AVLYTICS

artificial intelligence for video surveillance

The Most Cost Effective
Artificial Intelligence for Surveillance Solutions

TELEGRAM BOT USER MANUAL

Version 1.2

OPEN PLATFORM COMPATIBILITY | AMS & CMS INTEGRATION

OFFLINE OPERATION | MULTI-PLATFORM NOTIFICATIONS

INDEX

1. Welcome to the Telegram Bot Control Group for your AVLYTICS device.

This control group is designed to receive remote notifications of your system's status along with allowing you to ARM and DISARM your device remotely. Simple to use and easy to drive, the following functionality and status indicators are available via your Telegram APP and will be discussed in further detail in this document:

1. **USER MENU**
   A user menu which allows you to initiate an ARM / DISARM command or alternatively request certain key health checks on demand.

2. **TECHNICAL MENU**
   Technical menu which allows you to initiate various trouble shooting commands and get feedback from the device, as well as Network and Software Sub-Menus.

3. **STATUS AND FAULT NOTIFICATIONS IN THE GROUP**
   This is not a "BOT" interactive menu, however automatic status or fault notifications from your AVLYTICS device are sent to this group.

2. User Menu

The following functions and status checks can be completed from this menu.

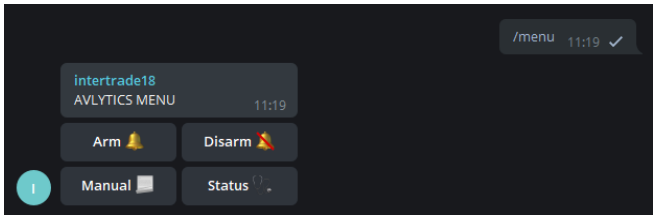
- **ARM -** either per channel or all channel functionality.
- **DISARM -** either per channel or all channel functionality.
- **STATUS** – you are able to request the current STATUS of your device.
- **FPS** – request to view current FPS status of each channel.
- **REBOOT** – request that the system reboots.
- **HELP** – a link to this Help Guide.
- **TEST –** This request prompt's the device to respond with a basic – "test received "message to establish if the device has internet.

This menu can be entered by typing the following command in your Telegram Group: **/menu**
Before making your selection, wait until the entire menu above reflects.

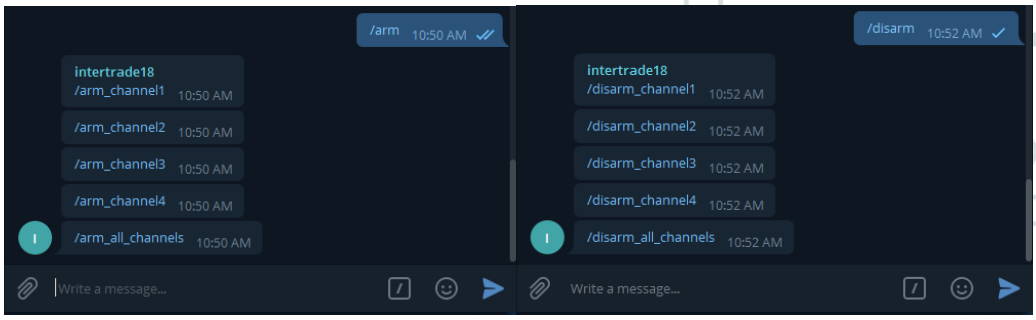
2.1 Arm and Disarm

Use this command to either ARM, or DISARM your system or specific channels.

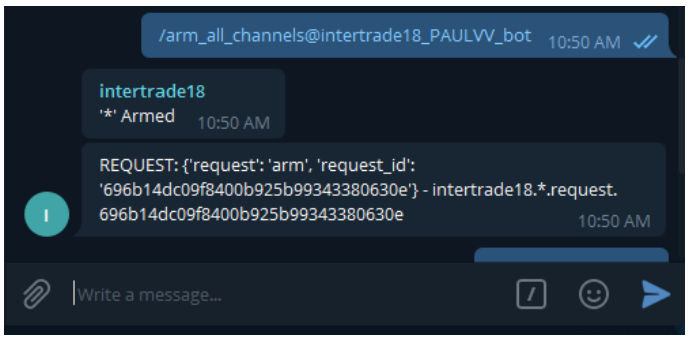
Step 1: Type **/menu** to start the BOT Communication.



