic

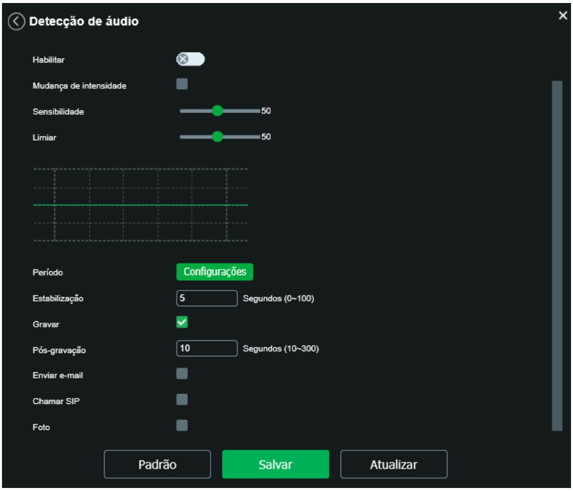
- **Record:** this option must be selected so that when recording a motion detection event, the camera will save the captured videos and/or photos to an FTP server, SD card or NAS. To configure the recording, see item *5.5. Location*.

Note: *To record videos, the Schedule from item 5.4. Scheduling and mode of item 5.5. Location must be configured and enabled. And for recording photos, the Schedule from item 5.4. Scheduling and mode from item 5.5. Location must also be configured and enabled. The location and time of remote recording must be set in item 5.5. Location.*

- **Post-recording:** The Post-recording value determines for how long the camera will continue recording after the Stabilization time, which occurs after motion detection ends. A value can be set between 10 and 300 seconds.
- **Send e-mail:** if this option is selected, the camera will send an e-mail when motion detection occurs, and may or may not have a photo. The destination e-mail is configured in item *4.5. Services*, in the *SMTP (e-mail)* section,as is the option of sending a photo of the moment of detection.
- **Call SIP:** if this option is selected, the camera will make a VoIP call when motion detection occurs. The VoIP number called is configured in item *4.5. Services*, in the SIP section.
- **Photo:** if this option is selected, the camera will take a picture and save it to the FTP server, SD card or NAS when motion detection occurs. To set the photo storage location, see *5.5. Location, section FTP.*

6.2. Audio detection

This camera supports audio detection. For this it needs the installation of an external microphone. Then you can define actions in case of audio detection.



Detecção de áudio

Habilitar ☒

Mudança de intensidade □

Sensibilidade 50

Limiar 50

Período Configurações

Estabilização 5 Segundos (0~100)

Gravar ☑

Pós-gravação 10 Segundos (10~300)

Enviar e-mail □

Chamar SIP □

Foto □

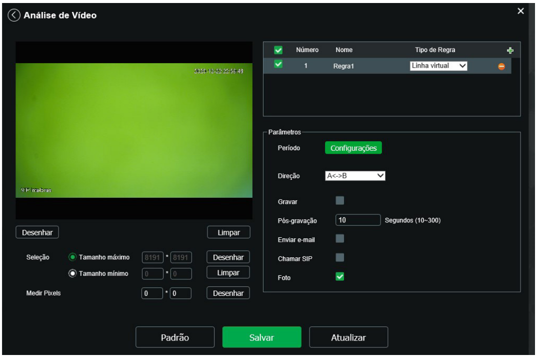
Audio Setting Configuration

- **Enable:** by clicking on the checkbox you enable the Audio Detection Enable function.
- **Intensity change:** when enabled, the triggering no longer depends on the configured threshold, but on the change in the audio intensity.
- **Sensitivity:** sets the sensitivity of audio detection (0 to 100). The default is 50.
- **Threshold:** sets the threshold of the signal to be recorded as a real alarm (0 to 100). The default is 50.
- **Period:** the operating period is divided into weekdays, and for each day up to six periods with different time frames can be created.
- **Stabilization:** when enabled, when audio is detected the camera will record a video of a set time frame.
- **Record:** when enabled, when audio is detected the camera will record a video of a set time frame.
- **Output:** when enabled, when audio is detected the camera will send an alarm signal to the alarm outputs.
- **Post-recording:** in this field the time that the camera will record after audio detection is finished is set. This value varies from 10 to 300 seconds.
- **Send e-mail:** SMTP must be enabled. Identifies audio and sends via e-mail a picture of the moment when the audio was detected.
- **PTZ: e**nables a predefined function (tour, preset, patrol).
- **Call SIP:** calls a SIP number to report the alarm.
- **Photo:** if this option is selected, the camera takes a photo at the moment of audio detection.

