

PR03 Series



User Guide

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Software Version: v4.1

AVIWEST
Shaping tomorrow's *live* video

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Compliance

Before using the unit, please inform yourself about laws and regulations in force in the country in which you use it.

Please refer to the sticker pasted on the unit to know its version.

The declaration of conformity is available upon request. Should you need it, please contact AVIWEST.

Safety and Health Precautions



Handling the Unit

- To avoid any injury during the installation, observe local health and safety requirements, and guidelines for manual material handling.
- The unit must be handled carefully and thoughtfully to prevent safety hazards and damage.



Electronic and Radio Interference

- To avoid interferences with electronic devices contained in vehicles, keep the unit away from the vehicle's dashboard.
- When connected to wireless networks (3G/4G or WiFi), the unit emits microwaves that can interfere with other electronic devices.
- The operation of this equipment in a residential environment could cause radio interference.



Safety Precautions

- Do not use the unit in any place where the use of mobile phones is usually banned: airplanes, hospitals, and areas with potentially explosive atmosphere (e.g. gas stations, repair shops, fuel or chemical storage areas).
- In accordance with IEC 62368-1:2014 standard, PRO3 Series devices must be connected only to PS2 power sources. Consequently, only PS2 type external batteries must be used. PRO3 Series devices are delivered with a design PS2 type power block.



Coin Battery Safety Precautions

- Lithium battery (ref: BR1225A)
- There is a risk of explosion if the battery is replaced by an incorrect type.



Health Precautions

Operating the unit is not recommended for:

- People with electronic implants (e.g. pacemakers, insulin pumps, implanted pulse generators, hearing aids).
- Pregnant women, old people, children, teenagers and people suffering from epilepsy.



Servicing the Unit

- Only trained and approved service engineers are permitted to service this unit.
- Unauthorized maintenance or the use of non-approved replacements may affect the unit specifications and invalidate any warranties.

Operating Environment

- Make sure that the environment corresponds to the conditions mentioned below:



Only use at altitude not exceeding 2000 meters.



Only use in not-tropical climate regions.

- ✓ Ambient operating temperature: 0°C to 45°C (0°C to 35°C when unit placed in backpack)
- ✓ Ambient operating temperature: 0°C to 40°C (for the DC adapter)
- ✓ Ambient operating humidity: 10 % to 85 % (no condensation)

Operating the unit out of these ranges may cause damage and void the warranty.

- Protect the unit against rain, dust and shocks.
- Avoid long exposure to direct sunlight.
- Do not obstruct the air inlets and outlets.
- Only use the backpack provided by Aviwest. Insufficient air flow may damage the unit and may void the warranty.
- Do not place a rain cover on the backpack when the unit is operating.
- The unit relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A.
- The unit does not have any protective earthing connector. Connection to earth is made through the DC adapter to which the unit is connected.



Caution – Safety precautions

Only use the DC adapter and the power cord provided by AVIWEST.

Using another DC adapter and power cord can damage the device and void the warranty.

- Important notice for Japan territory:

Using the 5GHz band (W52) outdoors is prohibited by radio regulations.

Turn off WiFi capabilities or select only 2.4GHz band when the device is used outdoors.

Product Presentation

Overview

The PR03 Series is a range of camera mounted mobile encoders & transmitters allowing video professionals to broadcast news, sports of field events from any location around the world.

This solution supports video live transmission, record and forward over unmanaged networks – such as 3G/4G LTE cellular network, LAN/WAN or public internet.



With its large set of professional audio and video interfaces, the PR03 Series supports the best state-of-the-art H.265/HEVC and H.264/AVC hardware encoder by offering premium video quality with less data usage, and low end-to-end latency.

On the transmission side, the solution features multiple world-wide compliant embedded cellular modems with high efficiency patented custom antenna array: up to x6 3G/4G/5G or x8 3G/4G modems. Additional extension links such as built-in Wi-Fi, Dual Gigabit Ethernet for streaming over LAN/WAN, BGAN, GX or Ka band Satellite are also natively supported, and controlled by our SST (Safe Stream Transport) technology. This award-winning technology powered by Aviwest is an intelligent IP bonding stack offering a set of powerful contribution network protocols. It ensures the delivery of video even in the midst of unpredictable and unmanaged networks conditions by:

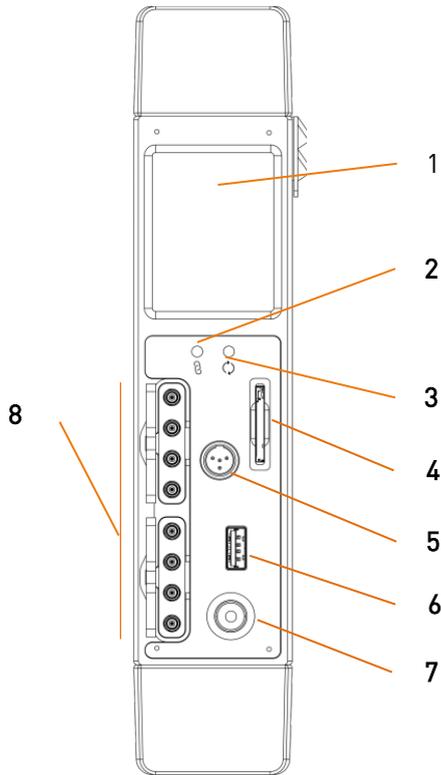
- aggregating simultaneously multiple network connections,
- dynamically adapting the video bitrate according to the network bandwidth fluctuations,
- protecting stream content,
- supporting retransmission of lost data.

Available in a compact and light ruggedized enclosure, the PR03 Series offers standard V-Mount or Gold-Mount plates for direct mounting on professional cameras, but also within a backpack.

The PR03 Series is organized as illustrated in the following chart.

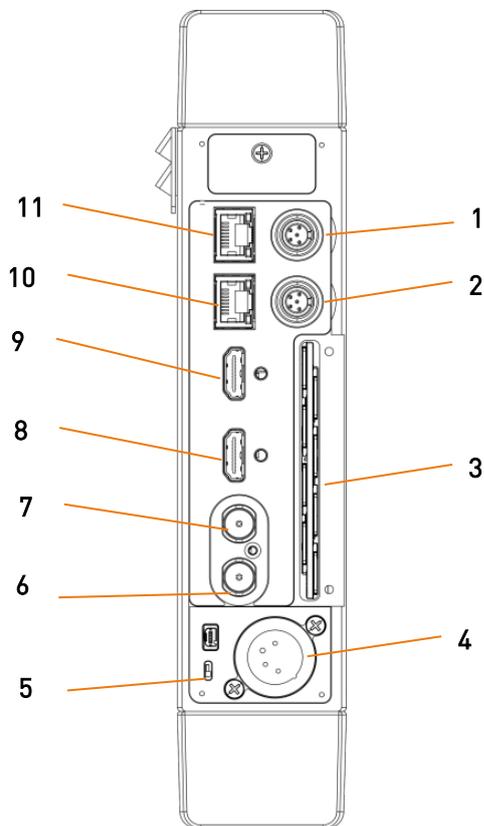
	PR0360-5G	PR0380	PR0340
Embedded cellular modems	6	8	4
Cellular networks	3G/4G/5G	3G/4G	3G/4G

Front Panel



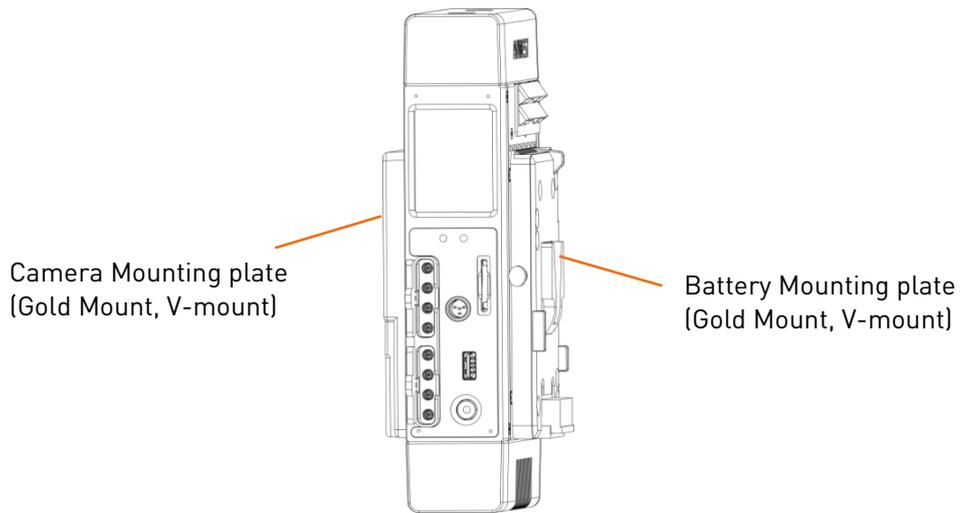
1	Touchscreen
2	Link Indicator
3	Activity Indicator
4	SD Card Slot
5	Intercom mini XLR (headphone, micro)
6	USB 3.0 port
7	Power Button
8	QUAD Antenna Interface

Rear Panel

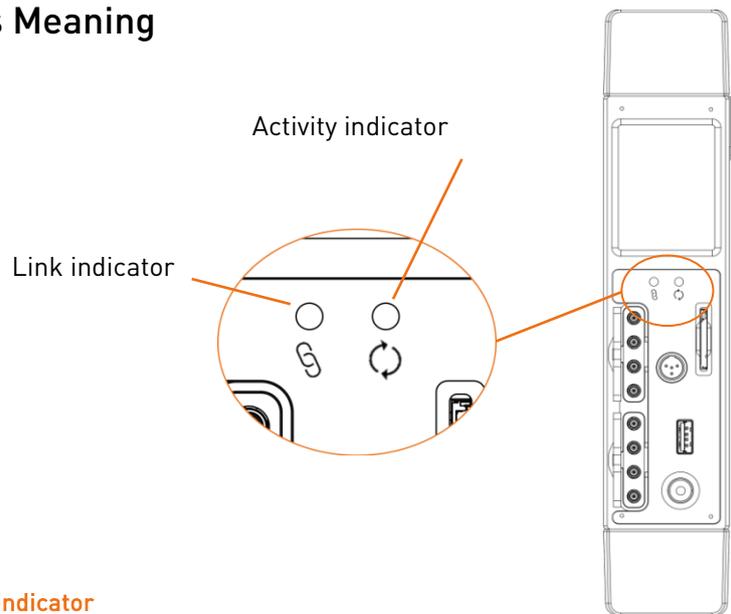


1	Analog Audio input/output (right) (channel 2)
2	Analog Audio input/output (left) (channel 1)
3	Micro SIM Card Slots
4	DC IN (18V nominal)
5	<p>Auto Start Switch</p> <p><u>Auto-Start Disabled</u> </p> <p>In that case, the power button is used to turn on and off the unit.</p> <p><u>Auto-Start Enabled</u> </p> <p>In that case, the power button is not used. The unit turns on when it is powered on.</p>
6	3G SDI Input
7	3G SDI Output
8	HDMI 1.4 Input
9	HDMI 1.4 Output
10	Ethernet 1
11	Ethernet 2

Left and Right Sides



Indicators Meaning



Activity indicator

Status	Meaning
Fixed Green	The unit is starting
Flashing Green	Live, Record or Forward in progress
Off	No Live, Record or Forward in progress

Link indicator

Status	Meaning
Fixed Green	The unit is starting The unit is connected to a StreamHub
Off	The unit is not connected to a StreamHub

Installation

Checking Package Content

Please check that the package contains:

- PRO3 unit
- 18V AC/DC adapter
- A printed Quick Start Guide
- Flyer with QR code redirecting to WEB site with technical documents (User Guide, and Quick Start Guide)
- SD card (if ordered)

Installing the Unit

1. Install the external battery onto the unit side.
Or
Connect the AC/DC adapter and the power cable.

2. Insert a SD card (if not already installed).

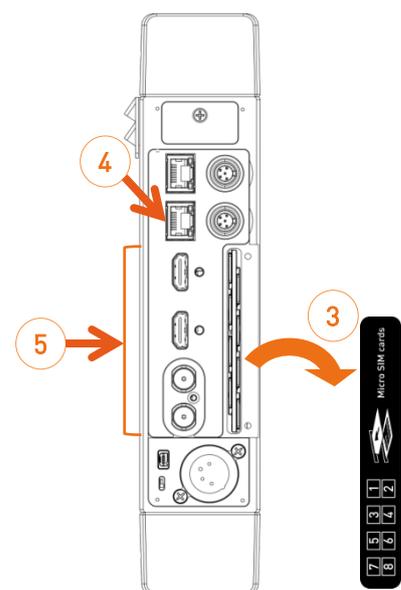
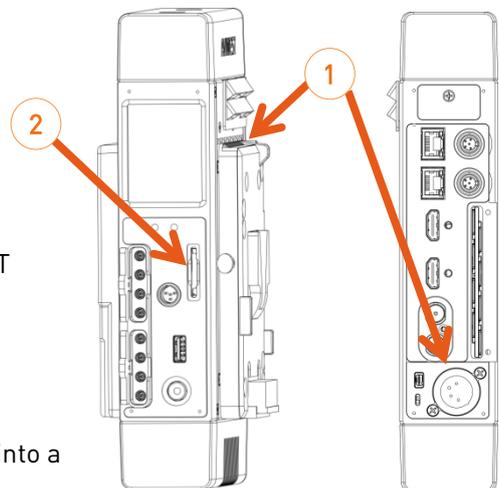
Note: It is recommended to use FAT 32 or exFAT formats and class 10 SD card.

3. Remove the SIM card cover and insert a SIM card into a slot according to indications written on the cover.

4. For the Ethernet transmission, connect the Ethernet cable to Ethernet 1.

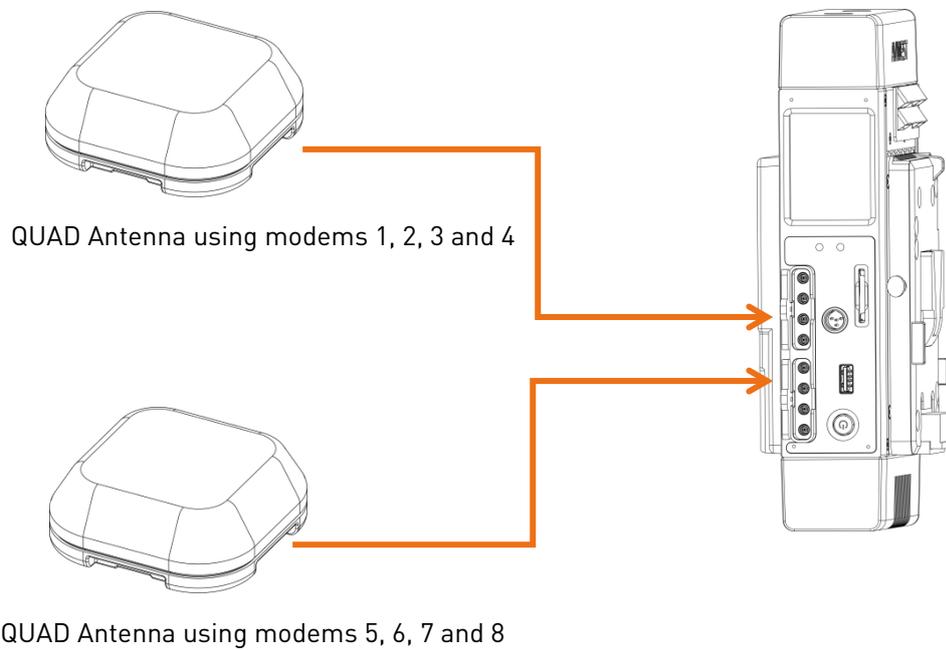
Note: DHCP is the default operating mode for Ethernet 1.

5. Connect video input cables (SDI or HDMI).



Connecting a QUAD Antenna to the Unit

You can connect up to 2 QUAD Antenna to MCX connectors.



Note:

- When plugging a QUAD Antenna, the unit automatically switches from its embedded antennas to the QUAD Antenna's external antenna arrays.
- If only one QUAD Antenna is connected to the unit, you need to disable the modems that are not used (please refer to [Enabling/Disabling a Cellular Modem](#)).
- When restarting the unit, the configuration that you applied to modems is kept.

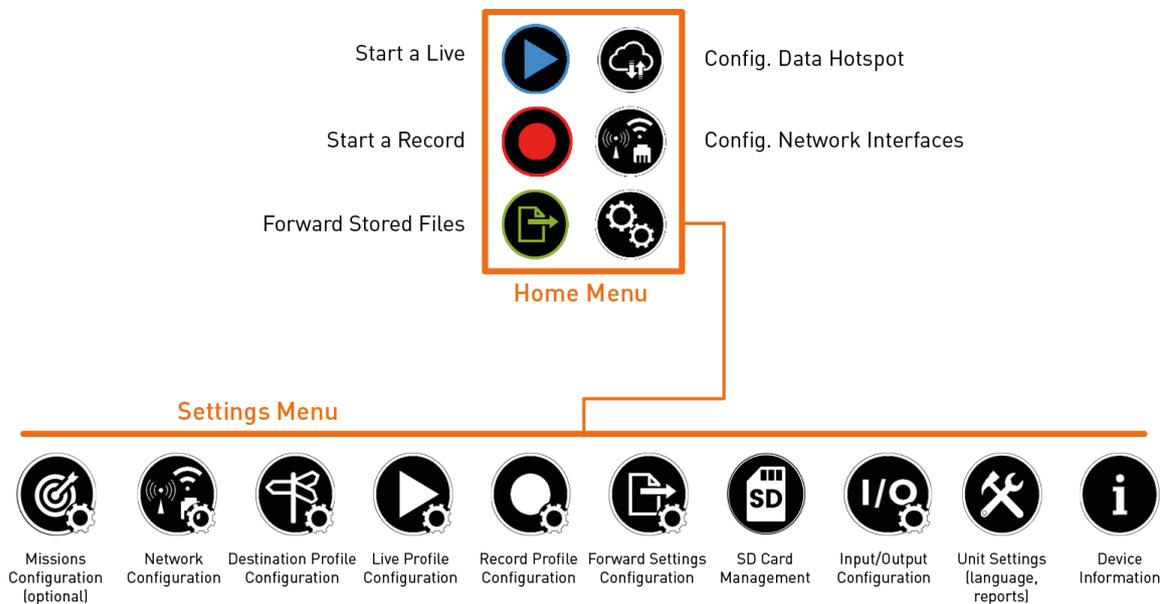
Unit Front Panel

The unit front panel allows you to:

- Configure the unit
- Start / stop live
- Start / stop record
- Forward stored files

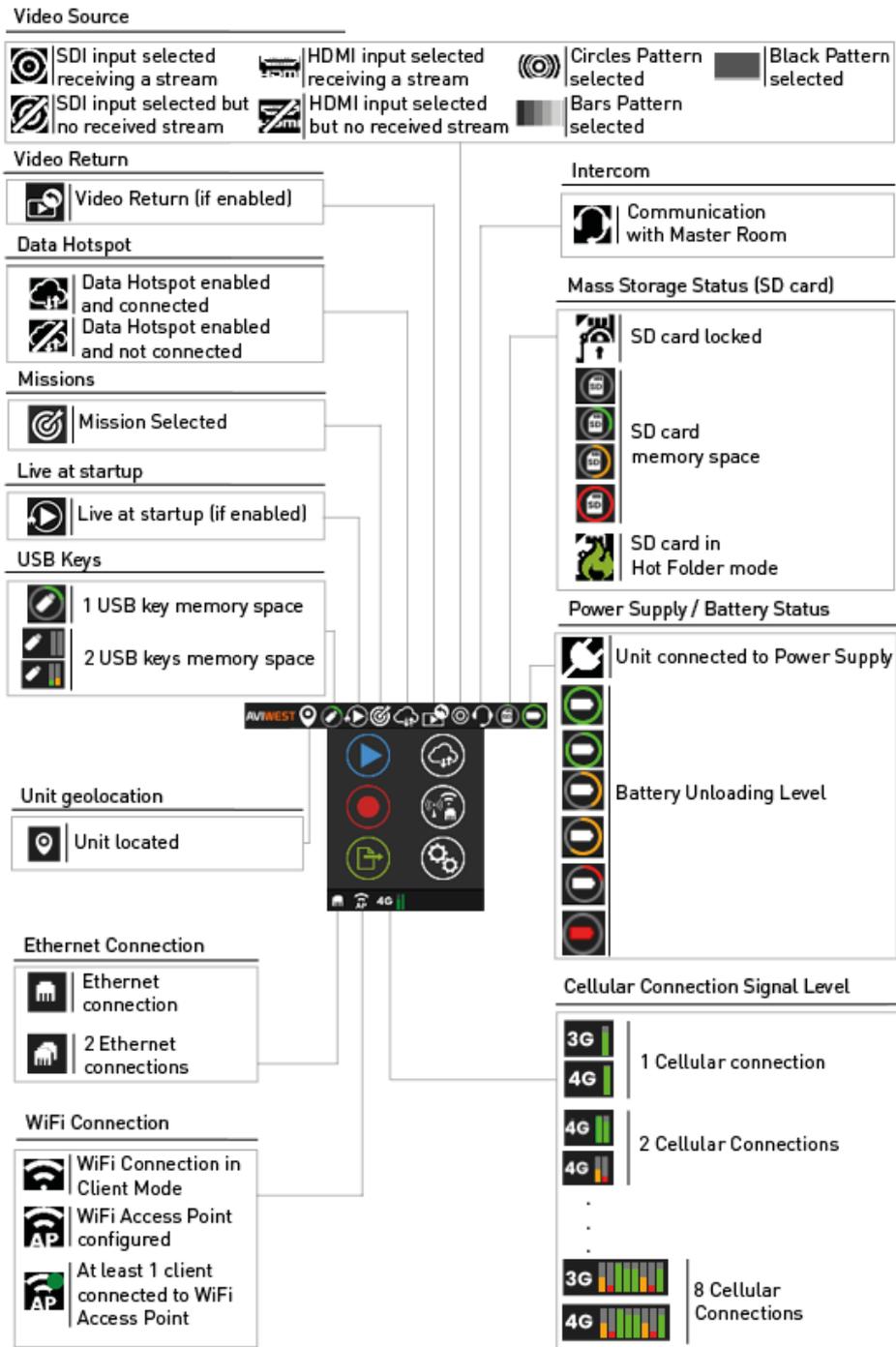
Menus

The diagram below shows the different menus accessible from **Home** and **Settings** Menus.



Icons

On the front panel screen, some icons indicate the unit state.



Error icons



Error with modem connection



Error with Ethernet connection

Launching the Web Interface

The web interface allows you to:

- Configure the unit
- Start / stop live
- Start / stop record
- Forward stored files

To access the Web interface, use an Ethernet connection or a WiFi connection.

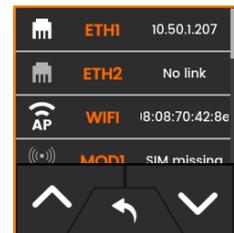
Ethernet Connection

Note: The unit is equipped with 2 Ethernet ports.

We recommend using Ethernet 1 for which DHCP is the default configuration.

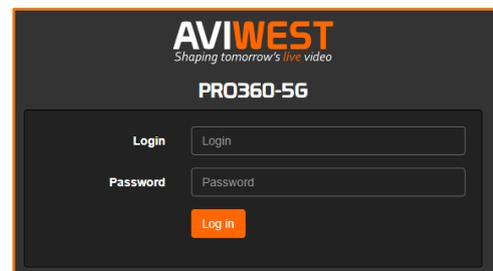
When using Ethernet 2, Gateway is the default configuration.

1. From the Home menu click on .
 - ▶ The screen displays the IP address assigned to the PRO3 unit (by default in DHCP mode):



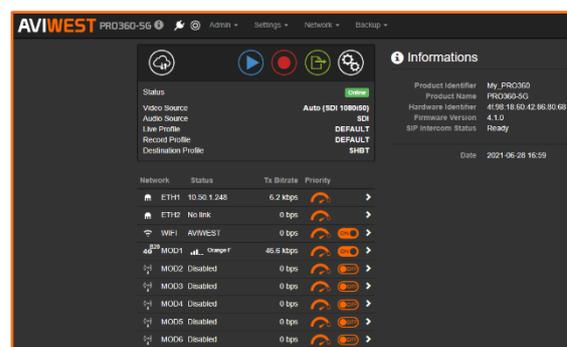
2. From a web browser enter the PRO3 unit IP address and append «:8888 » to it.
Example: 10.50.1.207:8888

- ▶ The login screen opens:
 - Note:** The screen will display PRO340, PRO360-5G or PRO380 according to the unit you have.



3. Enter the login and password (by default: login= **admin** ; password= **password**).
 - Note:** It is highly recommended to modify this factory password.