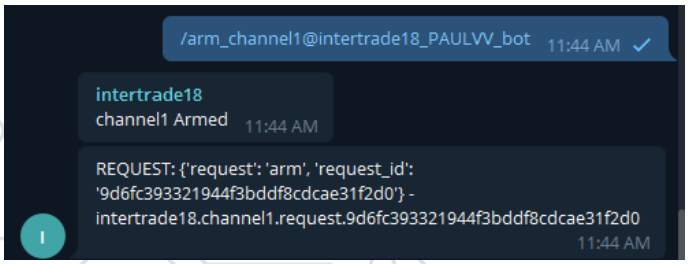
Step 2: Select the Arm or Disarm key to perform a full channel arm or disarm on the device, or send **/arm** or **/disarm** request for individual channel arming/ disarming.



Step 3: In the case of ARMING or DISARMING all channels, the system will confirm your selected command and thereafter confirm the ARMED/DISARMED status of the device.



If you have selected to either ARM or DISARM specific channels on your device - the same confirmation of instruction and status should appear as below when the sequence is completed.

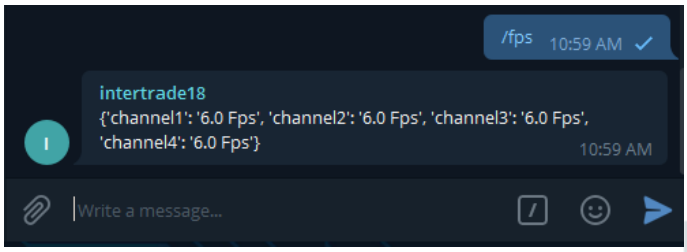


IMPORTANT NOTE:
You may type any available command to jump to that menu, and do not need to start from the beginning, however, if you would like to see the full menu options again, type **/menu** , to return to the main menu.

2.2 Frames Per Second (FPS)

To check your channel status, in terms of camera health and connectivity, utilise the FPS feedback option. The FPS indicator is a health check between the device and DVR, or device and CAMERA, in the case of IP.

Step 1: Type **/fps** to select the command. The FPS settings for each channel on the device will be displayed.



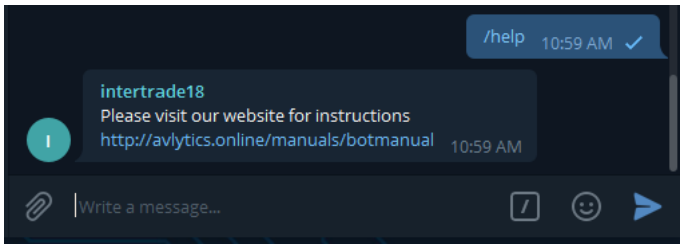
IMPORTANT NOTE:
FPS guidelines for both End User and Technician:

- Channel FPS: 6 FPS is the OPTIMAL detection rate.
- Channel FPS < 6fps needs to be addressed if below 4fps.
- Channel FPS > 6fps can delay alert distribution time.

2.3 Help Manual

To access the online manual for the AVLYTICS Telegram Bot.

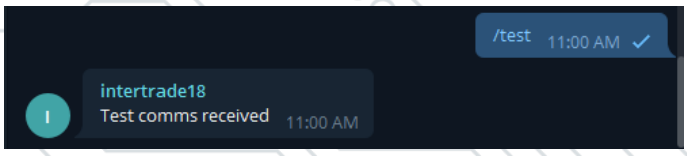
Step 1: Type **/help** and Telegram will display a link for help guides on the AVLYTICS Website.



2.4 Test – Internet Connectivity / Basic Comms

This request prompt's the device to respond with a basic – "test received "message to establish if the device has internet.