All changes must be saved.

6.3. Object Detection

In this tab we configure the Virtual Line and Virtual Fence video analysis rules. You can add up to 10 video analysis rules. In this option you must create the rule by clicking on the ✚ symbol.



☑	Número	Nome	Tipo de Regra	✚
☑	1	Regra1	Linha virtual	⊖

Seleção ● Tamanho máximo 8191 * 8191 Desenhar
○ Tamanho mínimo 0 * 0 Limpar
Medir Pixels 0 * 0 Desenhar

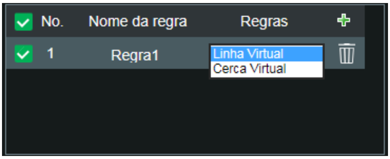
Parâmetros
Período: Configurações
Direção: A<->B
Gravar: □
Pós-gravação: 10 Segundos (10~300)
Enviar e-mail: □
Chamar SIP: □
Foto: ☑

Object Detection

The rule types are:

- » Virtual Line.
- » Virtual Fence.

Select a rule, or click on the trash can to remove the rule; in Rule name you define the nomenclature and in Rule type the Video analysis function (Virtual line, Virtual fence). To change the rule type click on the current function.

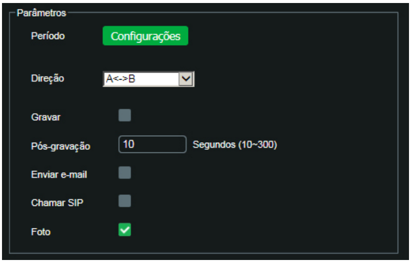


☑	No.	Nome da regra	Regras	✚
☑	1	Regra1	Linha Virtual Cerca Virtual	🗑

Rule type

The created rules turn gray while they are being edited and blue after the drawing is finished.

- » **Virtual Line**

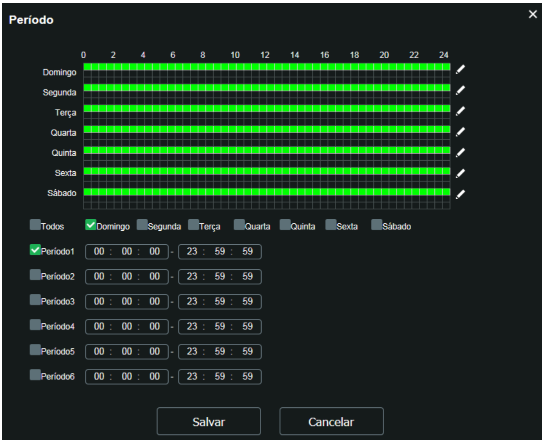


Parâmetros
Período: Configurações
Direção: A<->B
Gravar: □
Pós-gravação: 10 Segundos (10~300)
Enviar e-mail: □
Chamar SIP: □
Foto: ☑

Area settings and virtual line properties

This function allows you to detect objects that pass through a line, and you can create separate lines with different analysis directions, i.e. you define in which direction (A to B, B to A, or both) the camera will monitor.

- **Period of operation:** this option is used to set the period of operation for the rule. In the period of operation, you define the time and days that the function will be enabled. If it is not changed, it will be without interruption.



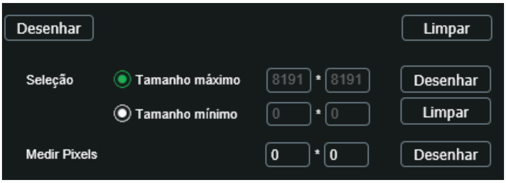
Período

□ Todos ☑ Domingo □ Segunda □ Terça □ Quarta □ Quinta □ Sexta □ Sábado

☑ Período1	00 : 00 : 00	23 : 59 : 59
□ Período2	00 : 00 : 00	23 : 59 : 59
□ Período3	00 : 00 : 00	23 : 59 : 59
□ Período4	00 : 00 : 00	23 : 59 : 59
□ Período5	00 : 00 : 00	23 : 59 : 59
□ Período6	00 : 00 : 00	23 : 59 : 59

- **Direction:**it can detect just from *A > B, B > A,* or both.
- **Record:** this option must be selected so that when recording a virtual line event the camera records the captured video to the FTP configured in *Settings > Location > FTP, SD Card or NAS.*
- **Post-recording:** the post-recording value determines for how long the camera will continue recording after virtual line detection ends. A value from 10 to 300 seconds can be set
- **Send e-mail:** if this option is selected, the camera will send an e-mail when the virtual line detection occurs, and may or may not have a photo.