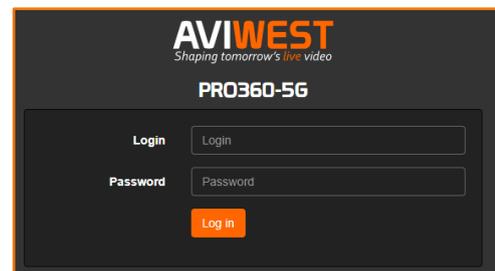
- ▶ The web interface opens:



WiFi Connection (Access Point Mode)

1. From the Unit Panel configure the unit as a WiFi Access Point (see chapter [Configuring a WiFi interface](#)).
2. On your WiFi client device (computer, notebook, smartphone), go to the WiFi settings menu, and select the WiFi access point that you configured.
Example: PRO_bf:98:10:01:02:8e:80:c0
3. Enter the password that you defined.
4. In a web browser, enter the unit url: <http://192.168.30.10:8888> (default IP address if it has not been changed).

▷ The login screen opens:

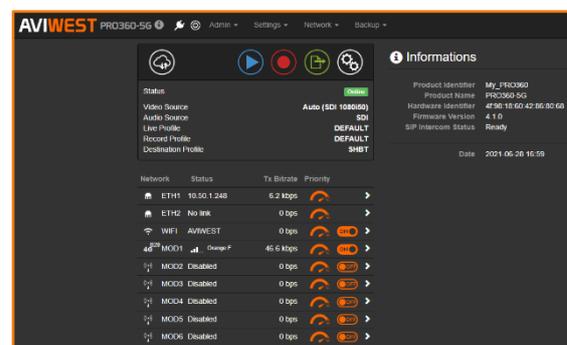


5. Enter the login and password.
Default login = **admin**
Default password = **password**

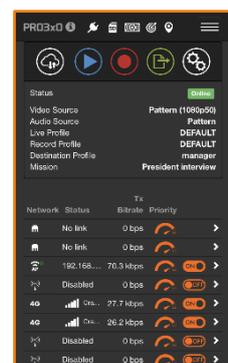
Note: It is highly recommended to modify the password.

▷ The unit webs interface opens:

From a Notebook / Computer



From a Smartphone



Configuring an Ethernet Interface

Devices connected to a local LAN transmitter are remotely controllable from the Media Control Room.

The unit can operate in different Ethernet modes:

DHCP

To use the unit in a domain that has a DHCP server.
The DHCP server assigns the IP address, subnet mask and default gateway to the equipment.
DHCP is the default configuration mode for Ethernet1.

STATIC

To connect the unit to a domain without using a DHCP server.
This requires that you are the network administrator to set IP settings of the Ethernet interface (IP address, netmask and gateway).

GATEWAY

To connect a host to the unit (for instance a laptop).
The unit acts as a DHCP server and assigns an IP address to the connected host.
The unit automatically detects from the netmask the range of IP addresses that it can use for assigning an IP address to the host connected.
GATEWAY is the default configuration mode for Ethernet 2.

Factory Settings According to Selected Mode

Interface	MODE	IP Address	Netmask	Gateway
Ethernet 1	DHCP*	Assigned by DHCP server		
	STATIC	192.168.1.10	255.255.255.0	192.168.1.1
Ethernet 2	DHCP	Assigned by DHCP server		
	STATIC	192.168.20.10	255.255.255.0	192.168.20.1
	GATEWAY*	192.168.20.10	255.255.255.0	
	OFF	N/A	N/A	N/A

* Default configuration

Note: When you select the OFF option, you disable the Ethernet mode.

From the Unit Panel

1. From the Home menu, click on .
2. Click on the Ethernet line to configure.



3. Click on the **Mode** field to enter the mode selection menu.



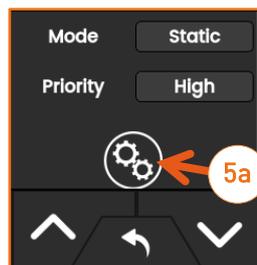
4. Click on a new mode.



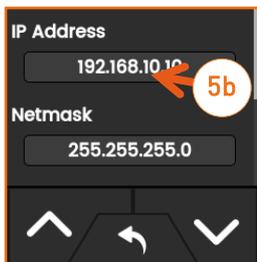
5. The selected mode appears.

- When selecting DHCP mode, settings are automatically retrieved.
- When selecting STATIC mode, you need to enter network settings.

a) Click on .

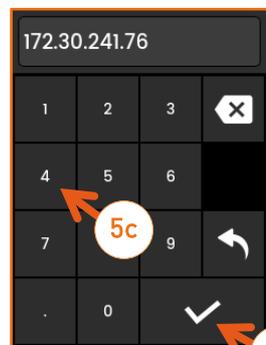


b) Click on settings fields to be modified.



c) Use the keyboard to enter new settings.

d) Click on  to confirm.

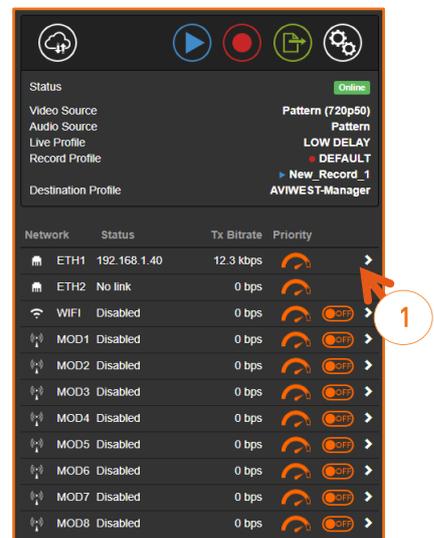


e) Click on  to scroll down and click on  to save new settings.



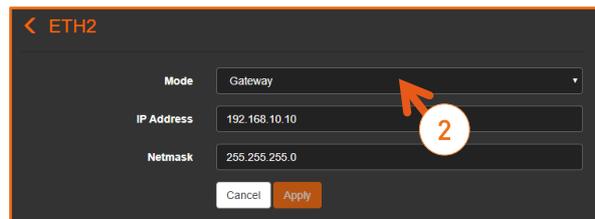
From the Web Interface

1. From the Web Interface, click on  on the Ethernet line.



2. In the **Mode** field, select the configuration mode according to the Ethernet connection used:

- DHCP
- STATIC
- GATEWAY (only for Ethernet 2)
- OFF (only for Ethernet 2)



3. According to the Ethernet connection, modify the settings if required:

- IP Address, Netmask and Gateway if STATIC mode is selected.
- IP Address and Netmask if GATEWAY mode is selected.

4. Click the **Apply** button to save these settings.

 **Note:** Configuring Ethernet interfaces may disconnect the unit.

Configuring a WiFi Interface

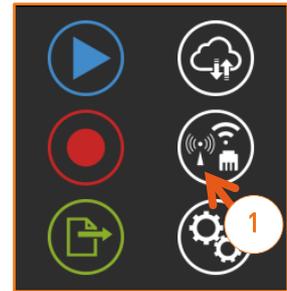
The unit can operate either as a WiFi Access Point, or a WiFi Client.

Enabling/Disabling the WiFi Interface

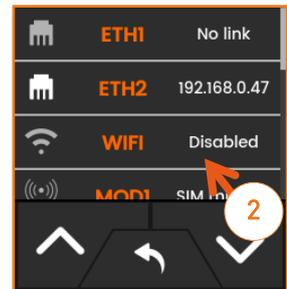
By default, the WiFi network is disabled.

From the Unit Panel

1. From the Home menu, click on  .



2. Click on the WiFi line to access the settings menu.

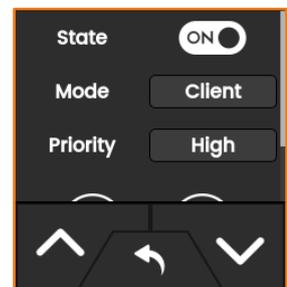


3. Click on  to enable the WiFi.

▷ The button turns into  .

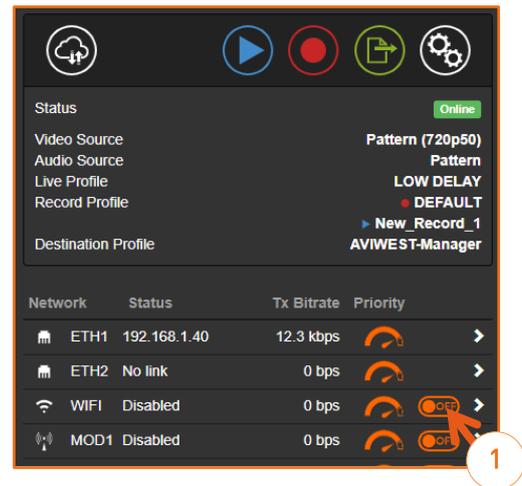


▷ The WiFi network is enabled.



From the Web Interface

1. Click on **ON** or **OFF** in the WiFi line to enable or disable the WiFi network.



- ▷ The WiFi network is enabled:



Configuring a WiFi Access Point

By default, the WiFi network is disabled. Make sure it is enabled. If not, see [Enabling/Disabling the WiFi Interface](#).

When configured in WiFi access point mode, the unit can be controlled remotely from a smartphone, a tablet or a laptop.

From the Unit Panel

1. From the Home menu, click on  .



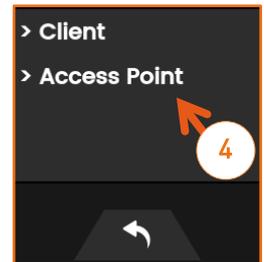
2. Click on the WiFi line to access the WiFi settings menu.



3. Click on the **Mode** field.



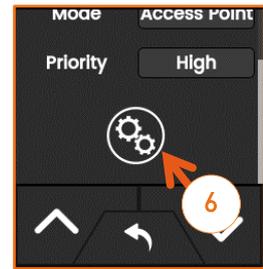
4. Select the **Access Point** mode.



5. Click on  to scroll down.

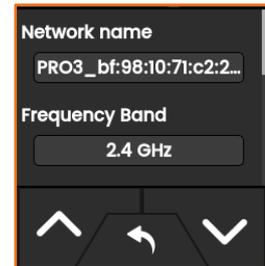


6. Click on .



7. Define the WiFi settings.

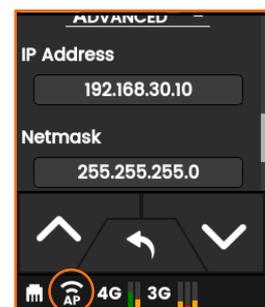
- **Network name** (automatically formatted as follows: PRO3 followed by _ and the unit hardware ID.
In the example beside: PRO3_bf:98:10:71:c2:26:80:6c
- **Frequency Band**
Select 2.4GHz or 5.0GHz
- **Channel**
Select the channel used (dynamic list according to the Frequency Band selected):
 - 2.4GHz: channel 1 to 11
 - 5.0GHz: channel 36, 40, 44 and 48
- **Password**
By default: password.



8. Click on  and **ADVANCED +**.



9. Define IP settings (IP Address and Netmask).



10. Click on .

▷ An icon indicates that the WiFi Access Point is configured:



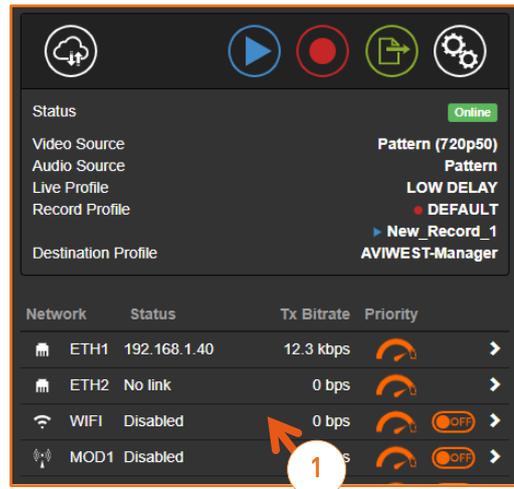
A WiFi Access Point is configured



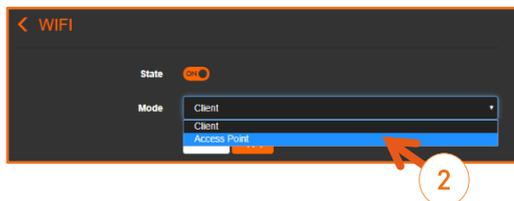
At least one client is connected to the Access Point

From the Web Interface

1. Click on the WiFi line to open the WiFi interface.

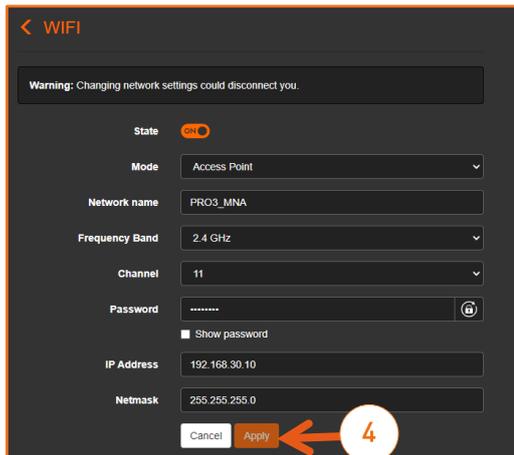


2. From the **Mode** scrolling list, select **Access Point**.



3. Define the WiFi settings:

- **Network name** (automatically formatted as follows: PRO3 followed by _ and the unit hardware ID. Example: PRO3_MNA)
- **Frequency Band**
Select 2.4GHz or 5.0GHz
- **Channel**
Select the channel used (dynamic list according to the Frequency Band selected):
- 2.4GHz: channel 1 to 11
- 5.0GHz: channel 36, 40, 44 and 48
- **Password**
By default: password.
Click  to reset it.
- Enter the **IP Address** and the **Netmask**.



4. Click on **Apply**.

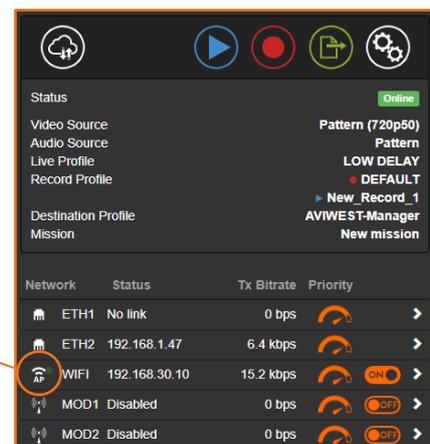
- ▷ An icon indicates that the WiFi Access Point is configured:



A WiFi Access Point is configured



At least one client is connected to the Access Point

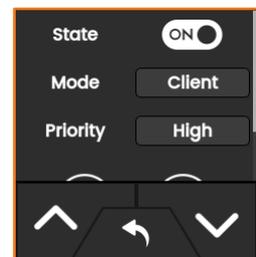
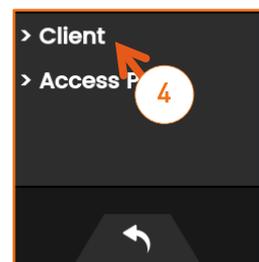


Configuring a WiFi Client Interface

By default, the WiFi network is disabled. Make sure it is enabled. If not, see [Enabling/Disabling the WiFi Interface](#).

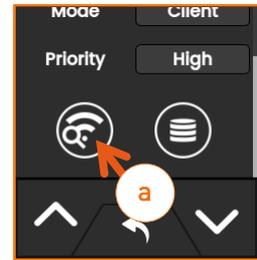
From the Unit Panel

1. From the Home menu, click on  .
2. Click on the WiFi line to access the WiFi settings menu.
3. Click on the **Mode** field.
4. Select the **Client** mode.
 - ▷ The client mode is activated.
5. You have 2 possibilities to configure a client interface.
 - Selecting a network among the ones identified around.
 - Adding manually a hidden network.

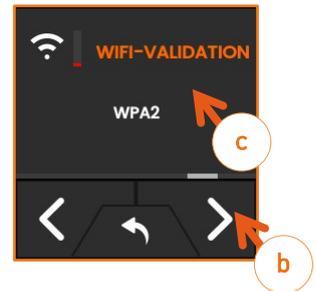


Selecting a network among the ones identified around

- a) Click on  to scroll down and click on  to scan surrounding networks.

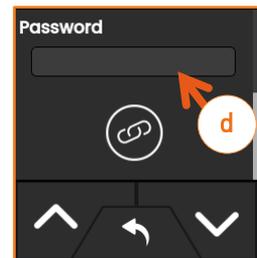


- b) Click on  or  to select a network.



- c) Click on the screen to enter the password.

- d) Click on the **Password** field to enter the password.

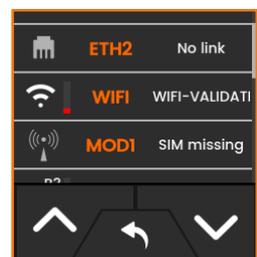


- e) Enter the password and click on  to confirm.



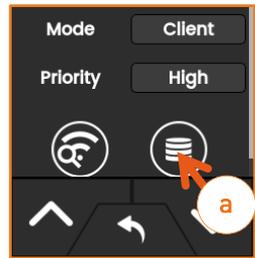
- f) Click on .

- ▷ The network is displayed:

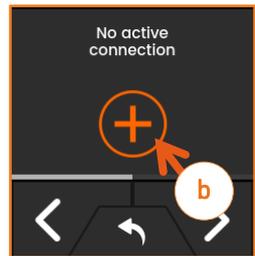


Adding manually a hidden network

a) Click on  to scroll down and click on .

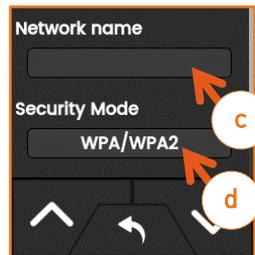


b) Click on  to add a new network.



c) Enter the Network name.

- o Click on the **Network name** field to enter a name.
- o Click on  to confirm the network name.

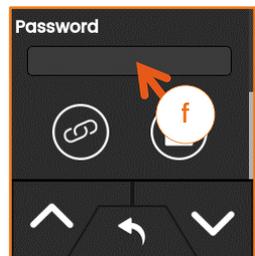


d) Click on the **Security Mode** field.

e) Select the Security Mode.



f) Click on the **Password** field.

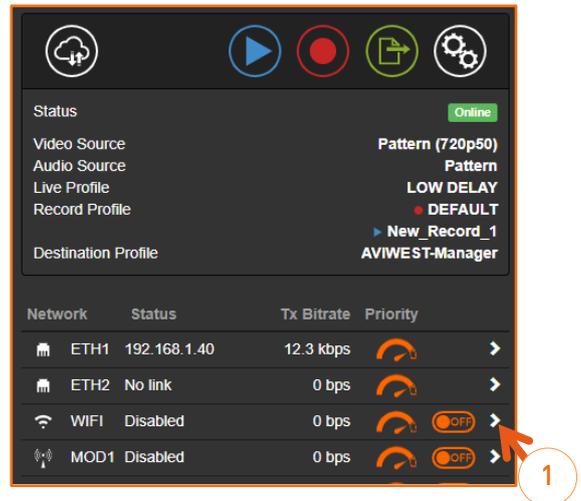


g) Enter the network password.

- Click on  to connect the new network.
- Click on  to save the new network.

From the Web Interface

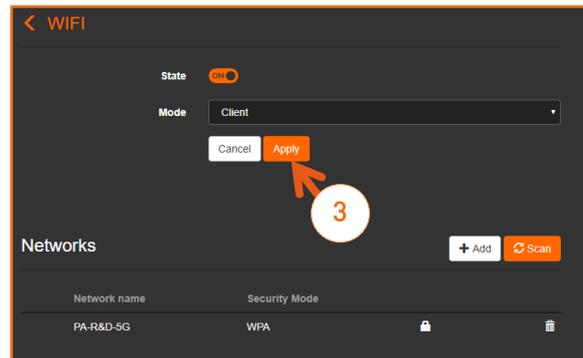
1. Click on the WiFi line to open the WiFi interface.



2. From the **Mode** scrolling list, select **Client** mode.



3. Click on **Apply**.

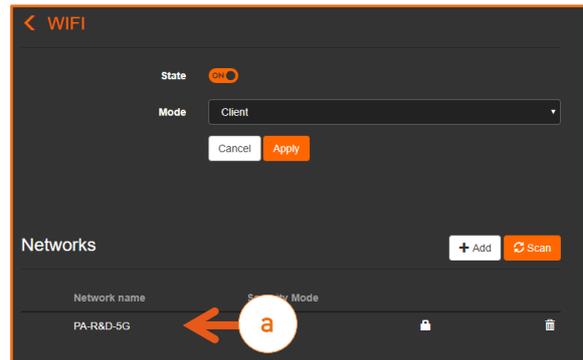


▷ Surrounding networks are scanned and listed.

4. You have 2 possibilities to configure a client interface:
 - Selecting a network among the ones identified around.
 - Adding manually a hidden network.

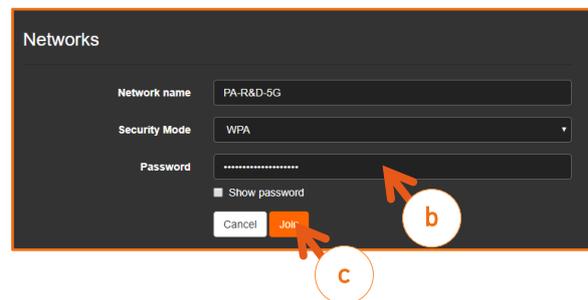
Selecting a network among the ones identified around

- a) Select the network among the list.



- b) Enter the **Password**.

- c) Click on **Join**.

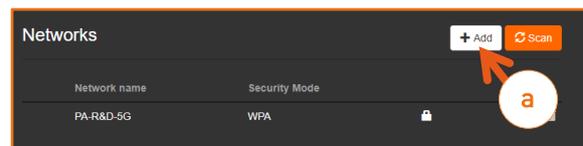


- ▷ The selected WiFi network is indicated:

Network	Status	Tx Bitrate	Priority
🏠 ETH1	10.50.1.166	89.0 kbps	📶
🏠 ETH2	No link	0 bps	📶
📶 WiFi	PA-R&D-5G	53.2 kbps	📶 ON

Adding manually a hidden network

- a) Click on **Add**.

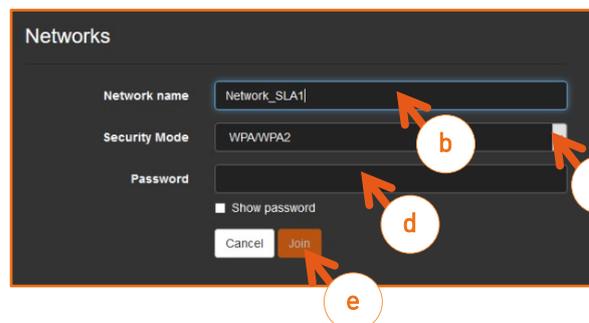


- b) Enter the **Network name**.

- c) Select the **Security Mode**.

- d) Enter the network **Password**.

- e) Click on **Join**.



Configuring a 3G/4G Cellular Interface

Inserting the SIM card

1. Make sure that your SIM card is unlocked.

Note: In some cases, you may need to identify the unit IMEI (International Mobile Equipment Identity). To know how to access this information, please refer to [Getting the IMEI numbers](#) chapter.

2. Insert the SIM card into a slot on the unit rear panel.

PRO340

- A PRO340 unit is equipped with 4 modems.
- Slots 1 to 4 can be used.



PRO360-5G

- A PRO360 unit is equipped with 6 5G modems.
- Slots 1 to 6 can be used.



PRO380

- A PRO380 unit is equipped with 8 modems.
- Slots 1 to 8 can be used.



When using the unit in the USA, we recommend inserting SIM cards as indicated in the table below:

SIM Slot Number	US Operator
1	AT&T
2	T-Mobile
3	Verizon
4	AT&T
5	TMobile
6	Verizon
7	AT&T
8	T-Mobile

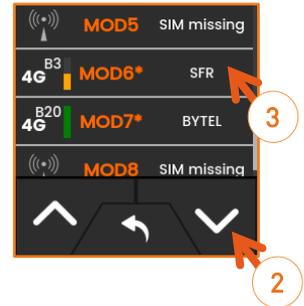
Configuring the APN

If the SIM card operator is registered in the unit's database, the unit automatically assigns a name and an APN (Access Point Name).

If the APN assigned is not relevant, you can select another one within a predefined list, or configure a new one.

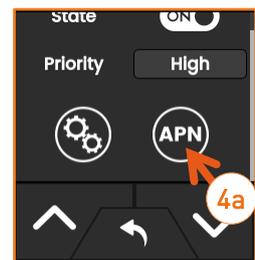
From the Unit Panel

1. From the Home menu, click on .
2. Click on  or  to select the Modem to configure.
3. Click on the line of the modem to be configured.



4. Check the APN assigned.

a) Click on .



b) Click on  to scroll down and display the APN.

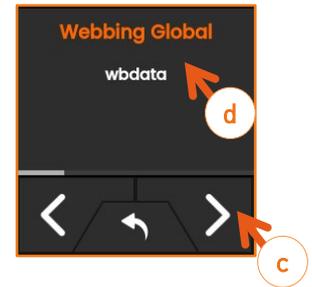


You can change the APN by:

- selecting an APN from a predefined list
or
- configuring settings for a new APN.

Selecting a predefined APN

- Click on  to scroll up to display the  button.
- Click on  to access the list of predefined APN.
- Click on  or  to select an APN.
- Click on the screen to confirm the choice.
- Click on  to save.



Configuring a new APN

- Click on the **APN** field
- Use the keyboard to enter a name for the new APN and click on  .
- Click on  to scroll down and enter other settings (Username and Password) if required.
- Click on  to save.

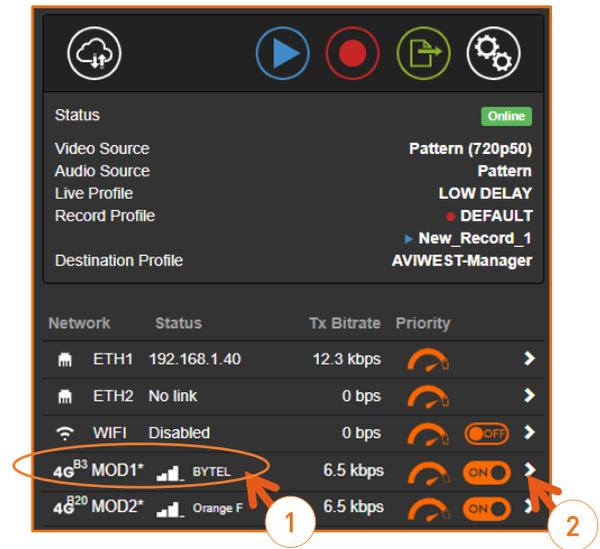


From the Web Interface

1. Check that the operator's name is indicated in the Status field and the type of network is indicated.

In the example beside: BYTEL (Bouygues Telecom) using Band 3 within a 4G network.

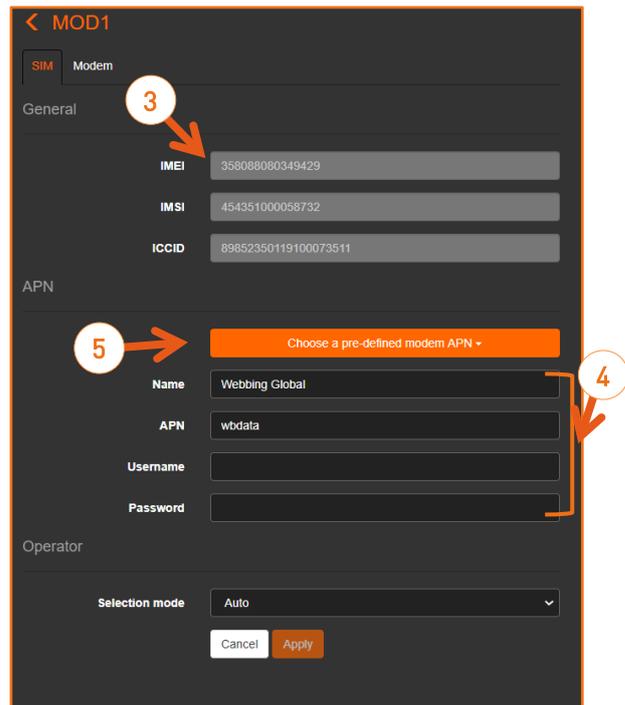
2. Click  to configure the APN.



3. The IMEI, IMSI and ICCID fields are automatically filled in.

4. Check if the automatically assigned APN settings are relevant.

5. If the APN is not suitable, you can click on "Choose a pre-defined modem APN" and select the expected APN from the pre-defined list.



6. If you cannot find a relevant APN in the pre-defined list you can:

- Fill in the APN fields with proper settings and click on **Apply**.
- Enrich the pre-defined APN list by adding your APN to it (See [Managing the APN database](#)).

Managing the APN database

The unit is delivered with a pre-defined APN database.

You can enrich this database from the Web Interface.

You can:

- Add and configure new APN settings to suit your requirements, so they can be easily selected from the list.
- Delete an APN.
- Enable/Disable the APN Automatic Configuration.

Adding an APN to the database

1. From the Web Interface, click on **Network > APN**.

2. Click the **Add** button.

3. Enter a **Name**.

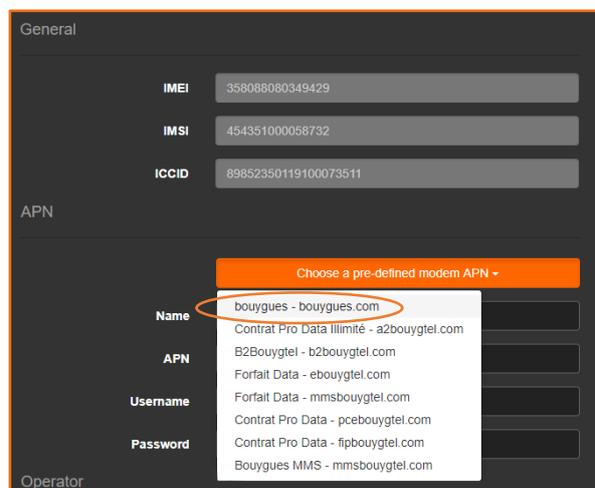
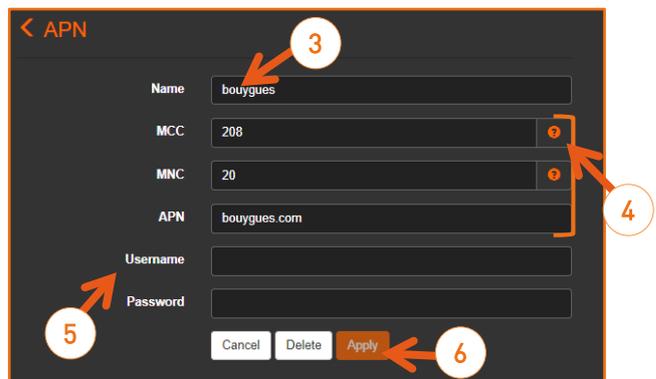
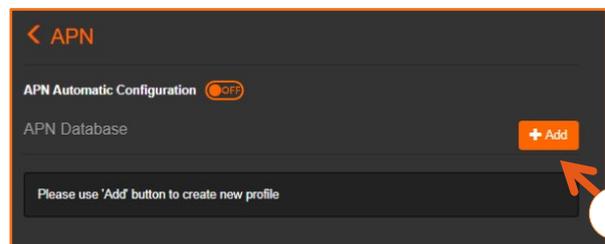
4. Fill in the parameters fields (**MCC, MNC, APN**)

Note: Click on  to get some help if required.

5. Enter a **Username** and **Password** if required.

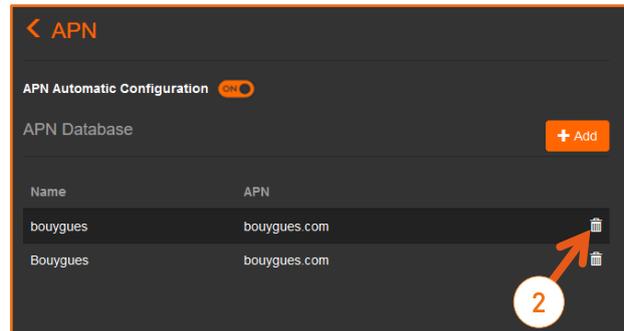
6. Click on **Apply**.

▷ The new APN appears in the APN database, and you can select it from the scrolling list when configuring a cellular interface operating within the same network.



Deleting an APN

1. Click on **Network > APN**.
2. Double click the trash button ().

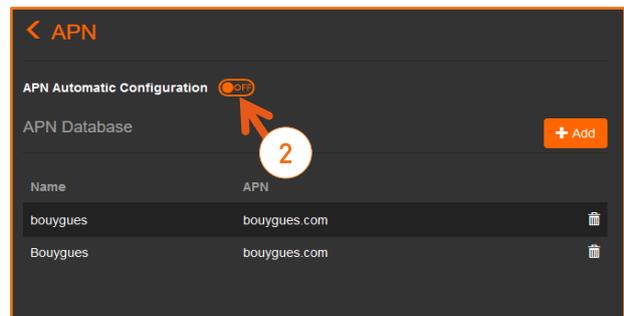


Enabling / Disabling the Automatic APN Configuration

When the **APN Automatic Configuration** is enabled, an APN is automatically assigned when a new SIM card is inserted.

1. From the Web Interface, click on **Network > APN**.
- i Note:** By default, the APN Automatic Configuration is enabled.

2. Click on  to disable it.
- ▷ The button turns into .



Managing Cellular Operators

For each SIM card you can decide how to manage the selection of the cellular operator.

You have 3 possibilities:

- **Automatic Mode**
The unit selects the operator by itself.
- **Manual Selection**
This mode is selected from the Web interface.
It allows entering the MCC and MNC of the operator that you want to use.
- **Scan and Select**
You select among a list of operators detected via the scan of networks.

Note: From the Web Interface, click on **Network > SIM** to have an overview of your SIM Cards. Sort the SIM Cards by clicking on the column titles.

Modem ▲	IMSI or ICCID	APN	Operator	
MOD1	89852350119100073511	wbdata	(Auto)	🗑️
MOD3	89852350119100073974	wbdata	(Auto)	🗑️
MOD5	89852350119100070467	wbdata	(Auto)	🗑️
	240075817063201	wbdata	(Auto)	🗑️

Selecting the Automatic Mode

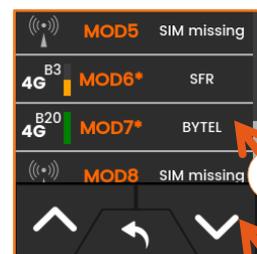
Note: The Automatic Mode is the default setting.

From the Unit Panel

1. From the Home menu, click on .



2. Click on  to scroll down to the modem to be configured.



3. Click on the modem line to enter the **MOD. CONFIG** menu.

2

4. Click on .



5. Click on the **Operator** field.



6. Click on  to enable the Automatic Mode.

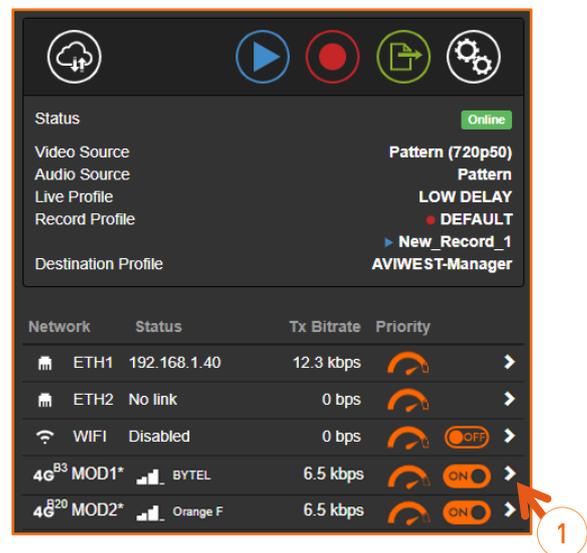
▷ The Automatic Mode is selected.



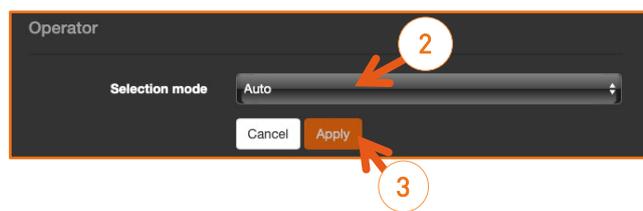
7. Click on  to scroll down and click on  to save.

From the Web Interface

1. Click on the modem line.



2. Select **Auto** in the **Selection mode** scrolling list.

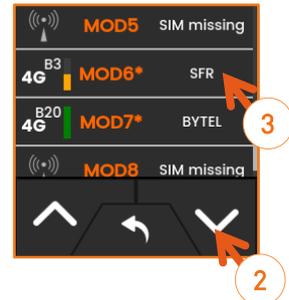


3. Click on **Apply**.

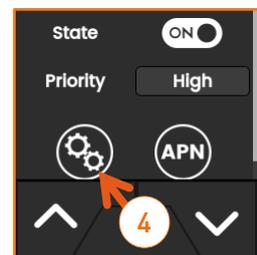
Scanning and Selecting a Cellular Operator

From the Unit Panel

1. From the Home menu, click on .
2. Click on  to scroll down to the modem to be configured.
3. Click on the modem line to enter the **MOD. CONFIG** menu.



4. Click on .



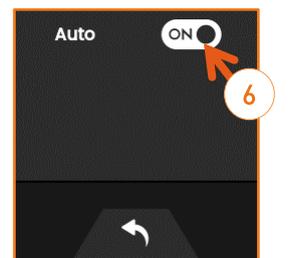
5. Click on the Operator field.



6. Click on  to disable the Auto mode.

▷ The button turns into .

▷ The scan starts.
It may take few minutes.



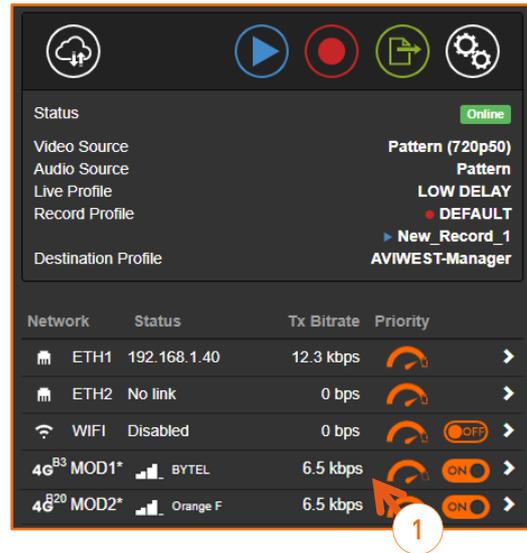
7. Click on the operator that you want to select.
 **Note:** Only white operators in the list can be selected.



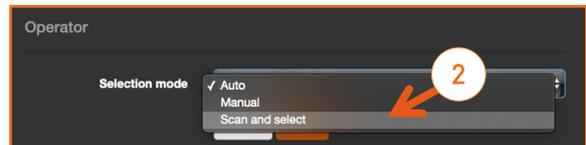
8. Click on  to scroll down and click on  to save.

From the Web Interface

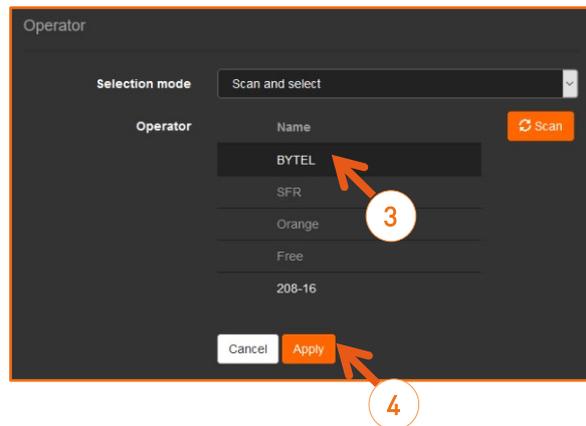
1. Click on the modem line.



2. Select **Scan and select** in the **Selection mode** scrolling list.



3. Select the operator among the operators listed.
i Note: Only white operators in the list can be selected.

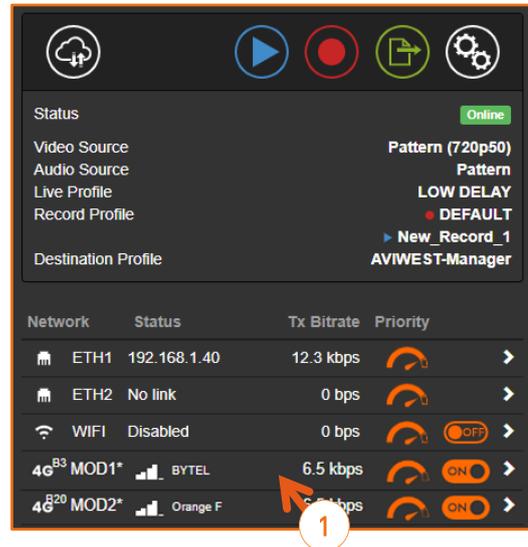


4. Click on **Apply**.

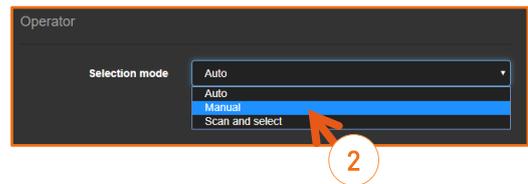
Selecting Manually a Cellular Operator

This option only available on the Web Interface allows to set the MCC (Mobile Country Code) and MNC (Mobile Network Code) manually.

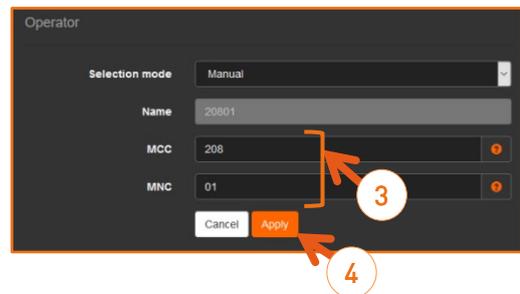
1. Click on the modem line.



2. Select **Manual** in the **Selection mode** scrolling list.



3. Fill the **MCC** and **MNC** fields.
Note: You can click on  to access the lists of MCC and MNC.



4. Click on **Apply**.

Mcc-mnc.com is a service by [SBCompany EU](#) and powered by [Interactive digital media GmbH](#)

Show entries

MCC	MNC	ISO	Country	Country Code	Network
289	08	de	Ashkazia	7	A-Mobile
289	08	de	Ashkazia	7	A-Mobile
289	07	de	Ashkazia	7	Aquafon
412	08	af	Alghanistan	93	Alghan Telecom Corp. (AT)
412	08	af	Alghanistan	93	Alghan Telecom Corp. (AT)
412	01	af	Alghanistan	93	Alghan Wireless/AVCC
412	40	af	Alghanistan	93	Areba/RTN
412	50	af	Alghanistan	93	Ehsasat
412	35	af	Alghanistan	93	Ehsasat
412	29	af	Alghanistan	93	Rakun/TTCA
412	03	af	Alghanistan	93	Wakaf/Telecom (WTF)
276	01	al	Albania	355	ABC/Comote
276	03	al	Albania	355	Eagle Mobile
276	04	al	Albania	355	PLUS Communication SR a
276	02	al	Albania	355	Vodafone

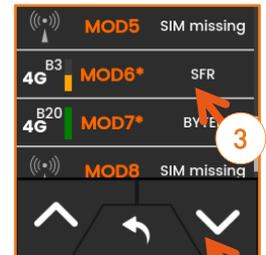
Configuring Modem Bands

- Note:** A star is displayed on the modem line if modem bands are not set in automatic mode or if they are not all selected.

From the Unit Panel

Using the Standard mode

1. From the Home menu, click on .
2. Click on  or  to select the modem to configure.
3. Click on the line of the modem to be configured.
4. Click on  to configure the modem.
5. Click on the **Frequency Bands** field.
6. Define the **Network Mode** field and choose:
 - Auto
 - 5G/4G
 - 5G Only
 - 4G Only
 - 3G Only



Note:

- 5G/4G and 5G only are available on PR0360-5G model.
- For 5G networks operating in Non-Standalone mode (NSA), select 5G/4G settings.

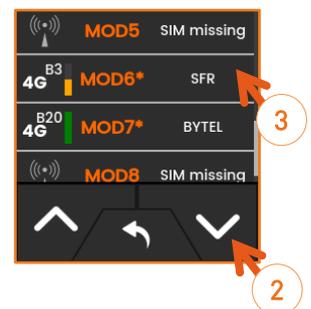
7. Click on the **Preset** field and choose:
 - All Bands
 - Low Frequency

Note: Low Frequency bands are useful for indoor operations.
8. Click on  to save.



Using the Expert mode

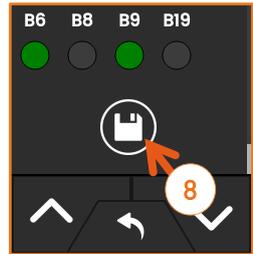
1. From the Home menu, click on .
2. Click on  or  to select the modem to configure.
3. Click on the line of the modem to be configured.
4. Click on  to configure the modem.
5. Click on  to enable the **Expert Mode**.
 - ▷ The Expert Mode is selected, all bands are displayed on the screen.
6. Click on  to scroll down and display all the 4G and 3G bands.



7. Click on  to unselect the different cellular bands.
▷ The green dots turn to grey.



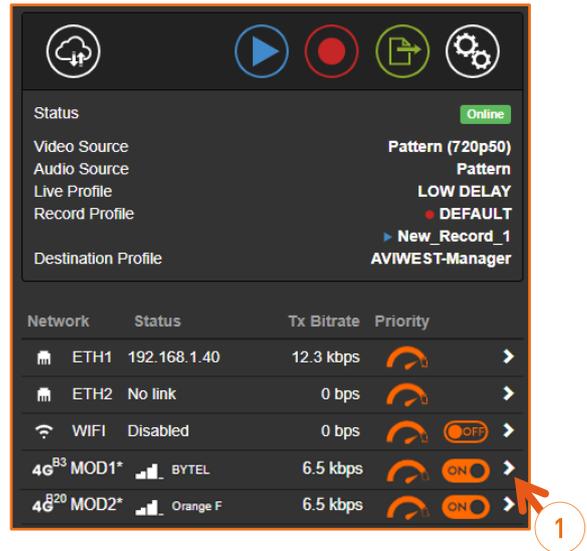
8. Click on  to scroll down and click on  to save.



From the Web Interface

Using the Standard mode

1. Click on  to configure the cellular bands.



2. Click on the **Modem** tab.
3. Define the **Network Mode** field and choose:
 - Auto
 - 5G/4G
 - 5G Only
 - 4G Only
 - 3G Only



Note:

- 5G/4G and 5G only are available on PRO360-5G model.
- For 5G networks operating in Non-Standalone mode (NSA), select 5G/4G settings.

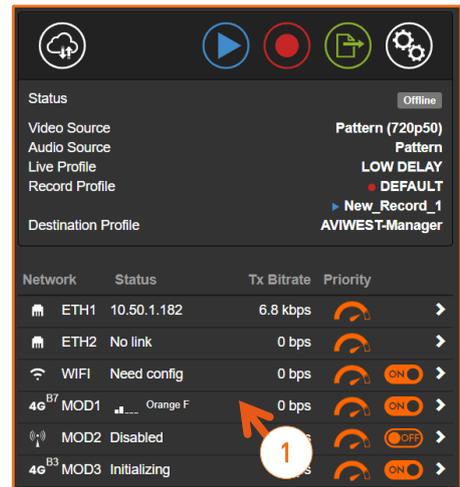
4. Click on the **Preset** field and choose:
 - All Bands
 - Low Frequency

- Note:** Low Frequency bands are useful for indoor operations.

5. Click on **Apply**.

Using the Expert mode

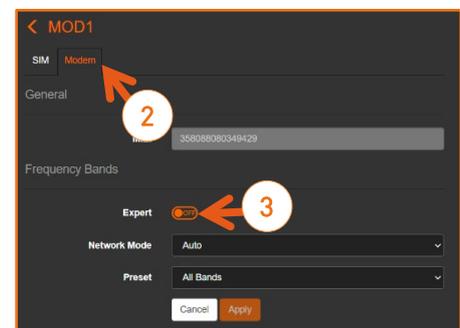
1. Click on  to configure the cellular bands.



2. Click on the **Modem** tab.

3. Click on  to enable the **Expert mode**.

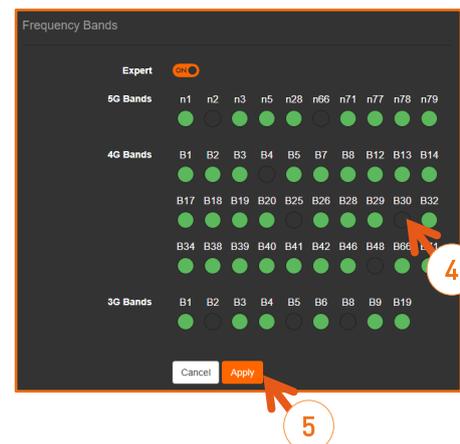
- ▷ The button turns into  and all the cellular bands appear on the screen.