  The destination e-mail is configured in the item *Network > SMTP,* as well as the option to send a photo of the detection time.



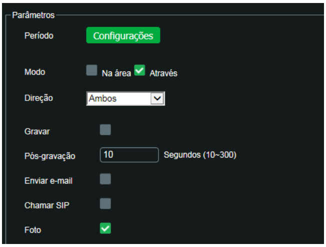
Seleção	● Tamanho máximo	8191 * 8191	Desenhar
	○ Tamanho mínimo	0 * 0	Limpar
Medir Pixels		0 * 0	Desenhar

Drawing Virtual Line

To draw on the screen, first click on *Clear*, it will release the image for editing. Use the left mouse button to start the drawing and the right one to end it. With a click on the drawn line it is possible to drag or modify the drawing. By checking the checkbox you can define what object size will trigger alarms, it is given in pixels and is displayed in the *Maximum* and *Minimum Size* frames; use the *Draw* and *Clear* options to define it; during drawing the frames are blue. You need to click on *Save* to keep the settings.

» Virtual fence

This function makes it possible to analyze whether objects have entered and/or left a given area, and it is possible to create up to 4 different areas, with different analysis directions, i.e., it is defined whether the camera should supervise objects entering, leaving, or both, or even monitor any movement within the area.



Parâmetros

Período: Configurações

Modo: □ Na área ☑ Através

Direção: Ambos

Gravar: □

Pós-gravação: 10 Segundos (10~300)

Enviar e-mail: □

Chamar SIP: □

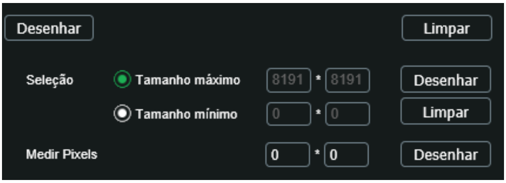
Foto: ☑

Area settings and virtual fence properties

- **Detection mode:** it is set whether the camera will monitor movements within an area (In Area), intrusions (Through) or both (select both check boxes).
- **Direction:** in this field the user can configure if the event will be generated if the object/person crosses the line in the direction of entering, leaving, or entering and leaving the drawn region.

By checking the *Selection* box you can define which object size will trigger alarms, it is given in pixels and is displayed in the *Maximum* and *Minimum Size* frames; use the *Draw* and *Clear* options to define it; during drawing the smaller frame represents the *Minimum Size* and the larger frame the *Maximum Size*.

By selecting *Draw* at the top, you can define the area to be monitored. Use the left mouse button to start the drawing and the right one to close it. With a click on the drawn line you can drag or modify the drawing. You must click *Save* to keep the settings.



Desenhar Limpar

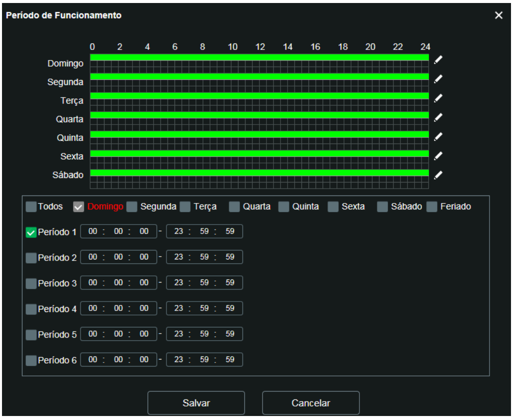
Seleção ● Tamanho máximo 8191 * 8191 Desenhar

○ Tamanho mínimo 0 * 0 Limpar

Medir Pixels 0 * 0 Desenhar

Drawing a virtual fence

In the period of operation, you define the time and days when the function will be enabled. If it is not changed, it will run without interruption.



Período de Funcionamento ×

□ Todos ☑ Domingo □ Segunda □ Terça □ Quarta □ Quinta □ Sexta □ Sábado □ Feriado

☑ Período 1 00 : 00 : 00 - 23 : 59 : 59

□ Período 2 00 : 00 : 00 - 23 : 59 : 59

□ Período 3 00 : 00 : 00 - 23 : 59 : 59

□ Período 4 00 : 00 : 00 - 23 : 59 : 59

□ Período 5 00 : 00 : 00 - 23 : 59 : 59

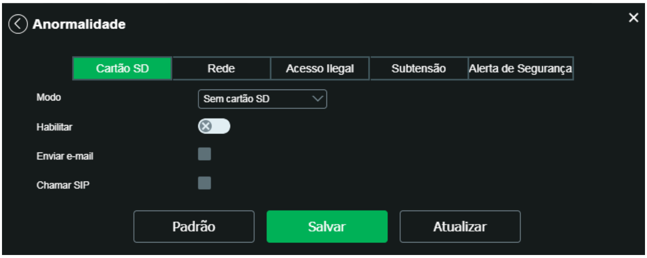
□ Período 6 00 : 00 : 00 - 23 : 59 : 59

Salvar Cancelar

Period of operation

6.4. Anomaly

SD Card



Modo: Sem cartão SD

Habilitar

Enviar e-mail □

Chamar SIP □

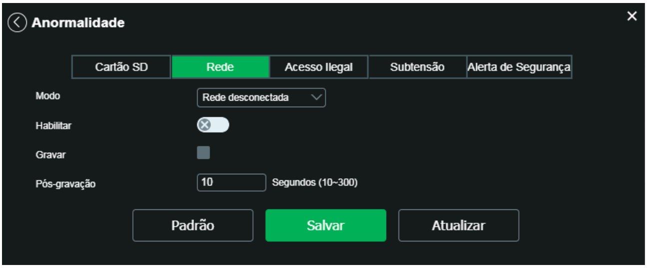
SD Card

You can generate *SD* card-related alarms in the following situations:

- **Mode:** There are three options, *No SD card, SD card error, and Capacity alert.*
- **No *SD* card:** the alarm will be generated upon removal of the SD card with the camera on.
- ***SD* card error:** an alarm will be generated when there is an error on the *SD* card.
- **Capacity alert:** the device will generate an alarm when the capacity limit, defined just below, is reached.
- **Capacity limit:** defines at what percentage of occupancy of the *SD* card an alarm will be generated. This percentage can be set between 0 and 99%.
- **Enable:** enables the function.
- **Send e-mail:** sends a message reporting the event to the e-mail address previously configured in the SMTP (e-mail) section.
- **Call SIP:** if this option is selected, the camera will make a VoIP call when the event occurs. The called VoIP number is configured as described in the SIP section of this manual.

Network

The device alerts the user of errors regarding device disconnection and IP conflict on the network by means of an alarm.



Modo: Rede desconectada

Habilitar

Gravar □

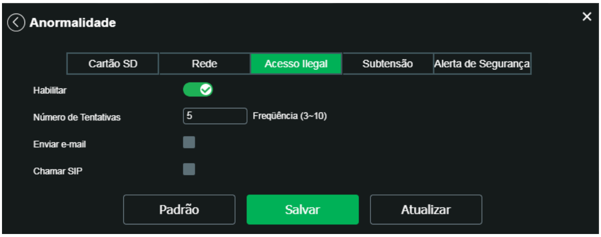
Pós-gravação: 10 Segundos (10~300)

Absent network

- **Mode:** defines the event to be considered an anomaly:
  - **Absent network:** when the camera is disconnected from the network.
  - **IP Conflict:** when there is an IP conflict between the network and the camera.
- **Enable:** enables the *Anomalies* feature.

Illegal access

The camera can be configured to trigger an alarm and send an e-mail in the event of excessive login attempts on the interface.



Habilitar ●✓

Número de Tentativas 5 Freqüência (3~10)

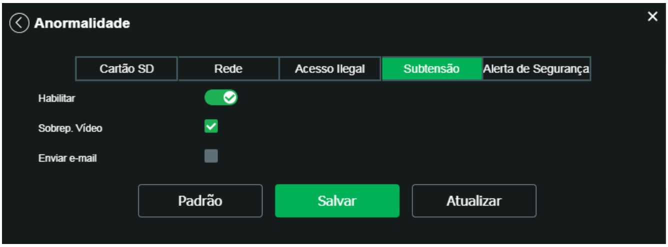
Enviar e-mail □

Chamar SIP □

Illegal access

- **Enable:** enables the function.
- **Number of attempts:** number of times to make a wrong login before triggering the alarm, it can be between 3 and 10 times.
- **Send e-mail:** sends a message reporting the event to the previously configured e-mail address.
- **Call SIP:** if this option is selected, the camera will make a VoIP call when the event occurs. The called VoIP number is configured as described in the *SIP* section of this manual.