4. Click on  to unselect the different cellular bands.

- ▷ The green dots turn to grey.

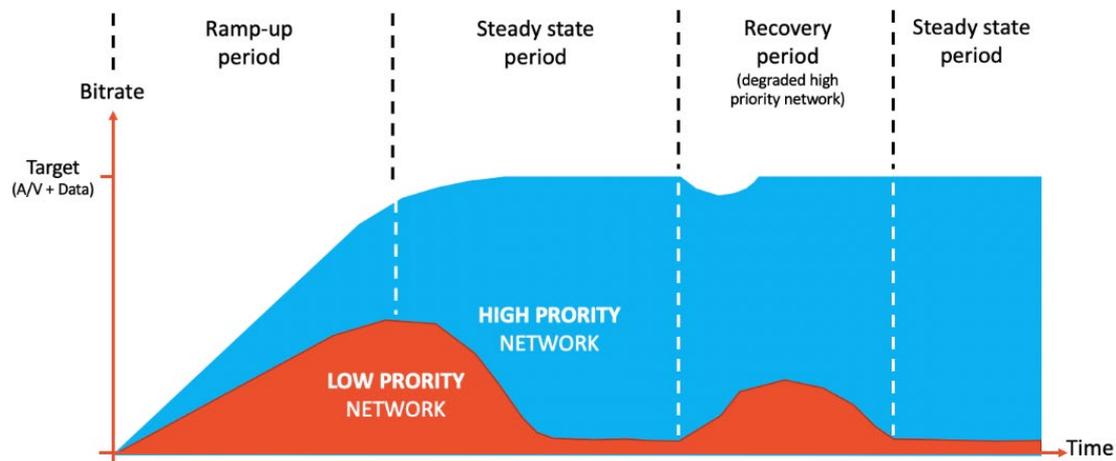
5. Click on **Apply**.



Managing Priorities of Network Links

You can decide of a priority level (High or Low) for each network link used for Live or Forward operations.

These low and high priorities are managed as shown on the diagram below:



- For Live:
 - Both high and low priority links are used as long as the bitrate target set in the Live profile is not been reached.
 - Once the bitrate target is reached, high priority links are mainly used.
- For Forward:
 - Both high and low priority links are used as long as the bitrate target is lower than 1Mbps.
 - When the bitrate target is lower than, low priority links are mainly used.

By default, each network link is set as a high priority link.

This setting can be changed, either from the unit panel or from the web interface, before starting an operation or while the operation is in progress:

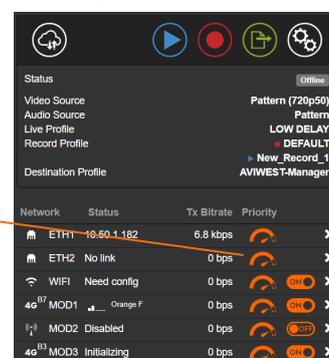
- From the web interface click on the gauge icon to select High or Low priority.



High priority link



Low priority link



- From the unit panel select the priority level when configuring network links (see chapter [Configuring an Ethernet Interface](#), [Configuring a WiFi Client Interface](#)).

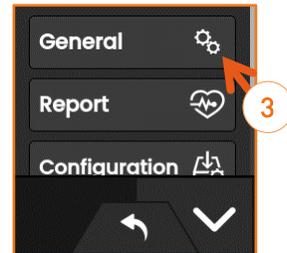
Configuration

Configuring the Unit Name

Giving a significant name to the unit allows you to identify it easily on a StreamHub interface.

From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on the **Product Identifier** field.
5. Use the keyboard to enter an ID (up to 15 characters).

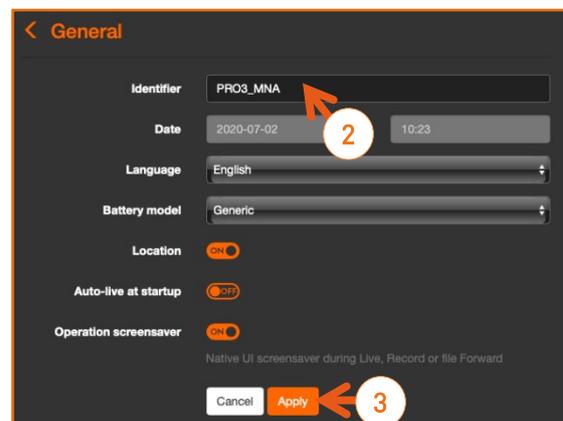


6. Click on  to confirm.



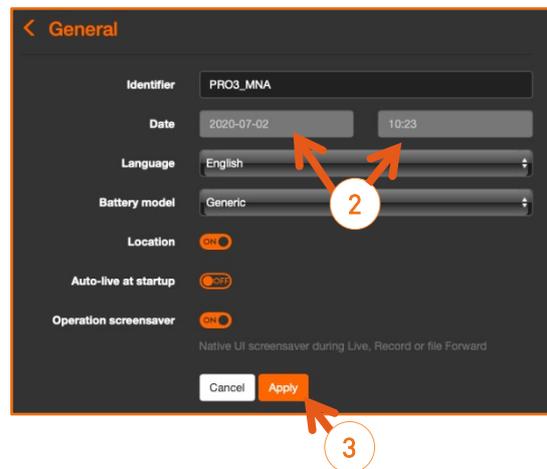
From the Web Interface

1. From the Web Interface, click on **Settings > General**.
2. In the **Identifier** field, enter an ID (up to 15 characters).
3. Click on the **Apply** button.



Configuring the Time and Date

1. From the Web Interface, click on **Settings > General**.
2. Change the **Date** and/or **Time** as required.
3. Click the **Apply** button.



Selecting the Language

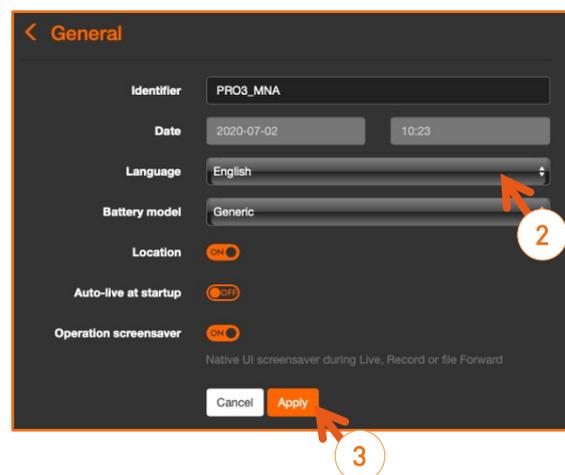
From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on the **Language** field.
5. Click on the language required.



From the Web Interface

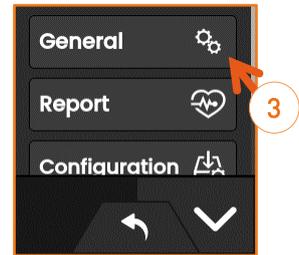
1. From the Web Interface, click on **Settings > General**.
2. Select the language.
3. Click the **Apply** button.



Selecting the Battery Model

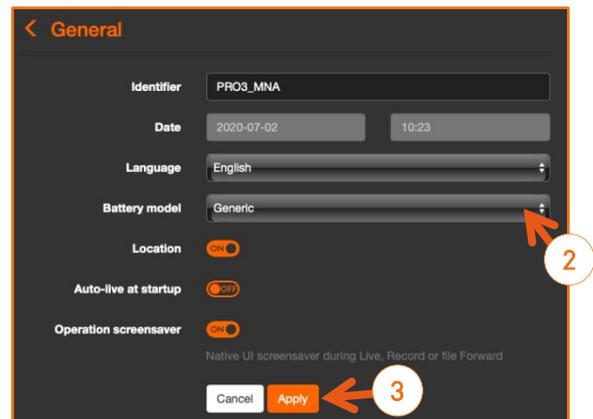
From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on  to scroll down.
5. Click on the **Battery model** field to select your battery.
Note: If the battery used is not listed, select **Generic**.



From the Web Interface

1. From the Web Interface, click on **Settings > General**.
2. Select the Battery model.
Note: If the battery used is not listed, select **Generic**.
3. Click the **Apply** button.



- Note:** You can access to this menu by clicking on the battery icon on the top bar of the screen. This shortcut is available only if an external battery is plugged.

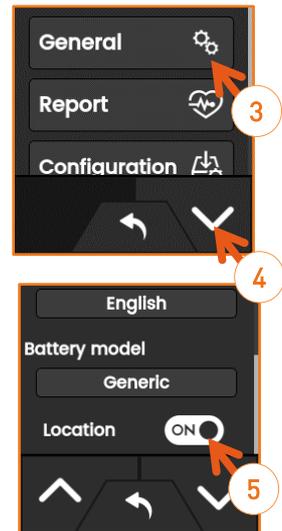


Enabling / Disabling the Unit Location

You can enable or disable the unit location to allow (or not) the Manager application locating the unit.

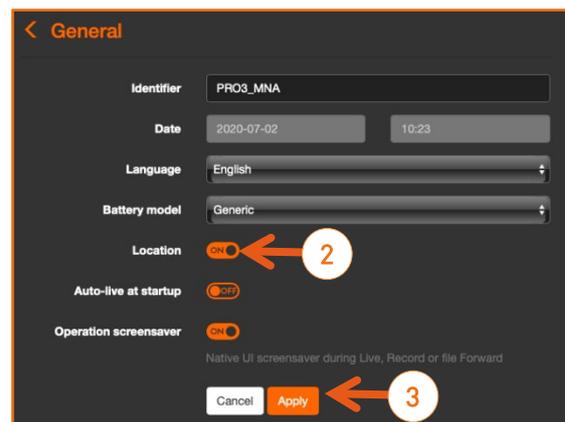
From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on  to scroll down.
5. Click on  to disable the unit location.
▷ The button turns into .



From the Web Interface

1. From the Web Interface, click on **Settings > General**.
2. Click on  to disable the unit Location.
▷ The button turns into .
3. Click on **Apply**.



Note: You can access to this menu by clicking on the Location icon on the top bar of the screen.

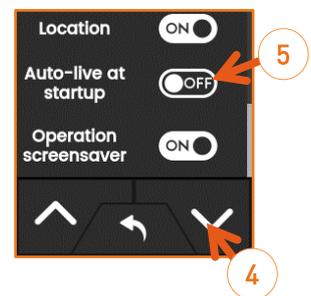


Enabling / Disabling Auto-Live at Startup

This option allows you to start a Live automatically once the unit is connected to a StreamHub or a Manager and once there is a video source (Pattern, SDI or HDMI).

From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on  to scroll down.
5. Click on  to enable and on  to disable **Auto-live at startup**.

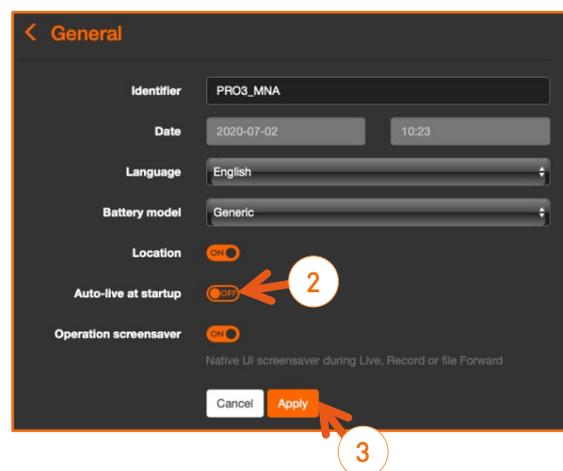


- ▷ An icon appears on the top bar of the screen when **Auto-live at startup** is enabled.



From the Web Interface

1. From the Web Interface, click on **Settings > General**.
2. Click on  to enable or on  to disable **Auto-live at startup**.
3. Click on **Apply**.

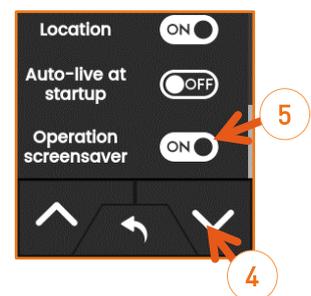


Enabling / Disabling Screensaver

This option allows to display a screensaver during a Live, a Record or a Forward.

From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **General**.
4. Click on  to scroll down.
5. Click on  to enable and on  to disable **Operation screensaver**.



- ▷ When this option is enabled, this moving screen appears during a Live, a Record or a Forward after 2 minutes of inactivity.

Note: Touching the screen do not interrupt the operation in process. It shows the screen displayed before the screensaver.



From the Web Interface

1. From the Web Interface, click on **Settings > General**.
2. Click on  to enable or on  to disable **Operation screensaver**.
3. Click on **Apply**.



Selecting the Video Source

You can select amongst:

- Auto
- SDI input
- HDMI input
- Pattern (Internal Pattern Generator)

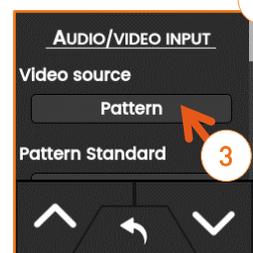
i Note:

- When selecting the Pattern generator as a source, you can select the pattern shape amongst color circles, color bars or a black pattern.
- You can also select amongst the following standards: NTSC, PAL, 720p50, 720p59.94, 720p60, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94 and 1080p60.
- When the Auto mode is selected (default mode), the following rules are applied:

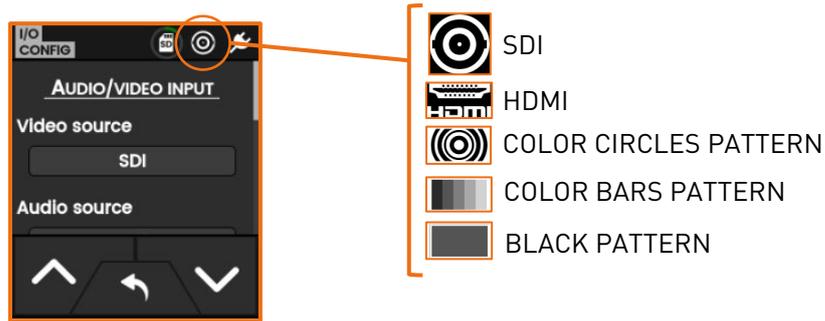
SDI input presence	HDMI input presence	Selected input
Yes	No	SDI
No	Yes	HDMI
Yes	Yes	SDI

From the Unit Panel

1. From the Home menu, click on .
2. Click on .
 - ▷ The current source is displayed.
3. Click on the **Video Source** field to select another source.
4. Select the expected source.
 - i** Note: When selecting **Pattern**, the **Pattern Shape** and **Pattern standard** fields appear.



On the upper part of the screen, an icon indicates the selected source:



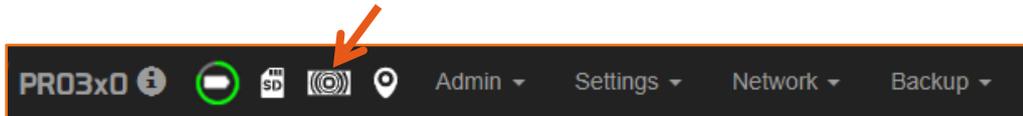
You can preview the selected video source.

5. Click on , and on  to preview the video.

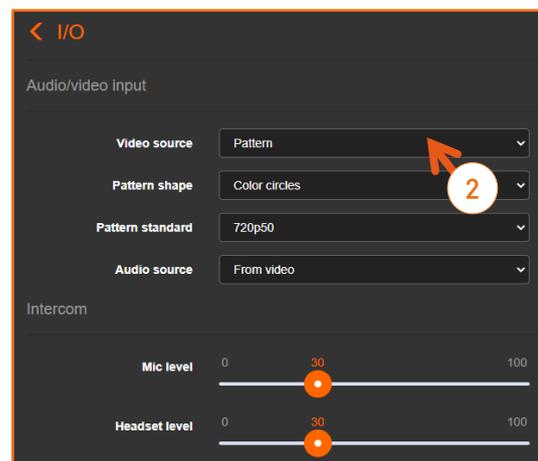


From the Web Interface

You can access to the video source configuration by clicking on the icon in the top bar of the Web Interface.



1. From the Web Interface, click on **Settings > I/O**.
2. From the scrolling list, select the source:
 - Auto
 - SDI
 - HDMI
 - Pattern



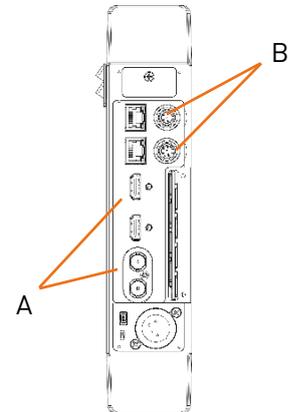
Note:

- If Pattern is selected, you need to define the shape and the resolution to be used.
- If SDI, HDMI or Auto is selected, the video resolution is automatically detected.

Selecting the Audio Source

You can select amongst 2 options:

- From Video
When using the SDI or HDMI inputs (A), the audio is embedded in the video source.
- Analog (Balanced)
When analog audio inputs (B) are used to connect to an analog audio source.



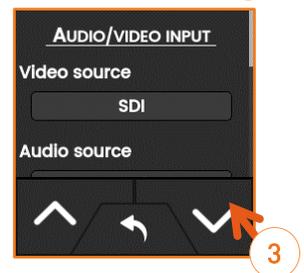
From the Unit Panel

1. From the Home menu, click on .

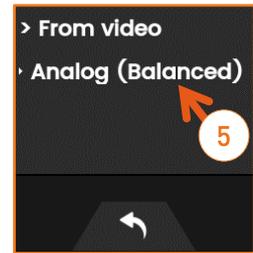
2. Click on .

3. Click on .
▷ The current source is displayed.

4. Click on the **Audio source** field to select another source.



5. Select the expected source



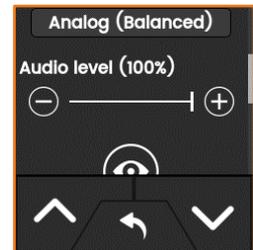
▷ The new source is displayed.



6. Click on **−** or **+** to adjust the analog input level.

Note:

- 0% is for audio muted
- 100% is the max applicable gain



From the Web Interface

1. From the Web Interface, click on **Settings > I/O**.

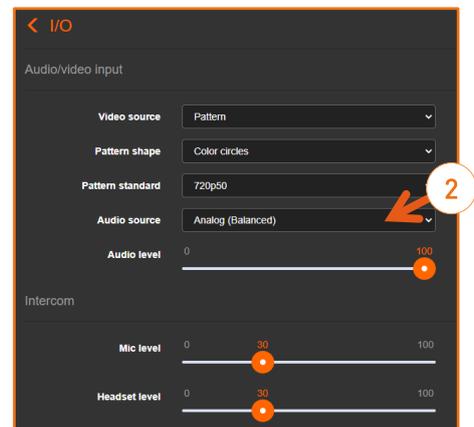
2. From the scrolling list, select the audio source amongst 2 options:

- From video
- Analog (Balanced)

3. When the audio source is analog, move the Audio Level cursor to adjust it.

Note:

- 0% is for audio muted.
- 100% is the max applicable gain.



Adding and configuring a Live Profile

A **Live Profile** is a set of audio and video settings to fit with specific broadcasting requirements.

Live Profiles can be configured from either the web interface or on the unit front panel.

The unit is delivered with 5 default Live Profiles:

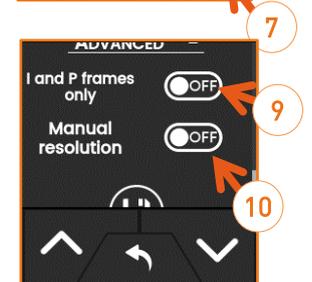
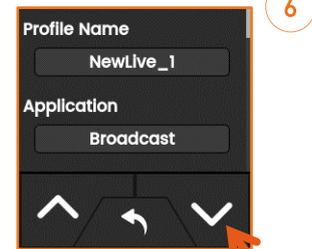
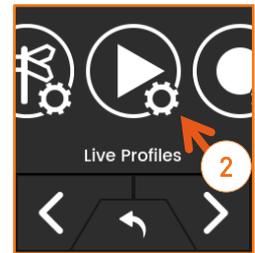
- DEFAULT
- LOW DELAY
- HQUALITY 10s
- BGAN X-STREAM
- BGAN HDR

Recommendations when configuring a Live Profile:

End to End Latency	<ul style="list-style-type: none"> • For CBR, enter a value within the 500ms - 10s range. • For VBR, enter a value within the 800ms - 10s range. 			
Bitrate Control mode	<ul style="list-style-type: none"> • CBR mode for streaming over managed network. • VBR mode for streaming over unmanaged networks 			
Resolution	<ul style="list-style-type: none"> • As source for an encoding in the same resolution as source • Dynamic when the resolution is adapted to available bitrate (only for H.264) 			
Live Bitrate (static resolution as source)	Video Resolution		Bitrate Range	
			<u>H.265/HEVC</u>	
			<u>H.264/AVC</u>	
	1080p 50/59.94/60		600 kbps – 20 Mbps	
	1080p 25/29.97/30		600 kbps – 20 Mbps	
	1080i 50/59.94/60		300 kbps – 20 Mbps	
Live Bitrate (dynamic resolution)	720p 50/59.94/60		300 kbps – 20 Mbps	
	SD (PAL or NTSC)		200 kbps – 20 Mbps	
	1080p 50/59.94/60		-	
	1080p 25/29.97/30		-	
	1080i 50/59.94/60		-	
Manual Resolution	720p 50/59.94/60		-	
	SD (PAL or NTSC)		-	
	1920 x 1080p 50/59.94/60		-	
	1920 x 1080p 25/29.97/30		-	
	1280 x 720p		-	
	854 x 480p		-	
Audio Settings	640 x 360p		-	
	426 x 240p		-	
			Channel Layout	
			Bitrate Range	
	1 x MONO		32 kbps – 256 kbps	
	1 x STEREO		64 kbps – 512 kbps	
	2 x MONO		64 kbps – 512 kbps	
	2 x STEREO		128 kbps – 1024 kbps	

From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on .
4. Click on the **Profile Name** field.
5. Use the keyboard to enter the new profile name.
 - Application (Broadcast or Video Return)
 - End to End Latency
 - Video settings
 - Audio Settings
6. Click on  to confirm the new profile name.
7. Click on  to configure the Live Profile settings following the recommendations mentioned in the table above:
 - Application (Broadcast or Video Return)
 - End to End Latency
 - Video settings
 - Audio Settings
8. Click on  and **ADVANCED +**.
 - i Note:** Advanced parameters are available only if the **Encoding Type** is H.264.
9. Click on  to enable **I and P frames only**.
 - ▷ The button turns into .
10. Click on  to enable **Manual Resolution**.
 - ▷ The button turns into  and the Resolution field appears.



- Click on the **Resolution** field to display the resolution list.
 - Note:** Only downscaling or same resolution are supported.

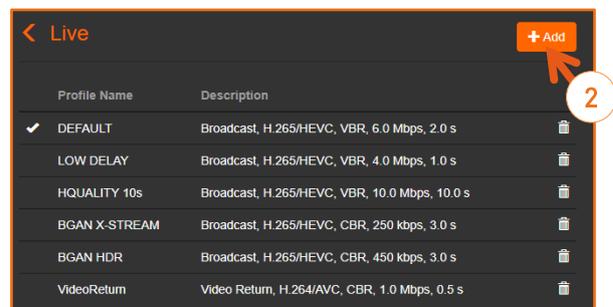


- Click on the resolution that you want to apply.
- Click on  to save the new Live Profile settings.