Undervoltage



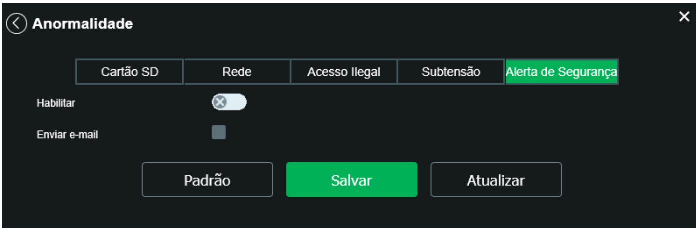
Habilitar ●✓

Sobrep. Vídeo ☑

Enviar e-mail □

Voltage Detection

- **Enable:** enables the function.
- **Overlay video:** enables the display of the *Undervoltage* icon 🪫 in the video stream.
- **Send e-mail:** sends a message reporting the event to the previously configured e-mail address.
- **Call SIP:** if this option is selected, the camera will make a VoIP call when the event occurs. The called VoIP number is configured as described in the *SIP* section of this manual.
- **Security Alert:** the camera will recognize some unusual access patterns that might be originated from hacker attacks.



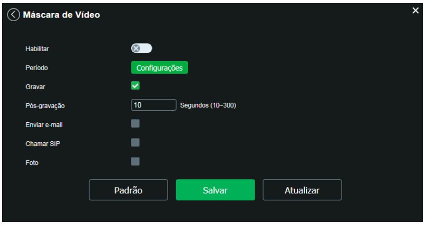
Habilitar ○✕

Enviar e-mail □

- **Enable:** enables the security alert function.
- **Send e-mail:** sends an e-mail if a harmful access pattern is detected.

6.5. Video Masking

In this tab, as shown in the following picture, the options are configured to generate events when the lens is obstructed (example: when covering the camera lens with a hand or some other object). It is also possible to enable, when this type of event occurs, video recording on FTP, sending e-mail (SMTP), photo recording on FTP, and SIP calls. These options, *Post Recording and Period of Operation* work in the same way as the *Motion Detection* tab (*item 6.1 Motion Detection).*


Máscara de Vídeo

Habilitar ☒

Período Configurações

Gravar ☑

Pós-gravação 10 Segundos (10~300)

Enviar e-mail □

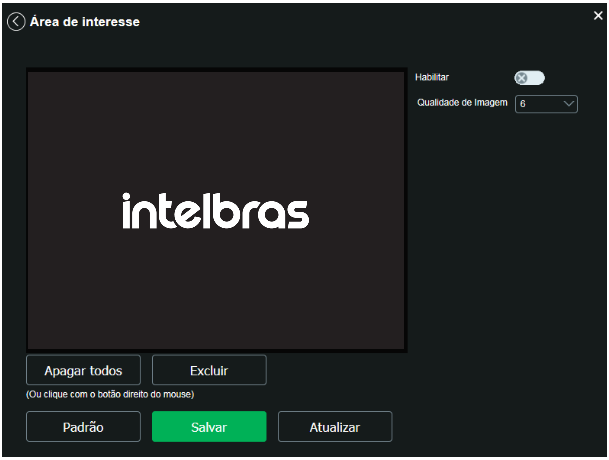
Chamar SIP □

Foto □

Video Mask

6.6. Area of interest

In this tab you define an area of interest (of higher quality) that is adjustable on the screen (up to 4 regions). Whenever you make changes, you must save. It is possible to delete or remove all areas of interest. There is a possibility to define 6 image qualities, where 1 is very low and 6 is very high.


Área de interesse

Habilitar ☒

Qualidade de Imagem 6

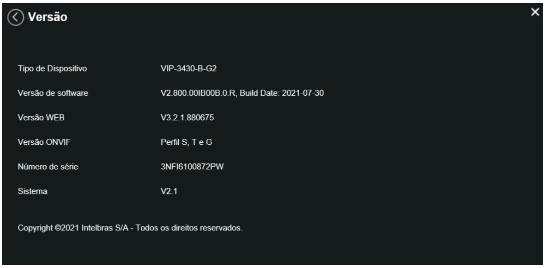
(Ou clique com o botão direito do mouse)

Area of interest

7. Configure Information

7.1. Version

Information about firmware version and model is displayed on this page:



Versão

Tipo de Dispositivo	VIP-3430-B-G2
Versão de software	V2.800.00IB00B.0.R, Build Date: 2021-07-30
Versão WEB	V3.2.1.880675
Versão ONVIF	Perfil S, T e G
Número de série	3NFI6100872PW
Sistema	V2.1

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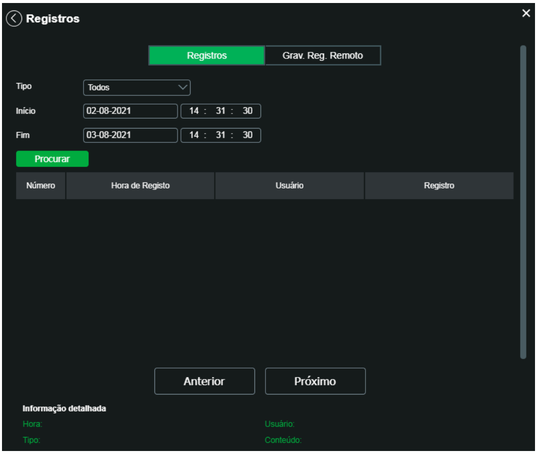
Version (illustrative version image)

- » **Device type:** Informs the model of the Intelbras IP camera.
- » **Software version:** informs the firmware version of the Intelbras IP camera.
- » **Web version:** application version of the web interface.
- » **Onvif version:** *Onvif* protocol profile.
- » **Serial number:** serial number of the camera. Each has its own number.

7.2. Logs

Access to interface logs, event logs with details and type of the settings made on the device. By selecting the period, the logs are displayed according to the filter selected in *Type*. To display the logs on the screen, click *Browse*.

After performing the search, it is possible to make a backup, on your machine, of the displayed records, by clicking *Backup* a text document will be generated with the results of the applied filter. You can also clear the entire log by clicking on *Clear*, thus deleting all the logs that have been retrieved up to that point. The following is a screenshot of the logging screen.



Registros

Tipo: Todos

Início: 02-08-2021 14 : 31 : 30

Fim: 03-08-2021 14 : 31 : 30

Número	Hora de Registo	Usuário	Registro

Informação detalhada

Hora:

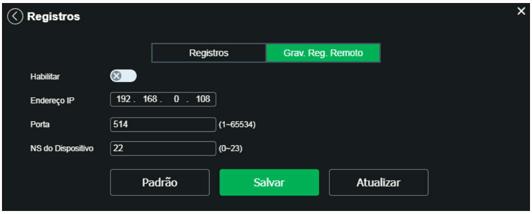
Usuário:

Tipo:

Conteúdo:

Log

- **Remote log Recording:** it is possible to record camera logs on an external dedicated server. With these logs it is possible to do statistical analysis and/or automation for different situations that may occur.



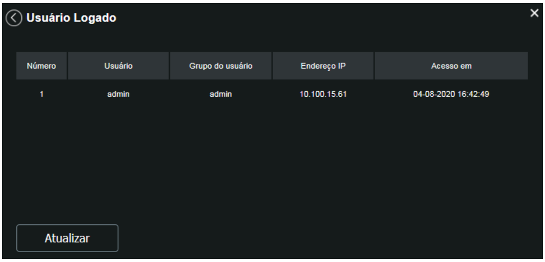
Habilitar
Endereço IP 192 . 168 . 0 . 108
Porta 514 (1~65534)
NS do Dispositivo 22 (0~23)

Remote log Recording

- **Enable:** enables the Remote Logging function.
- **IP Address:** IP address of the machine where the Remote Log Server is installed.
- **Port:** port used for the Remote Logging protocol.
- **Device NS:** Identifier number of the device.

7.3. Logged user

Displays information about the users connected to the IP camera. Provides information about which username was used to connect, the user's group,the IP address, and the time they accessed the camera.