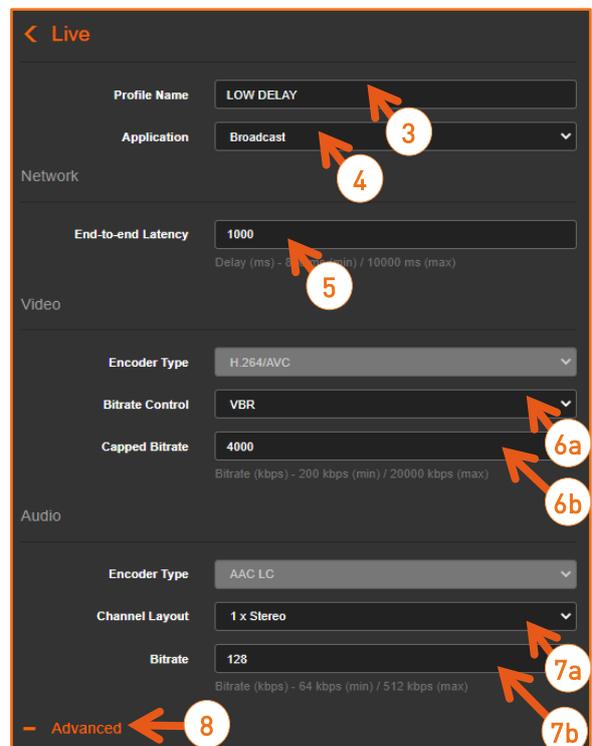


From the Web Interface

- Click on **Settings > Live**.
- Click the  button.
- Enter a profile name in the **Profile Name** field.
- Select the **Application** (Broadcast or Video Return)

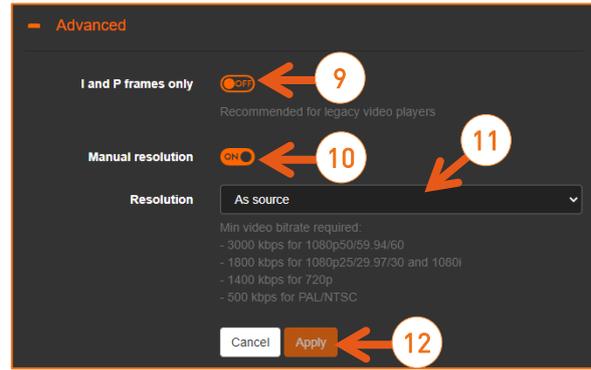


- Note:** The **Application** field is available only if the Encoding Type is H.264.
- In **Network** settings, enter an **End to End Latency** according to the Bitrate Control used (CBR or VBR).



- In the **Video** settings
 - Select the Bitrate Control mode (VBR or CBR)
 - Enter a Capped Bitrate
- Fill in the **Audio** settings.
 - Select the audio channel layout (1 x MONO / 1 x STEREO / 2 x MONO / 2 x STEREO)
 - Enter the total audio bitrate.
- Click on **Advanced**.
 - Note:** Advanced parameters are available only if the Encoding Type is H.264.

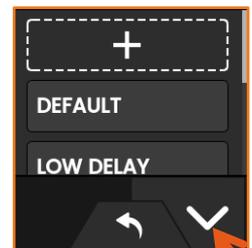
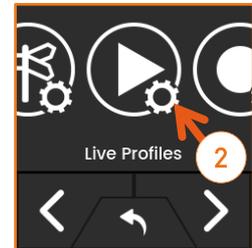
9. Click on  to enable **I and P frames only**.
10. Click on  to enable the **Manual Resolution**.
 - ▷ The button turns into  and the **Resolution** field appears.
11. Click on the **Resolution** field to select the resolution to apply.
12. Click on **Apply**.



Deleting a Live Profile

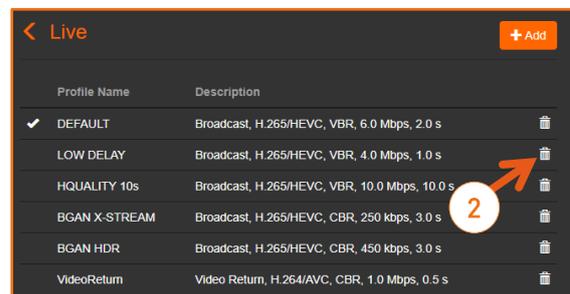
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to display the profile to delete.
4. Long press the profile to delete.
5. Click on **YES** to confirm the profile deletion.



From the Web Interface

1. Click on **Settings > Live**.
2. Double click the trash button ().



Selecting a Live profile

From the Unit Panel

You can select a Live profile from the Unit Panel when you are starting a Live.
See the chapter [Starting a Live](#).

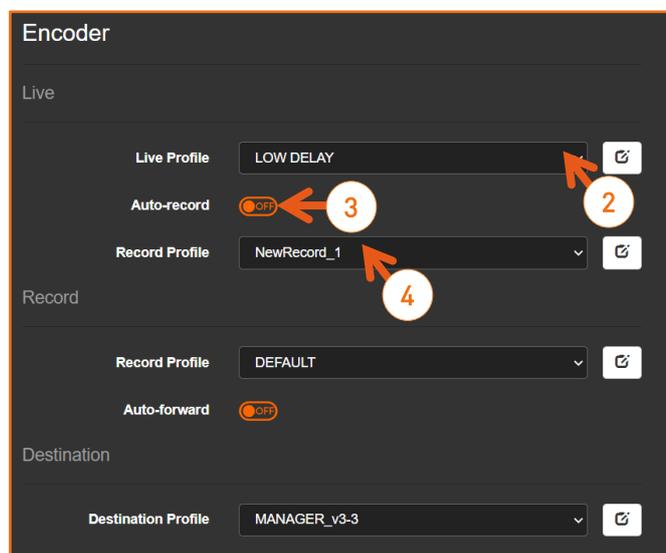
From the Web Interface

1. Click the  icon.
▶ The encoder current settings are displayed.
2. Select a pre-defined **Live Profile**.
3. Activate **Auto-record** if required.

Note:

- When this option is enabled, a Record starts automatically when a Live is started.
- The Record profile used for the Auto-record can be different than the one used for a Record.

4. Select a pre-defined **Record Profile**.



Adding and Configuring a Record Profile

A **Record Profile** is a set of audio and video settings to fit specific broadcasting requirements. The supported file formats are Transport Stream and MP4.

Record Profiles can be configured from either the web interface or on the unit front panel.

The unit is delivered with a DEFAULT Record Profile.

From the Unit Panel

1. From the Home menu, click on .



2. Click on  and click on .

3. Click on .



4. Click on the **Profile Name** field.

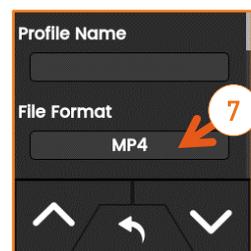


5. Use the keyboard to enter the new profile name.



6. Click on  to confirm the new record profile name.

7. Click on the **File Format** field and select Transport Stream or MP4 format.

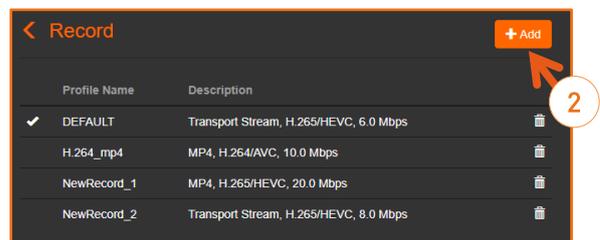


8. Click on  to configure the Record Profile settings:
 - Video settings (Encoder Type, Bitrate)
When recording, the video is encoded in CBR mode with a resolution as source.
 - Audio Settings (Encoder Type, Channel Layout, Bitrate)
9. Click on  to save the new Record Profile settings.

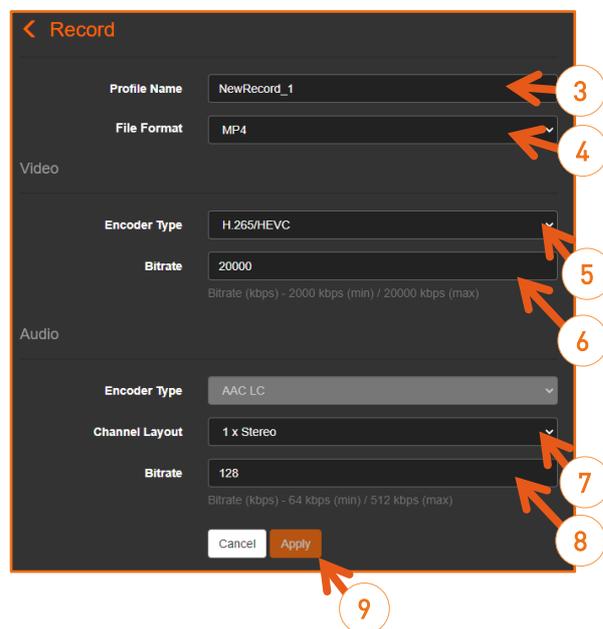


From the Web Interface

1. Click on **Settings > Record**.
2. Click the  button.



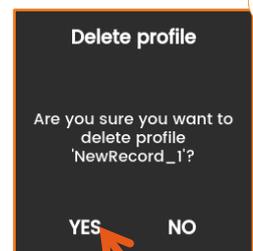
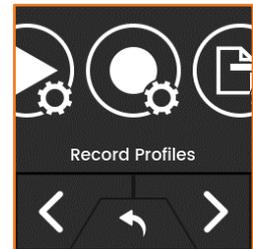
3. Enter a profile name in the **Profile Name** field.
4. Choose the **File Format** between Transport Stream and MP4.
5. Choose the video **Encoder Type**.
6. Set the video **Bitrate** (within 200kb/s and 20Mb/s).
7. Select the audio channel layout (1 x MONO / 1 x STEREO / 2 x MONO / 2 x STEREO).
8. Set the total audio **Bitrate**.
9. Click on **Apply**.



Deleting a Record Profile

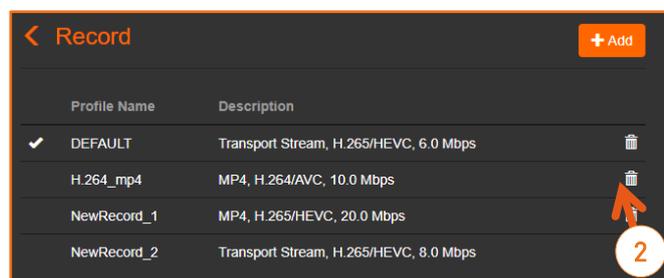
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to display the profile to delete.
4. Long press the profile to delete.
5. Click on **YES** to confirm the profile deletion.



From the Web Interface

1. Click on **Settings > Record**.
2. Double click the trash button ().



Selecting a Record profile

You can select different record profiles for:

- Live + Auto-record
- Record only

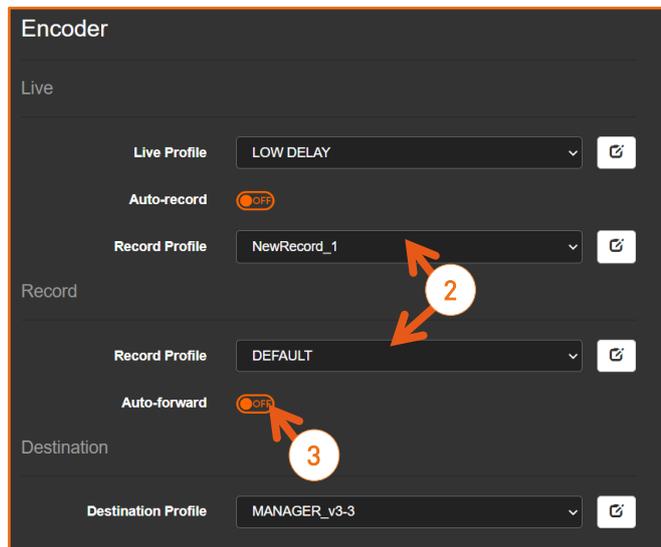
From the Unit Panel

You can select a Record profile from the Unit Panel when you are starting a Live or a Record.

See the chapter [Starting a Record](#) and chapter [Starting a Live](#).

From the Web Interface

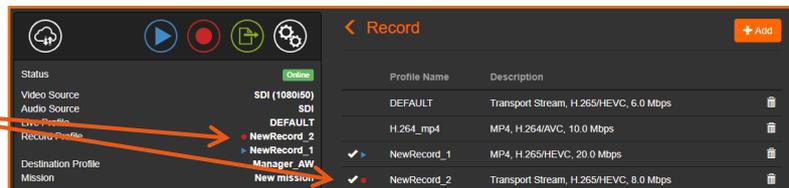
1. Click the  icon.
 - ▷ The encoder current settings are displayed.
2. Select a pre-defined **Record Profile** for Live and Record
3. Activate **Auto-forward** if required.



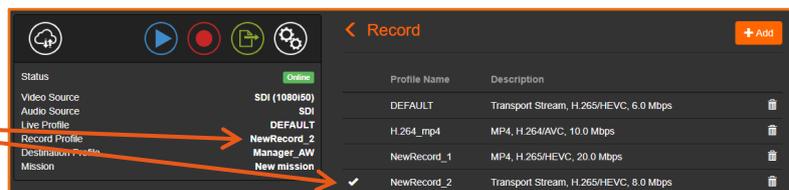
Note:

- When this option is enabled, a Forward starts automatically when a Record is started.
- The Record profile used for the Auto-record can be different than the one used for a Record.

different record profiles



same record profile



Adding and Configuring a Destination Profile

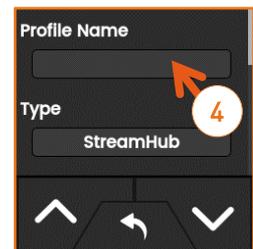
A **Destination Profile** is a set of parameters allowing the unit to connect to a StreamHub or a Manager.

Note:

- StreamHub is a web-based platform that receives, decodes, records and distributes video and audio feeds.
- Manager is a web-based platform that monitors and manage a contribution ecosystem. It is in charge of routing dynamically transmitters to appropriate StreamHub.

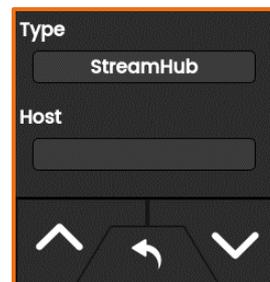
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on .
4. Click on the **Profile Name** field.
5. Use the keyboard to enter the new **Profile Name**.
6. Click on  to confirm the new Destination Profile name.



7. Click on  to configure the new Destination Profile settings:

- For a StreamHub
 - StreamHub IP address or Hostname
 - Input assignment on the StreamHub (Automatic Assignment possible)
 - Auto-connect function (Enabling / Disabling)
 - Port used
 - Username and Password (if required)
- For a Manager:
 - Manager IP address or Hostname
 - Auto-connect function (Enabling / Disabling)
 - Port used
 - Username and Password (if required)



 **Note:**

- StreamHub Default Settings are:
 - Port: 7900
 - Username: aviwest
 - Password: safestreams
- Manager Default Settings are:
 - Port: 9000
 - Username: username
 - Password: password
- These settings may have been changed by the system administrator.

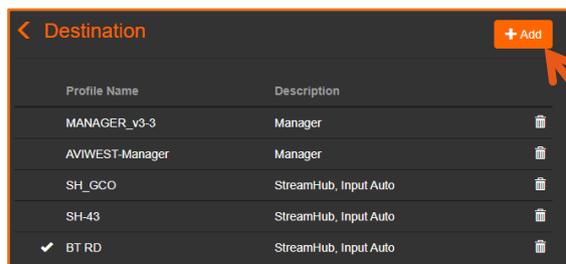
8. Click on  to save the new Destination Profile settings.

 **Note:** To select the newly created Destination Profile, see [Selecting a Destination Profile](#).

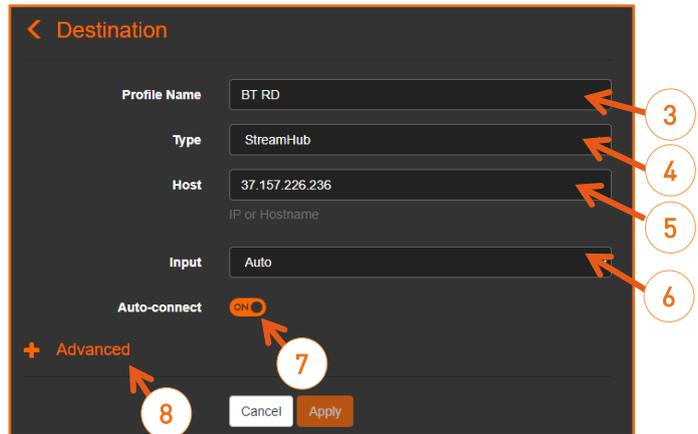
From the Web Interface

1. Click on **Settings > Destination**.

2. Click the  button.



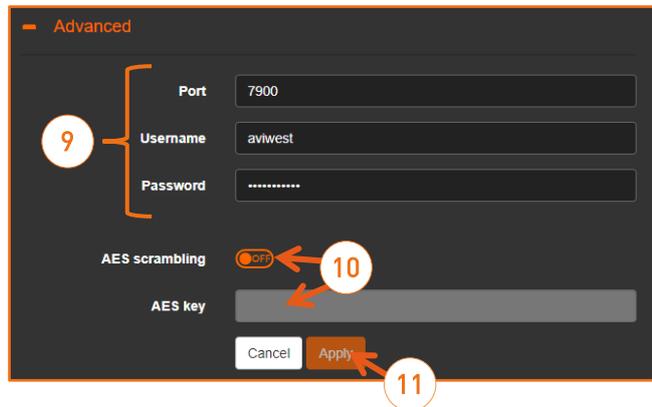
3. Enter a **Name** for the Profile.
4. Select the type of Destination Profile (StreamHub or Manager).
5. In the Host field, enter the URL, IP address or hostname of the StreamHub or Manager.
6. When creating a StreamHub profile, in the **Input** field, select the **AUTO** option if you wish an automatic assignment of Inputs on StreamHub.



7. Check that the **Auto Connect** option is ticked or unticked as needed.
 - Note:** **Auto-connect** option is selected to connect automatically to the StreamHub server when the unit is powered.
8. Click on **Advanced**.
9. Check the Connection Port, Username and Password that are set.

Note:

- StreamHub Default Settings are:
 - Port: 7900
 - Username: aviwest
 - Password: safestreams
- Manager Default Settings are:
 - Port: 9000
 - Username: username
 - Password: password



These settings may have been changed by the system administrator.

10. If an AES encryption is required, enable it and enter the corresponding AES key.
11. Click the **Apply** button.

Note: To select the newly created Destination Profile, see [Selecting a Destination Profile](#).

Deleting a Destination Profile

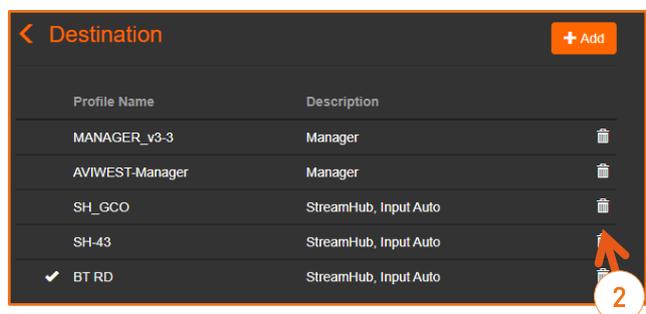
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
▷ A green dot () indicates the currently selected profile.
3. Click on  to display the profile to delete.
4. Long press the profile to delete.
5. Click on **YES** to confirm the profile deletion.



From the Web Interface

1. Click on **Settings > Destination**.
2. Double click the trash button ()



Selecting a Destination profile

From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
- ▶ A green dot () indicates the currently selected profile.



3. Click on  until the profile required is displayed.

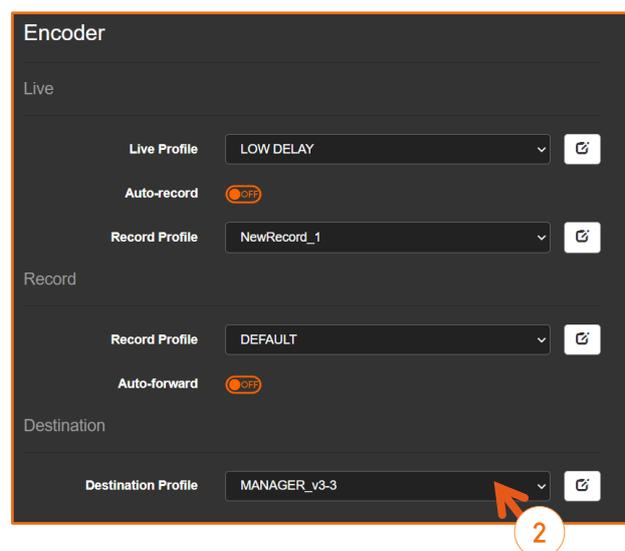


4. Click on  to select the destination profile.
- ▶ A green dot () appears on the newly selected profile.



From the Web Interface

1. Click the  icon.- ▶ The encoder current settings are displayed.
- 2. Select a pre-defined **Destination Profile**.



Configuring AES encryption

You can decide to encrypt / scramble a video during a Live operation, provided the destination server's license includes this option.

You can enable and disable the video AES encryption from the Unit Panel or the Web interface.

From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  until the profile concerned is displayed.
4. Click on the destination profile.
5. Click on  and click on **ADVANCED +**.
6. Click on  to display the AES scrambling option.
7. Click on  to enable it, or on  to disable it. If enabled, enter the AES key as defined in the destination server interface (please refer to the Server User Guide).



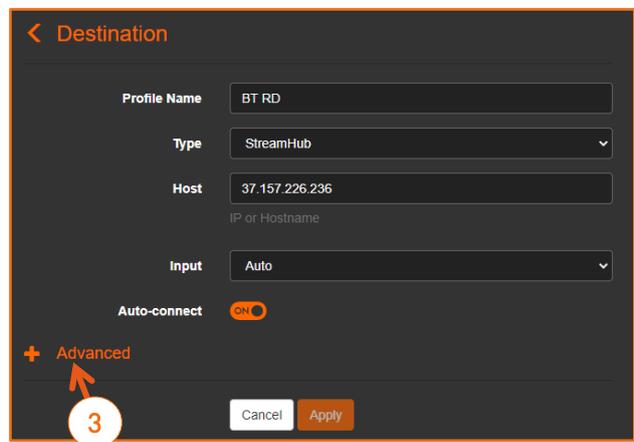
From the Web Interface

1. Click on **Settings > Destination**.

2. Click on the Destination profile where the video is sent to.

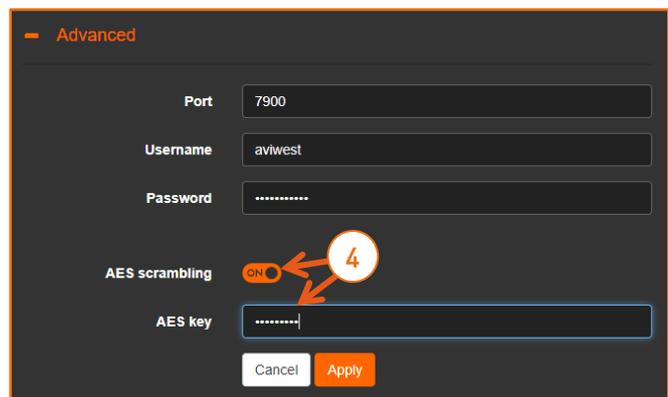


3. Click on **Advanced**.



4. Click on **OFF** or **ON** to enable or disable the **AES Scrambling** function.

If enabled, enter the AES key as defined in the destination server interface (please refer to the Server User Guide).



Configuring Forward Settings

The Forward function offers three possibilities:

- forwarding one or several files saved on a mass-storage device,
- forwarding all files saved on a mass-storage device,
- forwarding the latest recorded file.

Note: Mass storage can be SD cards and USB storage devices.

From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to enable, or on  to disable the **Resume at Startup**, **Auto-erase**, or/and **Hot Folder** options.

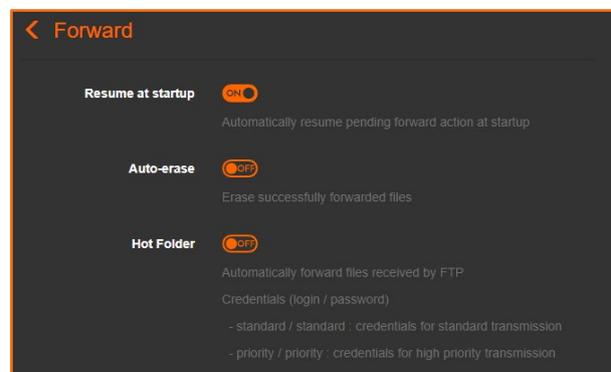


Note:

- **Resume at Startup:** If any forward is still in progress when the unit is turned off, it is resumed when the unit is started up.
- **Auto-erase:** All successfully forwarded files are automatically deleted once forward is completed.
- **Hot Folder:** Files coming from a camera are automatically transmitted via an ftp server.

From the Web Interface

1. Click on **Settings > Forward**.
2. Click on  or  to enable or disable the **Resume at Startup**, **Auto-erase**, or/and **Hot Folder** options.

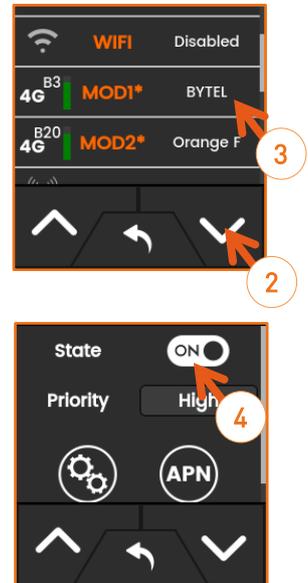


Enabling / Disabling a Cellular Modem

You can enable and disable modems from the unit panel or from the Web Interface.