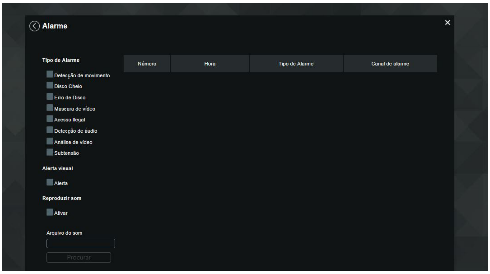


Número	Usuário	Grupo do usuário	Endereço IP	Acesso em
1	admin	admin	10.100.15.61	04-08-2020 16:42:49

Logged user

7.4. Alarm

The alarm interface is used only when accessed from the web interface.It will show the logs from Motion Detection, Video Masking, Illegal Access, Video Analytics, having the possibility to perform some actions only in the web interface, such as triggering a visual alert in the open web interface and sound triggering. In the interface shown in the picture below are made the alarm settings.



Tipo de Alarme
- □ Detecção de movimento
- □ Disco Cheio
- □ Erro de Disco
- □ Mascara de vídeo
- □ Acesso Ilegal
- □ Detecção de áudio
- □ Análise de vídeo
- □ Subtensão

Alerta visual
- □ Alerta

Reproduzir som
- □ Ativar

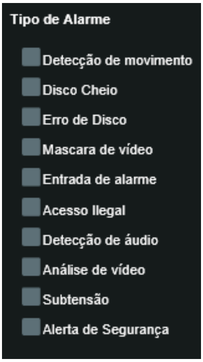
Arquivo do som

Número	Hora	Tipo de Alarme	Canal de alarme

Alarm

Alarm type

Select the type of alarm that will be generated in the device.



Tipo de Alarme

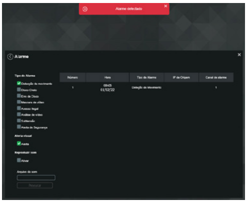
- □ Detecção de movimento
- □ Disco Cheio
- □ Erro de Disco
- □ Mascara de vídeo
- □ Entrada de alarme
- □ Acesso Ilegal
- □ Detecção de áudio
- □ Análise de vídeo
- □ Subtensão
- □ Alerta de Segurança

Alarm type

***Note:** all options require prior configuration.*

Visual Alert

If the *Alert* check-box is selected, when a new alarm occurs, an icon will appear on the *Alarm* tab, as shown in the following image.



Alarme detectado

Alarme

Tipo de Alarme

- ☑ Detecção de movimento
- □ Disco Cheio
- □ Erro de Disco
- □ Mascara de vídeo
- □ Acesso Ilegal
- □ Análise de vídeo
- □ Subtensão
- □ Alerta de Segurança

Alerta visual

- ☑ Alerta

Reproduzir som

- □ Ativar

Arquivo do som

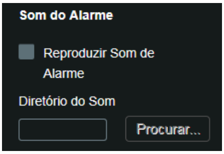
Procurar

Número	Hora	Tipo de Alarme	IP de Origem	Canal de alarme
1	08h05 01/02/22	Detecção de Movimento		1

Visual Alert

Play Sound

- » **Activate:** when checked, plays the chosen audio alarm tone.
- » **Sound directory:** allows you to select an audio file (with extension *.mp3 or .wav*) to be played during alarm occurrences.



Som do Alarme

□ Reproduzir Som de Alarme

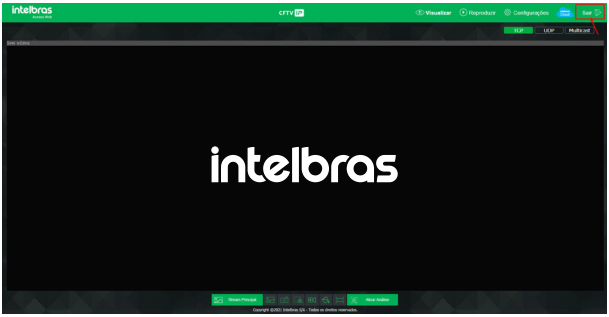
Diretório do Som

Procurar...

Alarm sound

8. Logout

Closes the session and returns to the login screen:



Logout

9. Frequently Asked Questions

Question	Cause	Solution
Unable to login via the Internet	Network connection failure	Check if your camera and PC connections are correct.
		Check the camera's IP and network cable.
	Blocked user	Check whether any other device is blocking the camera by using the wrong password. If not, connect the camera peer to peer with your PC to ensure that no other device will attempt a simultaneous connection, and create a new user and password for your access.
Unable to access camera even after double clicking using Intelbras IP Utility Next	Network IP addresses of camera and PC	Check if the camera's IP address, which Intelbras IP Utility Next presents, is in the same logical network as your PC's address.
Intelbras IP Utility Next can't find the IP camera	Physical installation of the camera and PC	Check if the IP camera is connected to the same physical network as your PC.
Unable to view the image in web browsers	Absence of complements	Check if the *Plugin* control has been installed on your computer.
DDNS Service does not access	Network Settings	Make sure the DDNS configuration data matches. Confirm that the router's UPnP® is enabled. If you do not have this feature, redirect the router ports manually.
Recover password	Lost password	Use the *Recover password* function or reset the camera using the reset button on the camera. If that is not enough, take it to your nearest service center.
Mosaic playback is not possible on the MHDX 1108 recorder	H.265 support in 2 MP	Play only one channel in full screen mode or use the H.264 encoder.