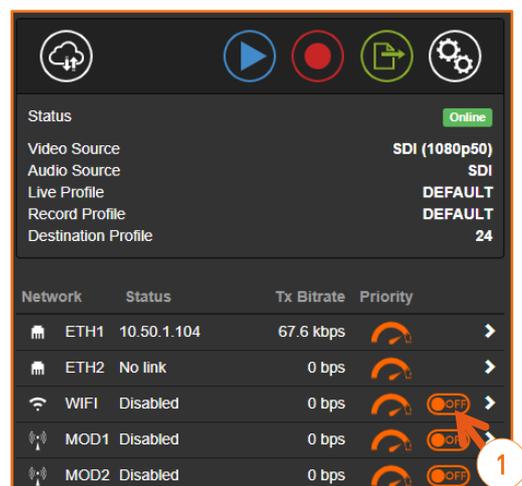
From the Unit Panel

1. From the Home menu, click on .
2. Click on  to select the modem that you want to enable or disable.
3. Click on the modem to be enabled or disabled.
4. Click on  to enable the modem or on  to disable it.



From Web Interface

1. Click on  or  to enable or disable a modem.

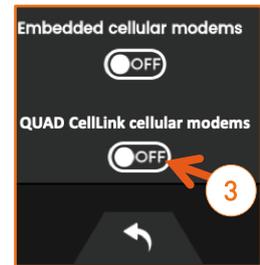


Enabling / Disabling all Internal Cellular Modems

You can enable and disable all internal cellular modems at the same time from the unit panel or from the Web Interface.

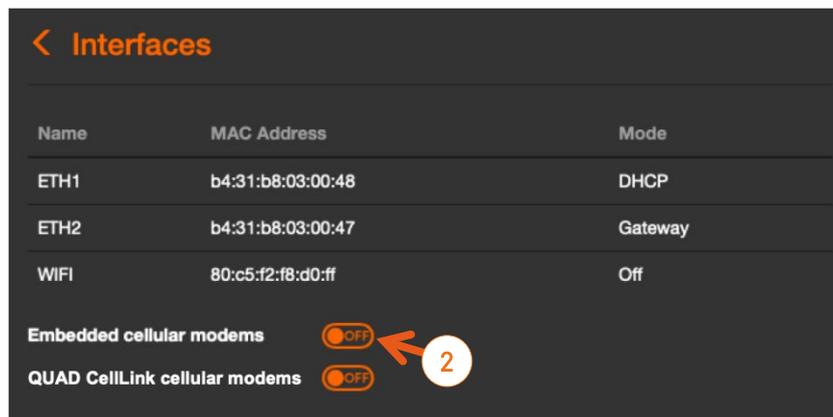
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to enable the modems or on  to disable them.



From the Web Interface

1. From the Web Interface, click on **Network > Interfaces**.



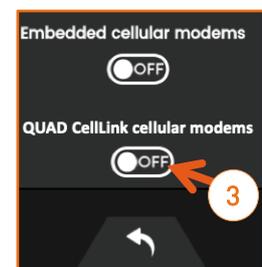
2. Click on  to disable modems and on  to enable them.

Enabling / Disabling all QUAD CellLink Cellular Modems

You can enable and disable all modems of a QUAD CellLink from the unit panel or from the Web Interface.

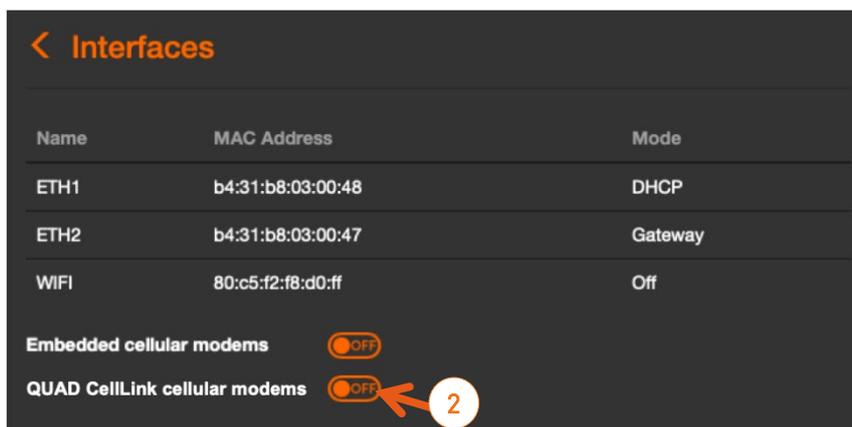
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to enable the modems or on  to disable them.



From the Web Interface

1. From the Web Interface, click on **Network > Interfaces**.



2. Click on  to disable modems of the QUAD CellLink and on  to enable them.

Selecting a Mission

- ✓ To receive missions, the destination profile selected must be a Manager supporting the Story Centric Workflow. See [Selecting a Destination Profile](#).

From the Unit Panel

1. Click on  or  to see the different missions.

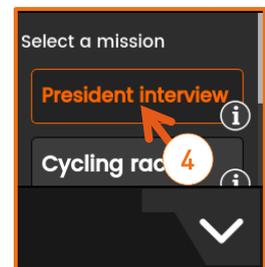
2. Click on  to have more information on the mission.
▷ This screen appears.



3. Click on  to go back to the previous screen.



4. Click on the mission to select it. It turns to orange during the loading.

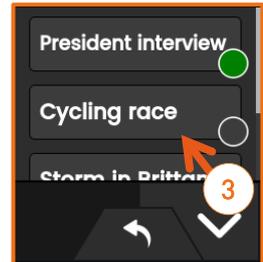


▷ The home screen appears with the icon  on the top bar. Click on this icon for more information.



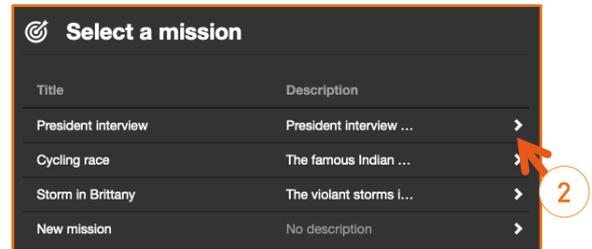
Changing the mission

1. From the home menu, click on .
2. Click on .
3. Click on a mission title to display information.
4. Click on  to go back to the previous screen.
5. Click on  to change the mission.
 - ▷ A green dot () indicates the new selected mission.

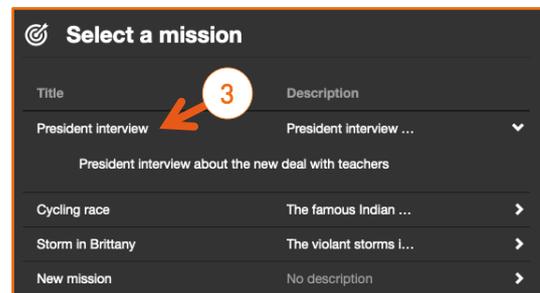


From the Web Interface

1. A list of missions appears on screen.
 - ▷ The missions loading may take few seconds.

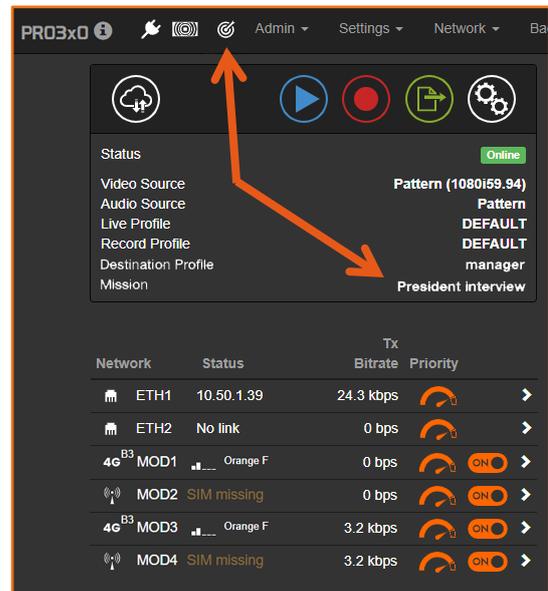


2. Click on  to see the description of the mission.
 - ▷ The description is displayed.



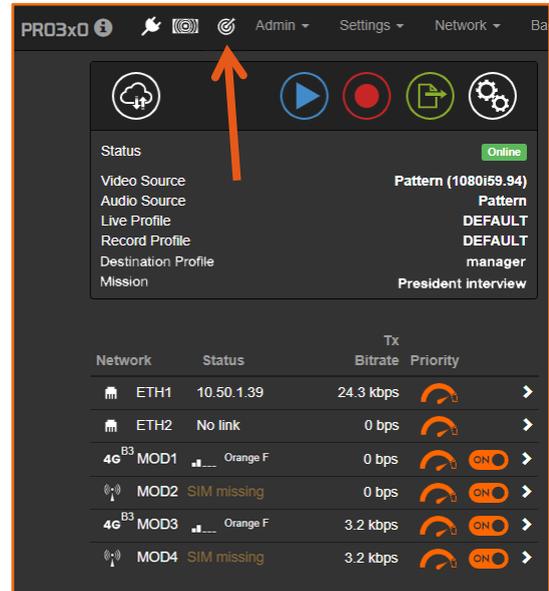
3. Click on a mission title to select it.

- ▷ The selected mission appears on the main screen and the mission icon appears on the top bar.

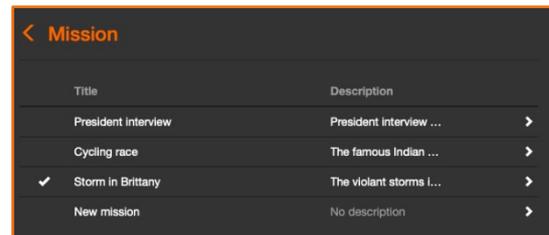


Changing the mission

1. Click on **Settings > Missions** or on the  icon in the top bar.



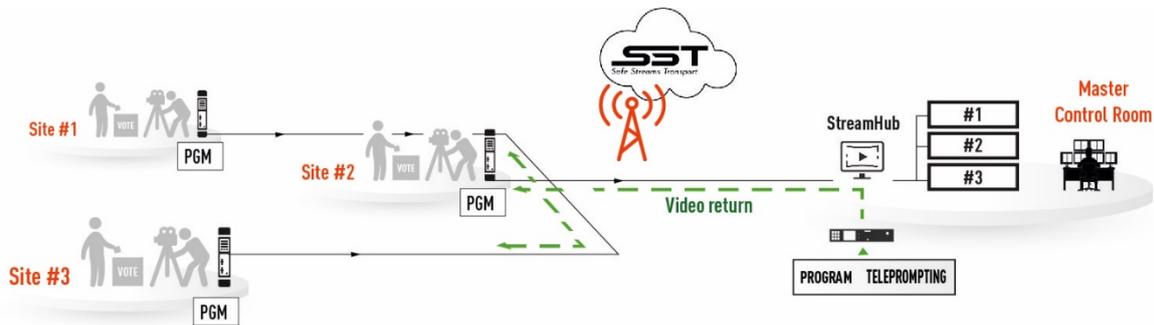
2. Click on another mission to select it.
 - ▷ The icon  move to the selected mission.



Setting a Video Return

The Video Return feature allows to receive a video such as a program currently on air or a teleprompting from the Media Control Room even if a Live is running or not.

- ☑ The unit must be connected to a StreamHub to allow the Video Return feature.



Emitting a Video Return

From the Unit Panel

1. Set a Live Profile with the application parameter set to Video Return (see chapter [Adding and Configuring a Live Profile](#)).
2. Start a Live with the profile previously created (see chapter [Starting a Live](#)).

From the Web Interface

1. Set a Live Profile with the application parameter set to Video Return (see chapter [Adding and Configuring a Live Profile](#)).
2. Start a Live with the profile previously created (see chapter [Starting a Live](#)).

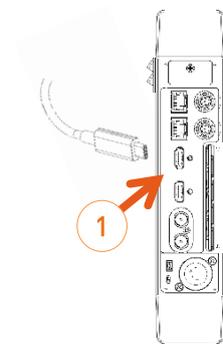
Receiving a Video Return

From the Unit Panel

- ▶ Check that this icon  appears on the top bar of the screen. If it appears, the unit is receiving a video stream.

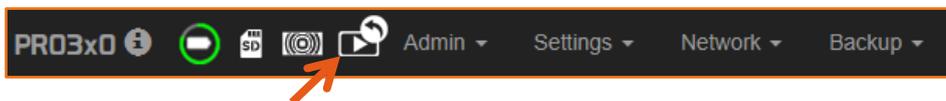


1. Connect a screen to the HDMI port of the unit.



From the Web interface

An icon on the top bar indicates that the unit is receiving a Video Return.



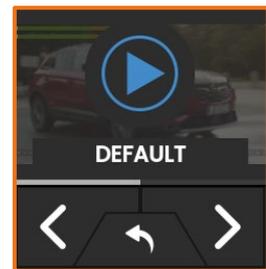
Starting a Live

You can start a live manually or you can enable the **Auto-Live at startup**. See chapter [Enabling / Disabling Auto-Live at Startup](#).

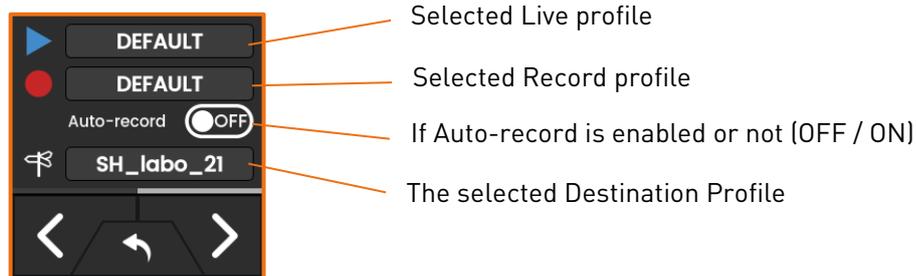
From the Unit Panel

1. From the Home menu, click on .

- ▷ The video preview appears on screen and the live profile selected is reminded.



When clicking on  or , the LIVE menu reminds some information:



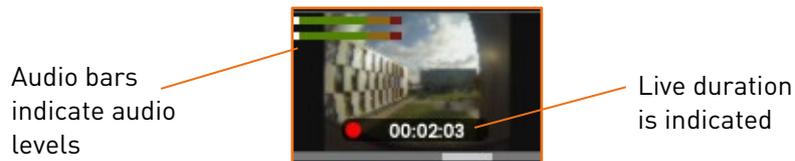
You can modify settings before starting the Live action.

- To select another Live profile:
 - a) Click on the  field.
 - b) Click on another Live profile.
- To select another Record profile:
 - a) Click on the  field.
 - b) Click on another Record profile.
- To modify the Auto-record mode:

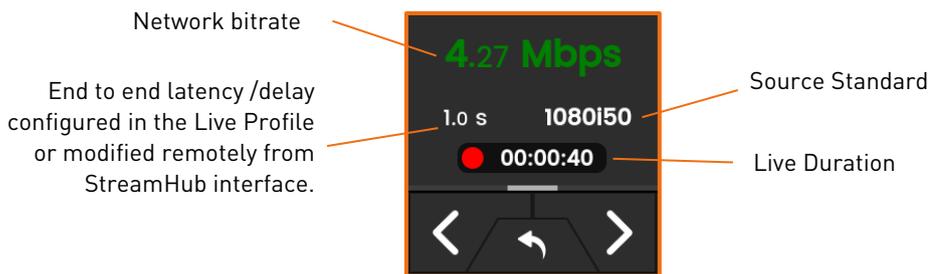
Click on the  or  button of **Auto-record** option.
- To select another Destination Profile:
 - a) Click on the  field.
 - b) Click on another Destination profile.

2. Click on  to start the Live.

▷ The video preview appears on screen, and the live profile selected is reminded.

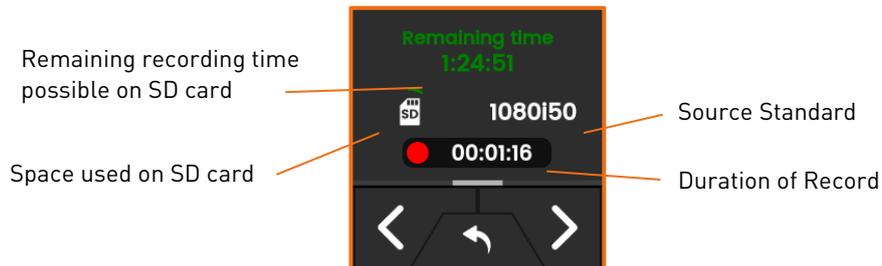


3. Click on  to display some indications about the Live action:



Note: See StreamHub User Guide to set another delay during Live operation.

In case of a Live and simultaneous Record, another screen appears alternately:



Note:

To stop the Live:

1. Click on .
2. Click on .
3. Click on  to confirm.



To stop the Record:

1. Click on .
2. Click on .
3. Click on  to confirm.



From the Web Interface

- Click on  to check that the unit settings are configured and selected as required:
 - Live profile
 - Auto-record mode (OFF / ON)
 - Record profile
 - Auto-forward option (OFF / ON)
 - Destination profile

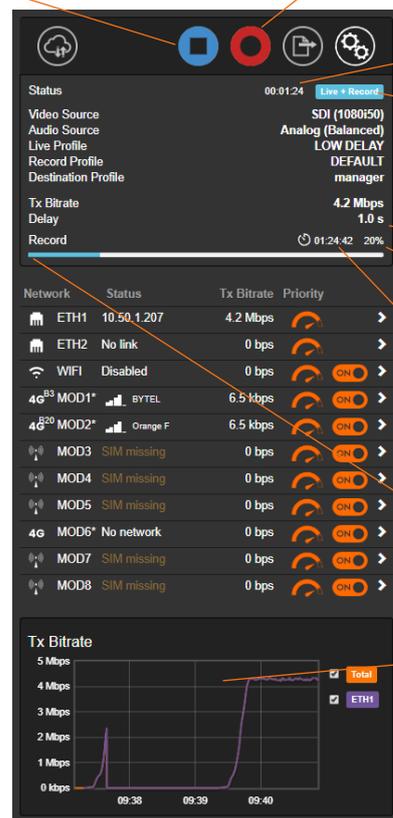
Note: If you enabled the **Auto-record** option, the video file is automatically recorded during the live.

- Click on  to start the Live.

Some indications appear on screen:

Stop Live button

Stop Record button



Duration of the Live in progress

Indication of the kind of action started

Transmission bitrate

End to end latency /delay configured in the Live Profile

Space percentage used on SD card (when record is enabled)

Remaining recording time possible on SD card (when record is enabled)

Progress bar indicating remaining space on SD card

Real-time graph

Note:

To stop the Live:

- Click on . A **Confirm** popup appears.
- Click on **Confirm** or the  icon to stop the video transmission.

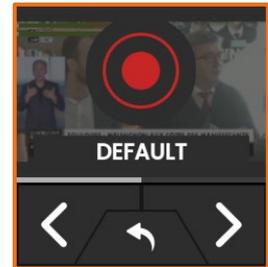
Starting a Record

- Note:** Make sure that you inserted a SD card before starting a record. This SD card must not be in read only (or locked) mode.

From the Unit Panel

- From the Home menu, click on .

- ▷ The video preview appears on screen and the record profile selected is reminded.



When clicking on  or , the RECORD menu reminds some information:



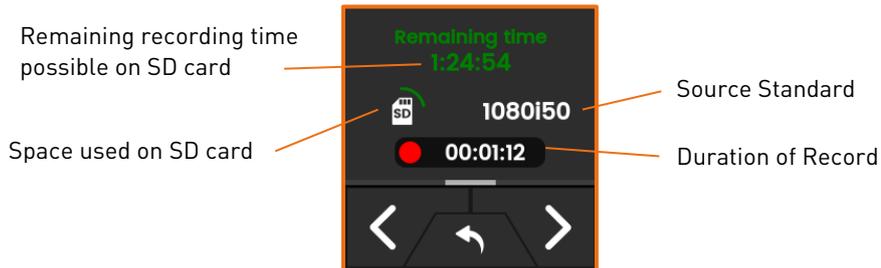
- To select another Record profile:
 - Click on the  field.
 - Click on another Record profile.
- To modify the Auto-forward mode:

Click on the  or  button of **Auto-forward** option.
- To select another Destination Profile:
 - Click on the  field.
 - Click on another Destination profile.

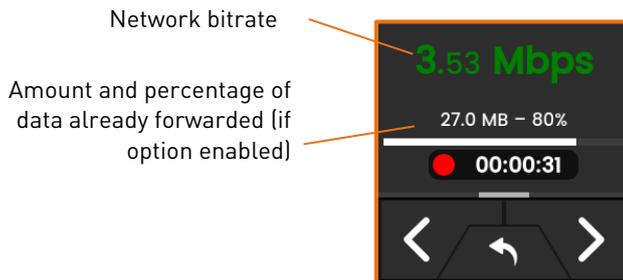
- Click on  to start recording.
 - The video preview appears on screen, and the record profile selected is reminded.



- Click on  to display some indications about the recording:



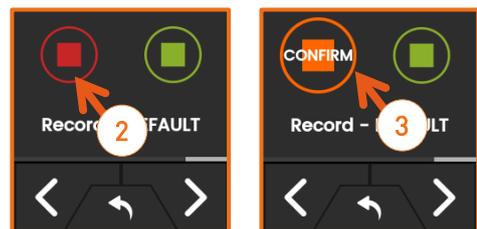
In case of a Record and simultaneous Forward, another screen appears alternately:



Note:

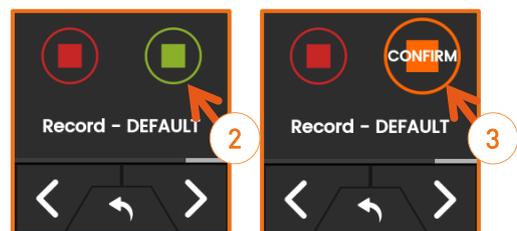
To stop the Record:

- Click on .
- Click on .
- Click on  to confirm.



To stop the Record:

- Click on .
- Click on .
- Click on  to confirm.

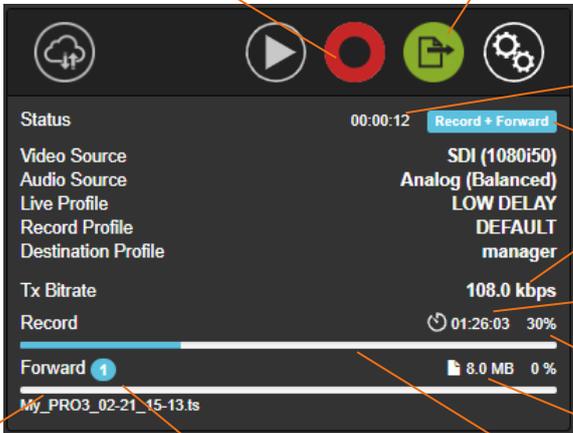


From the Web Interface

- Click on  to check that the unit settings are configured and selected as required:
 - Record profile
 - Auto-forward record mode (OFF / ON)

Note: If you enabled the **Auto-forward** option, the video file is progressively forwarded during the record.

- Click on  to start the Record.
Some indications appear on screen:



Stop Record button

Forward button

Duration of the Record in progress

Indication of the kind of action running

Transmission bitrate (if forward in progress)

Remaining recording time possible on SD card

Space percentage used on SD card

Size of file to be forwarded and percentage already forwarded

A progress bar indicating remaining space on SD card

Forward Progress Bar

Number of Forward actions in progress.

The screenshot shows a control panel with the following information:

- Status:** 00:00:12, Record + Forward
- Video Source:** SDI (1080i50)
- Audio Source:** Analog (Balanced)
- Live Profile:** LOW DELAY
- Record Profile:** DEFAULT
- Destination Profile:** manager
- Tx Bitrate:** 108.0 kbps
- Record:** 01:26:03 30%
- Forward:** 1, 8.0 MB 0%
- File Name:** My_PRO3_02-21_15-13.ts

Note:

To stop the Record:

- Click on  .
A **Confirm** popup appears.
- Click on **Confirm** or the  icon to stop the video transmission.

To stop the Forward:

- Click on  .
A **Confirm** popup appears.
- Click on **Confirm** or the  icon to stop the video transmission.

Starting a Forward

- ✓ Make sure that a mass storage such an SD card or a USB memory stick is connected to the unit.