Warranty Terms

It is hereby expressly stated that this contractual warranty is conferred under the following conditions:

Name of client:

Client Signature:

Invoice Nº:

Date of purchase:

Model: Serial Nº:

Retailer:

1. All parts, pieces and components of the product are guaranteed against eventual manufacturing defects, which they may eventually present, for a period of 1 (one) year - this being 90 (ninety) days of legal guarantee and 9 (nine) months of contractual guarantee -, as from the date of purchase of the product by the Consumer, as shown on the invoice for the purchase of the product, which is an integral part of this Term throughout the entire national territory. This contractual warranty includes the free replacement of parts, pieces, and components that present manufacturing defects, including the expenses for the labor used in this repair. If no manufacturing defect is found, but defect(s) arising from improper use, the Consumer will bear these expenses.
2. The product´s installation should be done according to the Product Manual and/or Installation Guide. If your product requires installation and configuration by a qualified technician, look for a competent and specialized professional, considering that the costs for these services are not included in the product's price.
3. Once the defect is confirmed, the Consumer must immediately contact the nearest Authorized Service listed by the manufacturer - only these are authorized to examine and repair the defect during the warranty period foreseen herein. If this is not done, this warranty will be void, since it will be characterized as a violation of the product.
4. In the event that the Consumer requests home assistance, he or she must go to the nearest Authorized Service to inquire about the technical visit fee. If it is necessary to remove the product, the resulting expenses, such as transportation and security costs to and from of the product, will be the Consumer´s responsibility.
5. The warranty will totally lose its validity in the occurrence of any of the following hypotheses: a) if the defect is not of manufacturing, but caused by the Consumer or by third parties not related to the manufacturer; b) if the damage to the product comes from accidents, disasters, nature agents (lightning, flooding, landslides, etc.), humidity, voltage in the electrical network (overvoltage caused by accidents or excessive fluctuations in the network), installation/use in disagreement with the user's manual or resulting from the natural wear and tear of the parts and components; c) if the product has suffered chemical, electromagnetic, electrical or animal (insects, etc.) influence; d) if the product's serial number has been tampered with or scraped; e) if the device has been breached.
6. This warranty does not cover data loss, therefore it is recommended, if applicable to the product, that the Consumer make a backup copy of the data on the product on a regular basis.
7. Intelbras is not responsible for the installation of this product, nor for any attempts of fraud and/or sabotage on its products. Keep the software updates and applications used up-to-date, if relevant, as well as the network protections required for protection against intrusions (hackers). The equipment is guaranteed against vices within its normal conditions of use, and it is important to be aware that, because it is an electronic equipment, it is not free of frauds and scams that may interfere with its correct operation.
8. After its useful lifespan, the product must be delivered to an Intelbras authorized service center or directly disposed of in an environmentally appropriate manner, avoiding environmental and health impacts. If you prefer, the battery as well as other Intelbras brand electronics without use, can be discarded at any Green Eletron collection point (manager of electro-electronic waste with whom we are associated). If you have any questions about the reverse logistics process, please contact us by phone (48) 2106-0006 or 0800 704 2767 (Monday to Friday from 8am to 8pm and on Saturdays from 8am to 6pm) or by e-mail suporte@intelbras.com.br.

These being the conditions of this supplemental warranty term, Intelbras S/A reserves the right to alter the general, technical and aesthetic characteristics of its products without prior notice.

The manufacturing process for this product is not covered by the requirements of ISO 14001.

All images in this manual are illustrative.

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talk to us

Customer Support: (48) 2106 0006
Forum: forum.intelbras.com.br
Support via chat: chat.intelbras.com.br
Support via e-mail: suporte@intelbras.com.br
Customer Service: 0800 7042767
Where to buy? Who installs it? 0800 7245115

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