You can choose to forward:

- The last record
- A selection of records
- All files

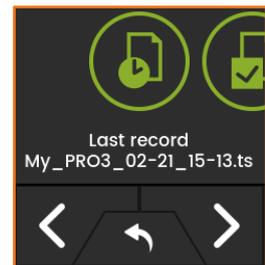
From the Unit Panel

1. From the Home menu, click on .
▷ The Forward interface appears:



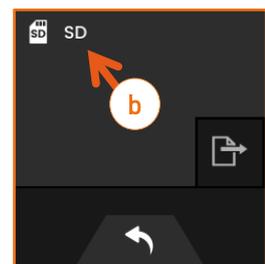
To forward the last record

- a) Click on .
▷ The Forward is starting.

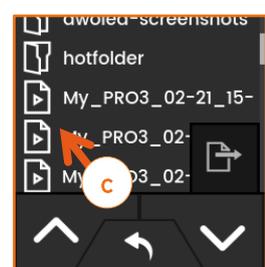


To forward some specific files

- a) Click on  and on .
- b) Click on  to open the SD card content.



- c) Click on files you want to forward.
Use  to scroll down files if required.

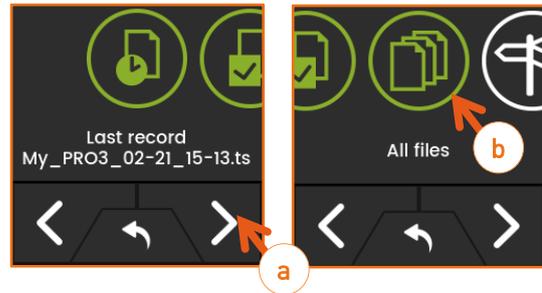


- d) Click on  to start Forward.
The forward is starting.



To forward all files

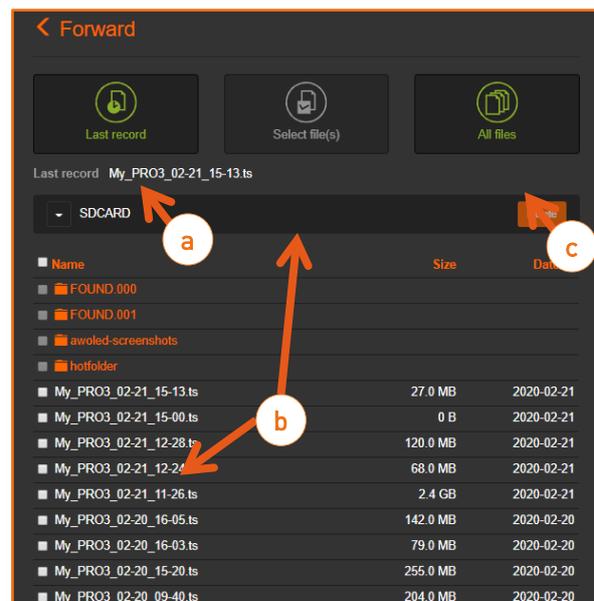
- a) Click on  to scroll
- b) Click on  .
▷ The Forward is starting.



From the Web Interface

1. Click on  .
▷ The Forward interface appears.

- a) To forward the last record,
click on  .
- b) To forward some specific files,
select the files and click on  .
- c) To forward all files,
click on  .



The forward in progress is indicated on screen.

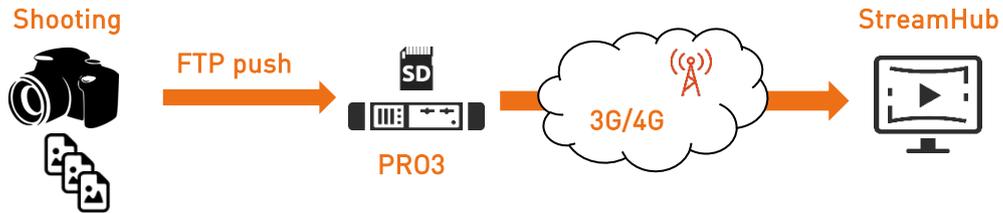


Transmitting Files via the Hot Folder

The Hot Folder function enables you to transmit files (eg photos) automatically over unmanaged networks wherever the action is taking place.

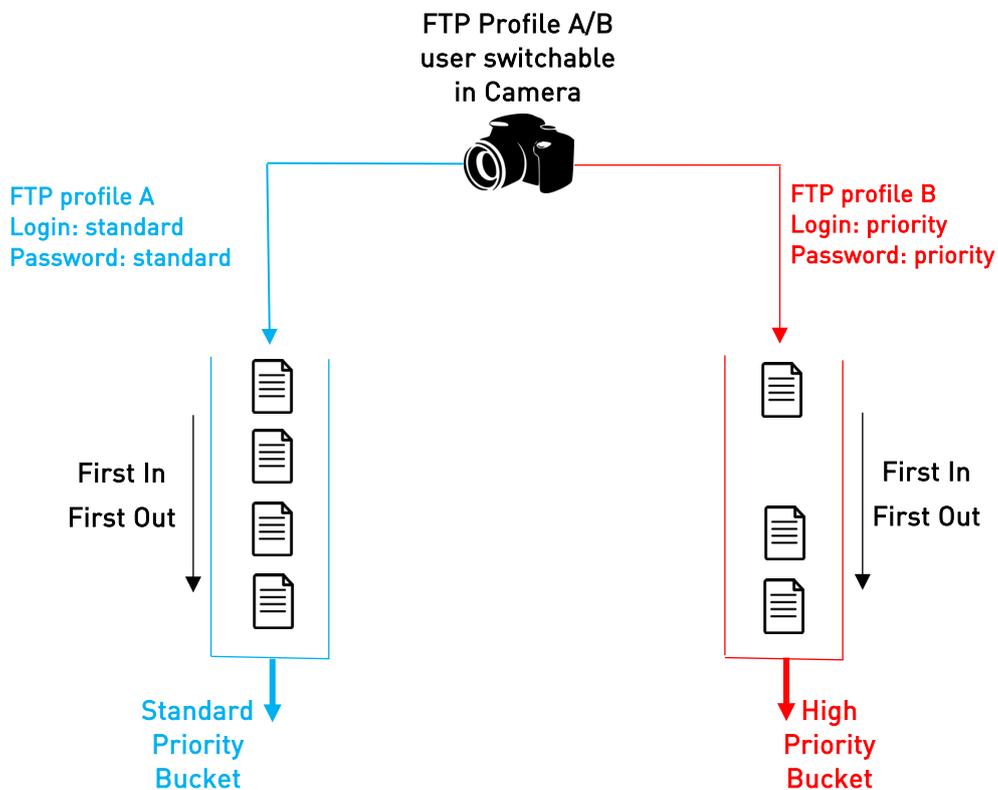
This function uses an ftp push to transmit files following the FIFO method (First In, First Out).

You can enable or disable the function as required.



Note:

- You can manage the hot folder content on the SD card as you wish.
- Please refer to the procedure about deleting files in the chapter “Deleting file(s) from the SD card”.
- Files can be transmitted according to 2 priority levels (Standard or Priority), as defined on the device that transmits files.



Enabling / Disabling the Hot Folder Function

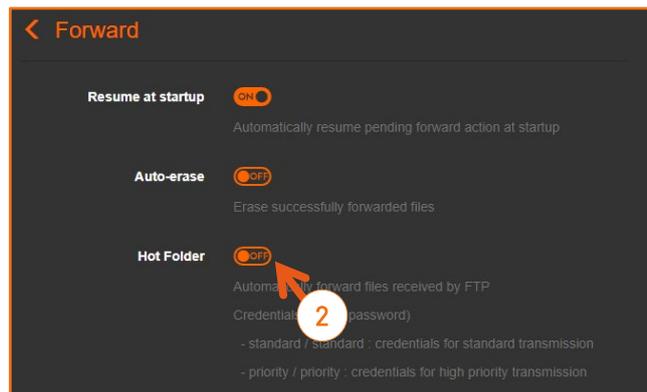
From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on  to enable or on  to disable the Hot Folder option.



From the Web interface

1. Click on **Settings > Forward**.
2. Click on  or  to enable or disable the **Hot Folder** function.



Once the Hot Folder option is enabled, the icon  appears in the upper bar.

Files are automatically forwarded following the priority levels defined on the camera (standard or high priority).

When the file transmission is starting the forward action can be seen on screen:



Using the Intercom

The Intercom function enables you to communicate with the Master Control Room, using a microphone or a headset connected to the unit.

You can manage the Intercom function from the StreamHub interface.

1. Connect the headset, or microphone to the unit.
2. From the StreamHub interface, start the Intercom session (please refer to the StreamHub User Guide).

▷ The intercom session is indicated by the icon  :



On the Unit Front Panel



On the unit Web interface

Note: You can adjust intercom settings from the Web Interface by click on the icon in the top bar.

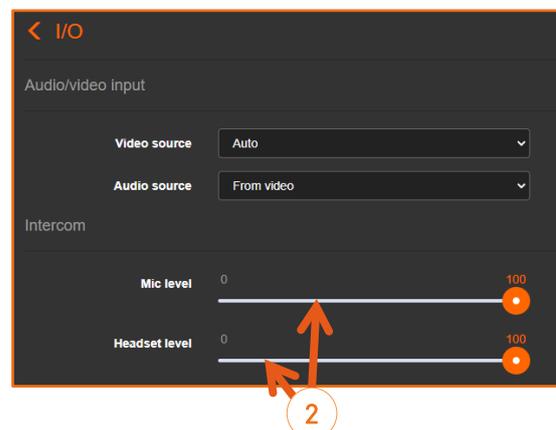
From the Unit Panel

1. From the Home menu, click on .
2. Click on .
3. Click on  to move to settings Micro and/or Headset levels.
4. Click on  or  to move the cursor.



From the Web Interface

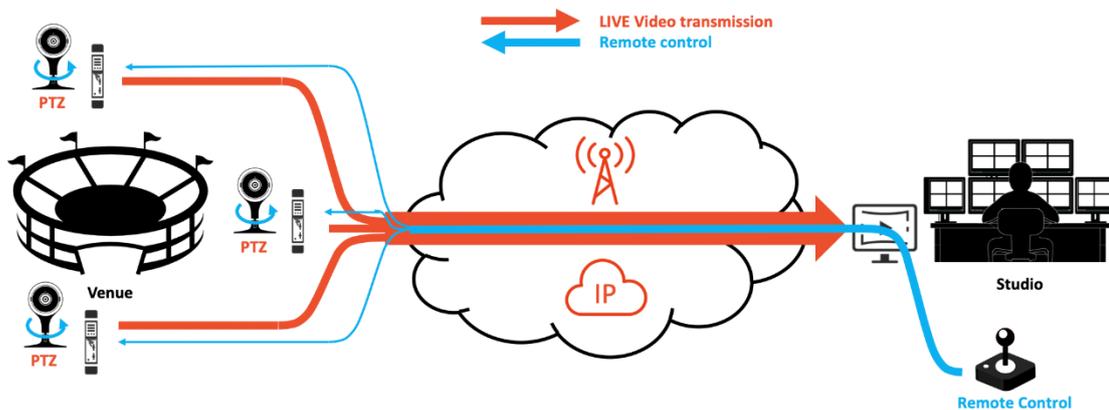
1. Click on **Settings > I/O**.
2. Move the **Mic level** and **Headset level** cursors to adjust the microphone and headset volumes.



Configuring a Data Bridge

When configured in Data Bridge mode, the unit can be used as a Data Bridge that provides access to Internet from the field, or access to devices connected to the transmitter LAN from the studio (such as remote control of camera).

In this configuration, Live operation is still allowed, but Record and Forward operations are no more available.



Up to 10 client devices can connect simultaneously to the unit's local network (Ethernet or WiFi).

To configure a unit as a Data Bridge, you must select the server that should be used (Destination profile) and then enable the Data Bridge mode.

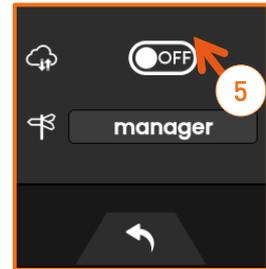
The selected server automatically allocates a license token to each Data Bridge that you enable.

From the Unit Panel

1. From the Home menu, click on .
2. Click on the Destination field ().
 - ▷ A green dot () indicates the currently selected profile.
3. Click on  to scroll down the list of Destination Profiles.
4. Select a Destination Profile.



- Click on  to enable, or on  to disable the Data Bridge option.



Once the Data Bridge is configured, the icon  appears in the upper bar.
 In case the connection is not possible, the icon  appears in the upper bar.

From the Web Interface

- From the Web Interface, click on .
- Select the **Destination Profile** from the scrolling list.
- Click on  or  to enable or disable Data Bridge



Once the Data Bridge is configured, the button turns into  and an icon  appears in the upper bar.

In case the connection is not possible, the icon  appears in the upper bar.

Locking a Field Unit from Manager Interface

You can lock / unlock a field unit from the Manager interface.

Please refer to the Manager User Guide to get the procedure to follow.

Once the field unit is locked, you cannot:

- add/delete/modify the Destination profiles
- add/delete/modify the Live profiles
- add/delete/modify the Record profiles
- change/select a new Destination profile
- import/export a configuration in the unit
- restore the factory settings
- upgrade the Firmware

Note: The unit remain locked if:

- the connection to the Manager is lost
- the unit is rebooted
- the unit is powered off/on

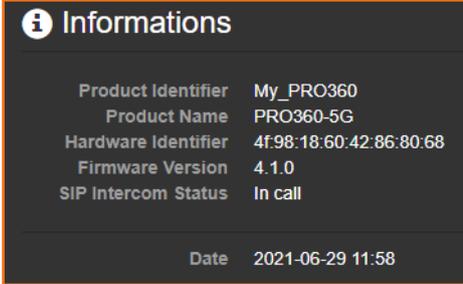
Servicing

Getting the unit information

From the Web Interface

You can access the unit information:

- The **Product Identifier**
- The **Product Name**
- The **Hardware ID**
- The **Firmware Version**
- The **SIP Intercom Status**
 - **Ready** if the product is registered to a Manager or connected to a StreamHub supporting SIP intercom.
 - **In call** if a SIP call is in progress with a Manager or a StreamHub.



i Informations	
Product Identifier	My_PRO360
Product Name	PRO360-5G
Hardware Identifier	4f:98:18:60:42:86:80:68
Firmware Version	4.1.0
SIP Intercom Status	In call
Date	2021-06-29 11:58

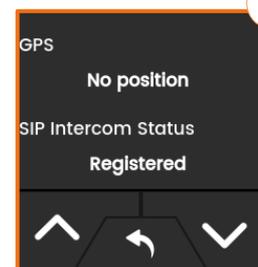
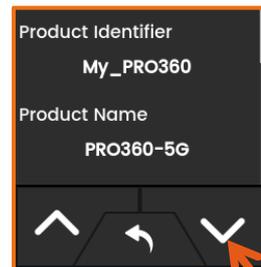
Click the  icon close to the name to display the unit information:

From the Unit Panel

1. From the Home menu, click on .
2. Click on  and click on .

▷ The Device Info screen appears:

3. Use  to scroll down information.



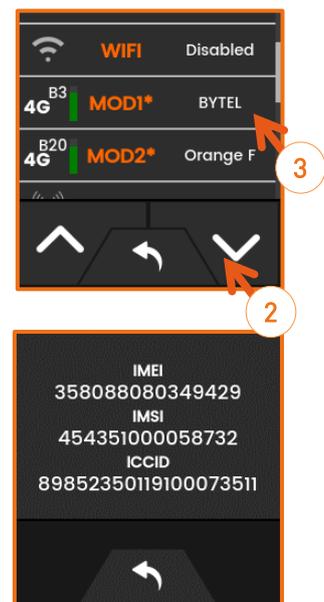
Getting the IMEI/IMSI/ICCID numbers

- **IMEI (International Mobile Equipment Identity)**
The IMEI number is a unique 15 digit number that identifies a cellular device within a mobile network. It identifies the modem embedded within the unit.
- **IMSI (International Mobile Subscriber Identity)**
The IMSI number is a unique 15 digit number that identifies a mobile subscriber. It identifies the SIM card inserted in the unit.
- **ICCID (Integrated Circuit Card Identifier)**
The ICCID number is a unique 19 to 22 digit number that identifies a SIM card. It identifies the chip of the SIM card inserted in the unit.

For legal purposes, you may need to register the IMEI, IMSI and/or ICCID numbers of the modem(s) used.

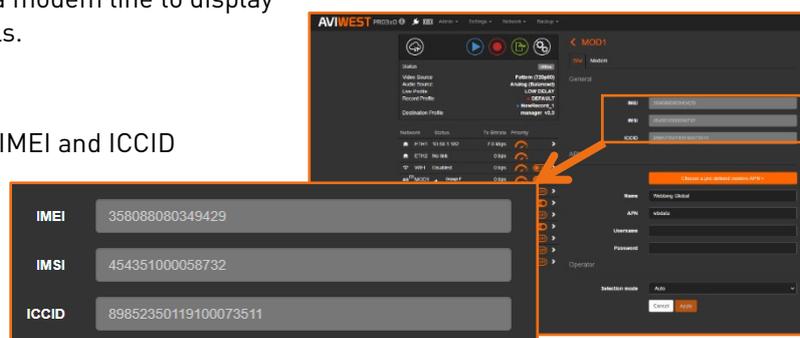
From the Unit Panel

1. From the Home menu, click on .
2. Click on  to scroll the list of modems.
3. Long press on modem for which you require the IMEI, the IMSI and/or the ICCID number.
 - ▷ The IMEI, IMSI and ICCID numbers are displayed:



From the Web Interface

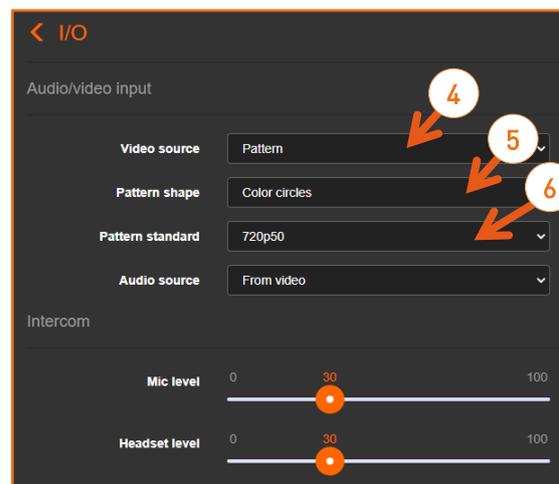
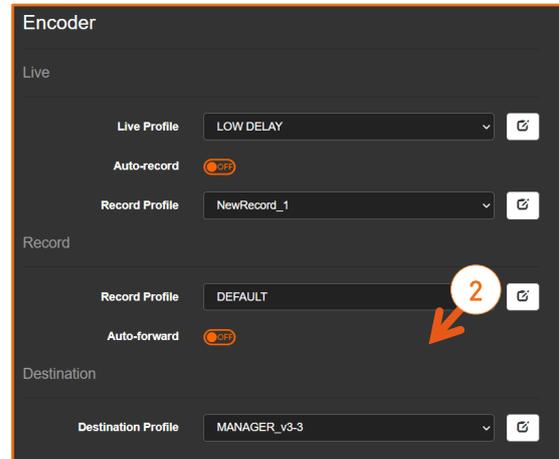
1. Click on  on a modem line to display the modem details.
- ▷ The modem IMSI, IMEI and ICCID numbers are indicated.



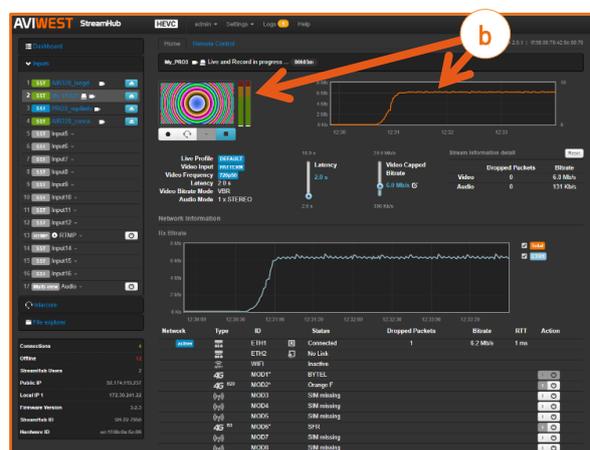
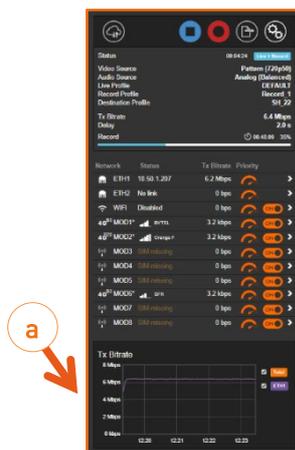
Testing a Live using the Pattern Mode

Once you have set a Destination profile, you can configure a Live encoding using a Pattern and test communication between the unit and the destination StreamHub.

1. Click on  to access the unit's settings.
2. Select a destination profile.
3. From the Web interface, click on **Settings > I/O**.
4. From the scrolling list select **PATTERN** as the **Video Source** and the expected video standard.
5. Select the **Pattern Shape** between:
 - Color circles pattern
 - Color bars pattern
 - Black pattern
6. Select the **Pattern standard**.
7. Click on  to start Live.

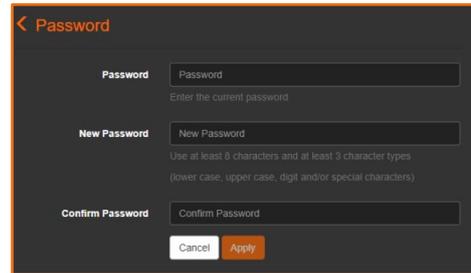


- a) A graph appears on the PRO3 Web Interface.
- b) While the pattern and the graph appear on the StreamHub interface.



Changing the Web Interface Password

1. Click on **Admin > Password**.
2. Enter the current password.
3. Enter the new password and confirm it by clicking on **Apply**.

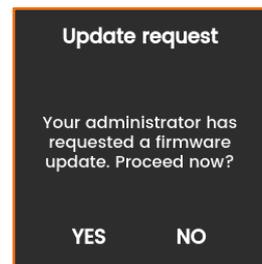


The screenshot shows a web interface titled "Password" with a back arrow. It contains three input fields: "Password" (with a placeholder "Enter the current password"), "New Password" (with a note: "Use at least 8 characters and at least 3 character types (lower case, upper case, digit and/or special characters)"), and "Confirm Password". At the bottom, there are "Cancel" and "Apply" buttons.

Updating the Firmware

i Note:

- Make sure that the battery is properly charged before starting to update.
- The Firmware can be updated from the Manager (v3.3.0).
- A message appears on the field unit to start the update.



From the Unit Panel

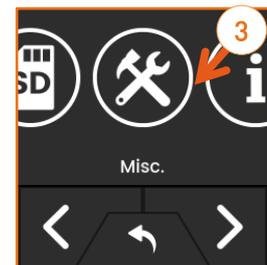
- Make sure you have uploaded the .fw firmware file from the customer portal to an SD card or USB key.

1. Connect the USB key or insert the SD card that contains the new firmware (.fw file).

2. From the Home menu, click on .

3. Click on  and click on .

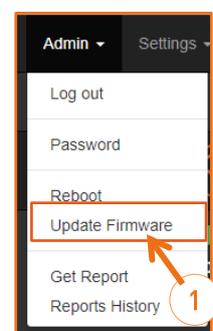
4. Click on  to scroll down and click on **Firmware**.



From the Web Interface

1. Click on **Admin > Update Firmware**.
2. Click the **Browse** button to select the .fw software file that you saved.
3. Click the **Update** button.
4. Follow the instructions on screen.

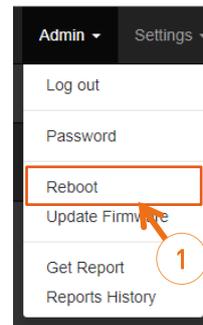
- i** **Note:** The update may take several minutes, depending if this is a major update or not. Make sure that no action is made meanwhile. At the end of the process, a message appears to suggest restarting the unit.



Rebooting the Unit

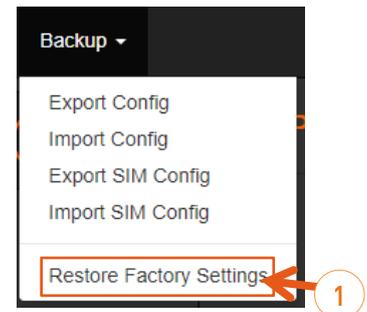
You can reboot the unit from the Web Interface only.

1. Click on **Admin > Reboot**.
2. Click the **Yes** button to confirm.



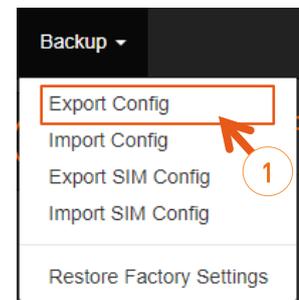
Restoring Factory Settings

1. Click on **Backup > Restore Factory Settings**.
2. Click the **Yes** button to confirm restoration.



Exporting the Unit Configuration

1. Click on **Backup > Export Config**.
- ▷ An .awj file is exported in the download space. This file can be easily imported later, once factory settings have been restored.

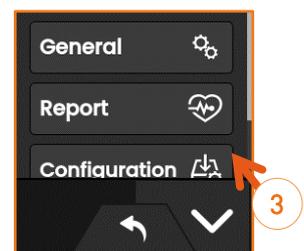


Importing the Unit Configuration

Note: You can import the configuration from the Manager (v3.3.0).

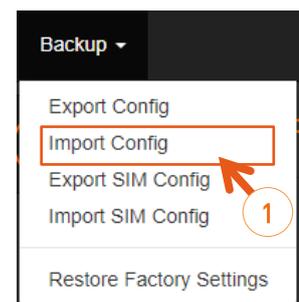
From the Unit Panel

1. From the main menu on the unit panel, click on .
2. Click on  and click on .
3. Click on **Configuration**.
4. Select the .awj file to be imported from the SD card or the USB memory key.



From the Web Interface

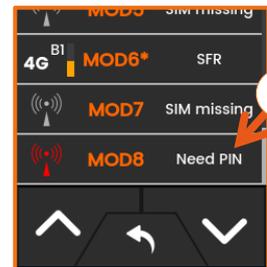
1. Click on **Backup > Import Config**.
2. Click the **Browse** button and select the .awj file to be imported.
3. Click the **Import** button.



Unlocking a SIM card

✔ You can unlock a SIM card from the Unit Panel only.

1. From the Home menu, click on .
2. Click on  or  to select the concerned Modem.
3. Click on the modem line indicating "Need pin".

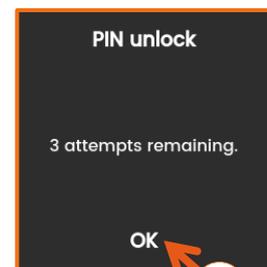


4. Click on .

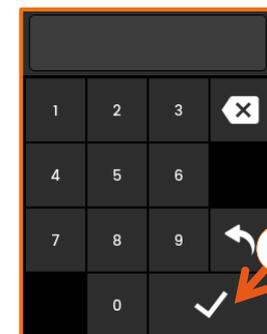


- ▷ The screen reminds the number of attempts left to enter the PIN code to unlock the SIM card.

5. Click on **OK** to activate the keyboard.

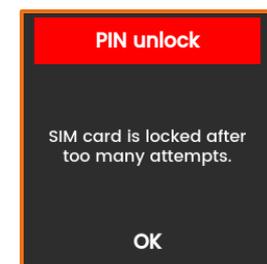


6. Enter the PIN code and click on  to confirm.



i Note: In case you exceeded the number of attempts allowed, this message is displayed.

The SIM card needs to be unlocked by entering the PUK code using another device such as a phone, a tablet...



Deleting file(s) from the SD card

- ✓ Make sure that the SD card is not locked.

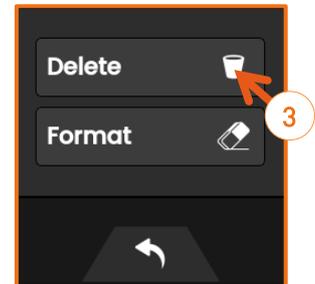
From the Unit Panel

1. From the Home menu, click on .

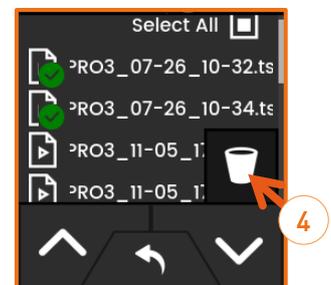
2. Click on  and click on .



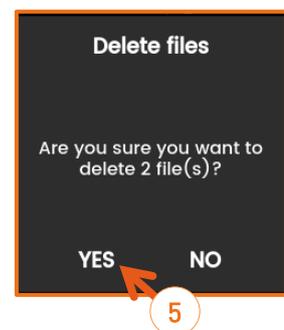
3. Click on **Delete**.



4. Click on files you want to delete and click on .



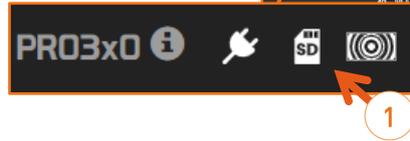
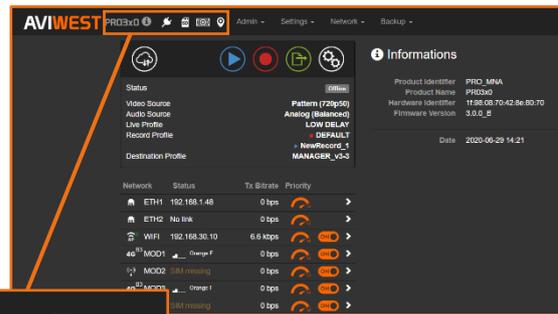
5. Click **YES** to confirm.



From the Web Interface

1. On the menu bar, click the SD card icon .

- Note:** if the Hot Folder function is enabled, the icon looks like .

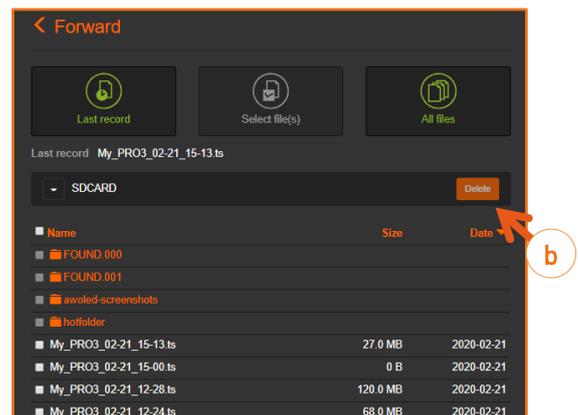


2. You can:
 - select some files
 - select all files
 - select files stored in the Hot folder

To select one or several files to delete:

- a) Click the files to be deleted.

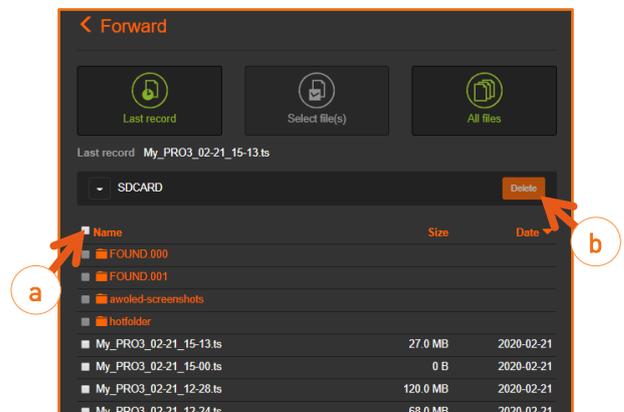
- b) Click on .



To select all files:

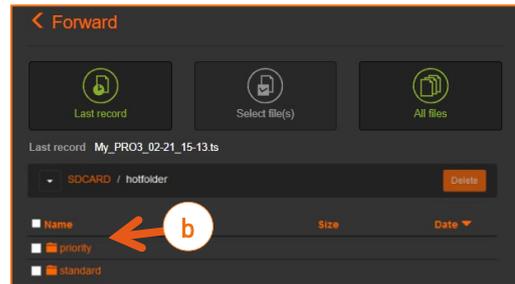
- a) Click the **Name** box.
 - ▷ All files are selected.

- b) Click on .



To select files stored in the Hot folder:

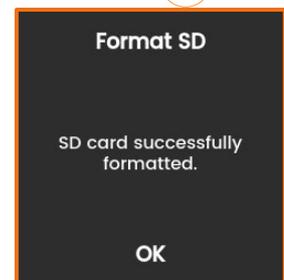
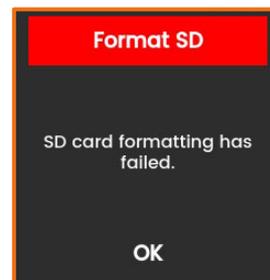
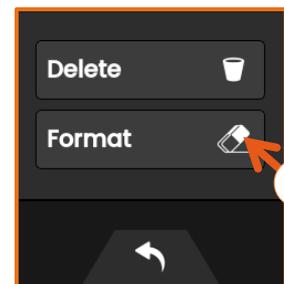
- a) Click on **Hotfolder**.
- b) Enter priority or standard folder to select files to be deleted.



Formatting the SD Card

This operation can be done only from the unit front panel.

1. From the Home menu, click on .
2. Click on  and click on .
3. Click on **Format**.
4. Click **YES** to confirm.
 -  **Note:** the SD card is formatted in FAT 32.
5. Click **OK** to complete the operation.



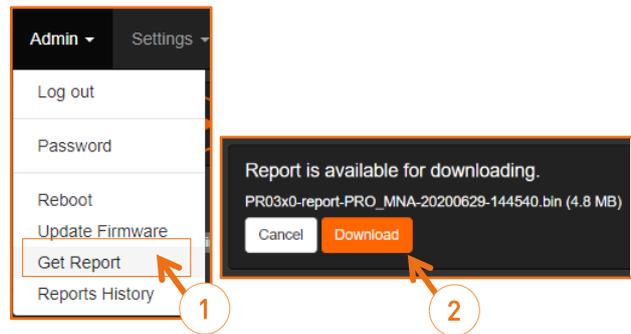
Troubleshooting

Getting a Report File

AVIWEST's support team may ask for a Report File that you can send by email to help them in investigating about unexpected behaviors.

From the Web Interface

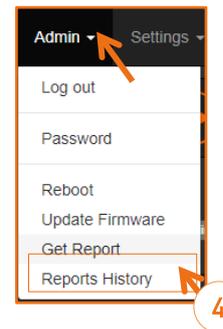
1. Click on **Admin > Get Report**.
2. Click the **Download** button.
 - ▷ A report file (.bin) is generated.



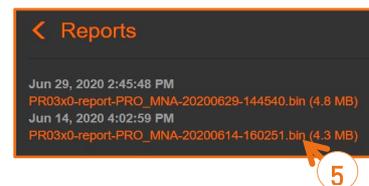
3. Attach the .bin file to an email in which you explain the issue you are facing and send it to Aviwest support team. See contact addresses at the end of this manual.

From the Unit Panel

1. From the main menu, click on .
2. Click on  and click on .
3. Click on **Report** .
- ▷ A report is generated.
 - ▷ It is accessible from the Web Interface or from the SD card (if present).
4. From the Web Interface, click on **Admin > Reports History**.



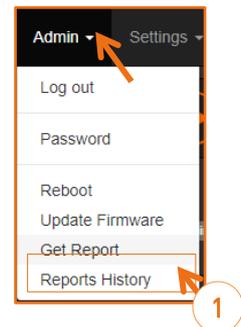
5. Click on the report that you want to download.
 - ▷ A report file (.bin) is generated.



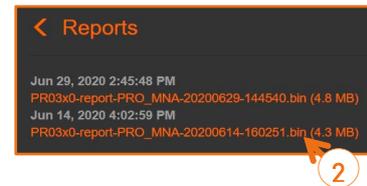
6. Attach the .bin file to an email in which you explain the issue you are facing and send it to Aviwest support team. See contact addresses at the end of this manual.

Exporting a Report File from the History Folder

1. Click on **Admin > Reports History**.
i **Note:** The last 5 reports are listed



2. Click on the report that you want to download.
 ▷ A report file (.bin) is generated.



3. Attach the .bin file to an email in which you explain the issue you are facing and send it to Aviwest support team. See contact addresses at the end of this manual.

Alarm Messages

Message	Solutions
Read-only SD card	Unlock the SD card inserted into the unit.
Receiver not defined	Please see Adding and Configuring a Destination Profile .
Bad Video synchronization	<ul style="list-style-type: none"> - Check that the video cable(s) are properly connected to the camera and to the unit. - On the Web interface, check the video input standard is properly identified.
Missing signal on SDI/HDMI	Check that the source set in the video settings corresponds to the actual video input.
Missing audio signal on HDMI	If the source should embed audio signals, please check the camera settings.
Connection to receiver Failed	Edit the profile to connect to the receiver in the settings of the unit: select another channel or select the Auto-connect option (see Adding and Configuring a Destination Profile).
Receiver not available	Call the MCR. Make sure that the StreamHub is turned on and reachable.

Message	Solutions
No interface connected	<p>Check that the network interfaces of the unit are enabled.</p> <p>Check that the SIM card is identified and that the modem is properly connected to network.</p> <p>Check the Ethernet cable.</p>
Failed to connect to the server	<p>The bandwidth is not sufficient to connect to the server.</p> <p>Wrong IP address or port set for the StreamHub. Check that destination profile settings are properly configured.</p>
Authentication failed	<p>Check username and password entered for the Destination profile used.</p> <p>Make sure to use a StreamHub for which AES is not activated.</p>
Connection to server failed (max devices reached)	<p>There is no more available channel on the server to connect a unit. Select another receiver (see Adding and Configuring a Destination Profile).</p>
Connection to server failed (Invalid license) / (Expired license) / (No license found)	<p>The license applied on the server is invalid, expired or there is no license applied on the server.</p> <p>You cannot connect the unit to this server until a valid license is applied on the server.</p>
Connection to channel closed by server	<p>The unit has been disconnected from the server by the user of the StreamHub.</p>
Connection Lost	<p>The unit has been disconnected from the Internet network.</p> <p>Check your Internet connection.</p>
Connection to channel not authorized for this product	<p>The unit tries to connect to a receiver's channel not available for this type of product.</p> <p>Edit the profile to connect to the receiver in the settings of the unit: select another channel (see Adding and Configuring a Destination Profile).</p>
Error: check server profile	<p>The server profile is not configured properly.</p> <p>See Adding and Configuring a Destination Profile.</p>

Specifications

Video

		H.265/HEVC	H.264/AVC
Standards	HD	1920x1080p 25/29.97/30/50/59.94/60 fps	1920x1080i 50/59.94/60 fps 1280x720p 50/59.94/60 fps
	SD	720x576i (PAL) 720x480i (NTSC)	
	Codec	H.265/HEVC	H.264/AVC
Compression	Profile	Main	High
	Level	Up to 4.1	Up to 4.2
	Bit depth	8-bit	
	Chroma format	4:2:0	
Bitrate mode	VBR (Live) CBR (Live, Record)		
Live Bitrate (static resolution as source)	1080p 50/59.94/60	600kbps – 20Mbps	3Mbps – 20Mbps
	1080p 25/29.97/30	600kbps – 20Mbps	1.8Mbps – 20Mbps
	1080i 50/59.94/60	300kbps – 20Mbps	1.8Mbps – 20Mbps
	720p 50/59.94/60	300kbps – 20Mbps	1.4Mbps – 20Mbps
	SD (PAL or NTSC)	200kbps – 20Mbps	0.5Mbps – 20Mbps
Live Bitrate (dynamic resolution)	1080p 50/59.94/60	-	200kps – 20Mbps
	1080p 25/29.97/30	-	
	1080i 50/59.94/60	-	
	720p 50/59.94/60	-	
	SD (PAL or NTSC)	-	
Live Bitrate (downscaled resolution)	1920x1080p 50/59.94/60	-	3 Mbps – 20Mbps
	1920x1080p 25/29.97/30	-	1.8 Mbps – 20Mbps
	1280x720p	-	1.4 Mbps – 20Mbps
	854x480p	-	0.5 Mbps – 20Mbps
	640x340p	-	0.4 Mbps – 20Mbps
	426x240p	-	0.3 Mbps – 20Mbps
Record File Format	MP4 Transport Stream		
Record Bitrate	2Mbps – 20Mbps		
Input /Output	1x 3G-SDI input 1x 3G-SDI output: video source loop through (SDI input/ HDMI input/ Pattern) 1x HDMI 1.4 input: HD only 1x HDMI 1.4 output: Video Return		

Audio

Channels	Up to 4 channels (SDI input) Up to 2 channels (HDMI input)
Codec	AAC-LC
Bitrate	32 to 256 kbps per channel
Mode	Mono, Dual Mono, Stereo, Dual Stereo (SDI only)
Input / Output	1x 3G-SDI input embedded audio 1x 3G-SDI output (loop through) embedded audio 1x HDMI 1.4 input

Video Return

Video	Codec	H.264/AVC 4:2:0 8 bit
	Resolution	720p50/60 1080i50/60 1080p50/60
	Bitrate mode	CBR
	Bitrate	200 Kbps to 6 Mbps
Audio	Codec	AAC-LC
	Mode	Mono and Stereo
	Bitrate	32 Kbps (for Mono) 64 Kbps (for Stereo)

Networks

3G, 4G and 5G

For PR0360-5G model

- Two modems with embedded high gain custom antennas
- Worldwide compliant
- 5G SA and NSA modes supported
- 5G sub 6GHz supported
- Supported bands
 - **5G:** n1, n2, n3, n5, n28, n66, n71, n77, n78, n79
 - **4G:** B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B46, B48, B66, B71
 - **3G:** B1, B2, B3, B4, B5, B6, B8, B9, B19

3G and 4G

For PR0340 and PR0380 models

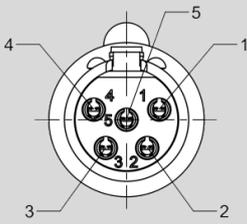
- Modems with embedded high gain custom antennas
 - 4 modems for PR0340
 - 8 modems for PR0380
- Worldwide compliant
- Supported bands
 - 4G: B1, B2, B3, B4, B5, B7, B8, B12, B13, B17, B18, B19, B20, B21, B25, B26, B28, B29, B30, B38, B39, B40, B41, B66
 - 3G: B1, B2, B3, B4, B5, B6, B8, B19

Ethernet

2 x Links

WiFi	Configurable in Access Point Mode or Client Mode Maximum simultaneous connections to Access Point: 10 Frequency Band: 2.4 GHz or 5 GHz Dynamic list of channels (Access Point Mode): <ul style="list-style-type: none"> • 1 to 11 for 2.4 GHz • 36, 40, 44 and 48 for 5 GHz
Latency (end to end)	User configurable <ul style="list-style-type: none"> • VBR: 800 ms to 10 s • CBR: 500 ms to 10 s

Interfaces

Audio/Video	
3G-SDI Input	Connector type: BNC connector
3G-SDI Output	Impedance: 75 Ohms Complies with SMPTE 259M, SMPTE 292M and SMPTE424M level A and level B-DS (limited to one SDI stream for level B-DS) Supported Embedded Audio at 48kHz
HDMI Input	Connector type: Type A
HDMI Output	Complies with HDMI 1.4 Fully Shielded HDMI cable is mandatory
Analog Audio Input / Output	Connector type: Mini-XLR (Male, 5 pins) Mates with <ul style="list-style-type: none"> Rean/Neutrik RT5FCT-B (Female, 5 pins) Switchcraft Mini-XLR TA5F Series (Female, 5 pins) Pins (Mating plugs) <ul style="list-style-type: none"> 1: Common GND 2: Balanced Input Hot (+) 3: Balanced Input Cold (-) 4: Microphone Input 5: Headphone/Line Output  <ul style="list-style-type: none"> Balanced channel input impedance: 59.6 kΩ Balanced channel input level (nominal): 4 dBu (1.23 Vp) Balanced channel input level (0dB Full Scale): 18 dBu (8.7 Vp) Balanced channel input level (max): 19.4 dBu (10.2 Vp) Headphone Dynamic Range (20 kHz Filter): 101 dB Headphone THD+N: -70 dB max HeadPhone Load Impedance: 16 Ω or higher HeadPhone Output Power: 55.8 mW max (16 Ω) Line full scale output voltage: 0.97 V_{RMS} Line load impedance (typical): 10 kΩ Microphone Bias: 2 V Microphone Maximum Level : 0.5 V_{RMS}

Return IFB channels

Intercom Headset

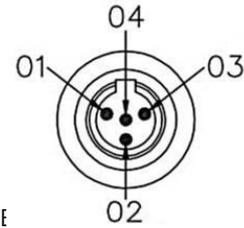
Connector type: Mini-XLR (Male, 4 pins)
(Signal comply with Apple and Samsung headsets)

Mates with

- Rean/Neutrik RT4FCT-B (Female, 4 pins)
- Switchcraft Mini-XLR TA4F Series (Female, 4 pins)

Pins (Mating plugs)

- 1: Common GND
- 2: Microphone Input
- 3: Headphone Left Output
- 4: Headphone Right Output



Intercom Headset

Headphone Dynamic Range (20 kHz Filter): 100 dB
 Headphone THD+N: -70 dB max
 Headphone Load Impedance: 16 Ω or higher
 HeadPhone Output Power: 2 x 55 mW max (16 Ω)
 HeadPhone Full Scale output voltage: 0.65 V_{RMS}
 Microphone Bias : 2.5 V
 Microphone Maximum Level : 0.5 V_{RMS}

LAN/WAN

Ethernet

Two Ethernet ports
 10/100/1000 Base-T
 RJ45 connector
 Green LED indicates link
 Orange LED indicated speed (on: 1000BT, off:10/100BT)

WiFi

Dual Band 2.4 GHz and 5 GHz
 802.11 b/g/n/ac

Remote Antenna

QUAD Antennas

2x4 MCX Connectors

Storage

SD card

SD slot, class10 recommended (FAT32, exFAT)

USB

One USB 3.0 Type A connectors

Power

Dual DC Input

Input type: Standard self-latching 2-pole connector with alignment key
 Automatic under-voltage protection at 11.8 Volts
 Automatic over-voltage protection at 24 Volts

AC/DC Adapter

Manufacturer: EDAC POWER ELEC.
 Model: EA10951E-180
 DC Output: 18V / 5A max
 AC Input: 100-240V-2.5A,50-60Hz

Hardware Specifications

Power Supply	DC input 18 V nominal, 5A Max External battery with V mount or Gold mount plates		
Power Consumption	70 W max From 25 to 35 W typical		
Weight	PRO340	PRO360-5G	PRO380
	1,36 kg	1,4 kg	1,43 kg
Dimensions (L x W x D)	PRO340	PRO360-5G	PRO380
	22,2 x 8,4 x 14,5 cm 8.7" x 3.3" x 5.7"	23,5 x 8,4 x 14,5 cm 9.2" x 3.3" x 5.7"	24,5 x 8,4 x 14,5 cm 9.6" x 3.3" x 5.7"
Operating Temperature	0°C to 45°C (0° to 35°C when unit in backpack) 14°F to 113°F (14°F to 95°F when unit in backpack) 0°C to 40°C for the DC adapter 32°F to 104°F for the DC adapter		
Storage Temperature	-20°C to 80°C -4°F to 176°F		

GNSS Receiver

Frequency range	1575.42 +/- 1.023 MHz
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Radiated Output Power

BT	Frequency Range from 2400 MHz to 2483.5 MHz	Maximal radiated power 1.076 mW
WiFi 2.4GHz	Frequency Range from 2400 MHz to 2483.5 MHz	Maximal radiated power 41.69 mW
WiFi 5GHz	Frequency Range from 5150 MHz to 5250 MHz * from 5250 MHz to 5350 MHz from 5470 MHz to 5725 MHz	Maximal radiated power 77.6 mW 54.6 mW 65.5 mW
UMTS (with internal antennas)	Frequency Range from 1920 MHz to 1980 MHz from 880 MHz to 915 MHz	Maximal radiated power 104.47 mW 225.42 mW
LTE (with internal antennas)	Frequency Range from 1920 MHz to 1980 MHz from 1710 MHz to 1785 MHz from 2500 MHz to 2570 MHz from 832 MHz to 862 MHz from 703 MHz to 748 MHz	Maximal radiated power 119.12mW 180.30 mW 197.70 mW 121.06 mW 69.66 mW

UMTS (with external antennas)	Frequency Range	Maximal radiated power
	from 1920 MHz to 1980 MHz	123.18 mW
	from 880 MHz to 915 MHz	110.10 mW

LTE (with external antennas)	Frequency Range	Maximal radiated power
	from 1920 MHz to 1980 MHz	92.44 mW
	from 1710 MHz to 1785 MHz	94.53 mW
	from 2500 MHz to 2570 MHz	96.33 mW
	from 832 MHz to 862 MHz	191.87 mW
	from 703 MHz to 748 MHz	129.72 mW

* Not available in Client Mode for Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia.

Device disposal



Dispose of this product in a separate waste collection facility according to the requirements in force in your country. Please check the regulation in force in your country. In the European Union, please refer to the WEEE Directive.

Contact Us

Should you have any question or require complementary information, feel free to visit www.aviwest.com or contact AVIWEST's technical support team:

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