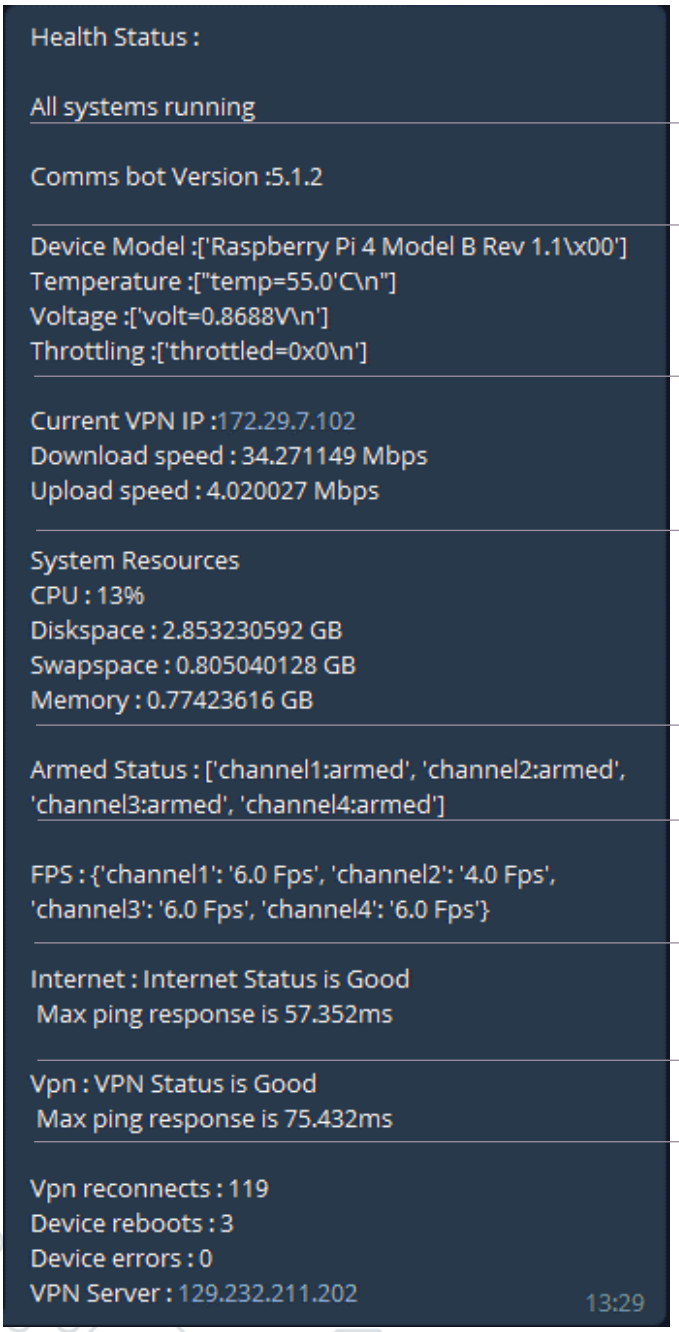
Step 1: Type **/test** for this function and Telegram will display a basic test message, to confirm that the device has internet connectivity. If the device doesn't display the message below, please check your internet connectivity on site.



2.5 Status (Full System Overview)

Use this command to check the status of your device, for example if the device is online, or ARMED / DISARMED.

Step 1: Type **/status** or press the status button on the menu to send the command. A display similar to the image below will appear. We have provided you with a description of each item reported for your convenience.



System's Check: All processes operational.

Comms Bot version: Illustrates the current version on the device.

Model, Temp, Voltage, Throttling:
Features that are only available with the BRT, temperature should not be above 85.

Network related:
VPN IP Address – registered AME Server link
Download Speed – registered on-site speed
Upload Speed – registered on-site speed

System Resources:
CPU operating at 90% + must be reported.
Disk space - should be more than 0 GB.
Swapspace – should be more than 0.0 GB
Memory - should be more than 0GB.

Armed or Disarmed status per channel.

FPS feed per channel:
Monitoring the connection between the individual camera feeds.

Ping response time of the on-site internet
<45ms ideal,
>100ms will adversely affect communication

VPN Ping response time and STATUS

Connection and Reboot information:

VPN Reconnects – shows how many times the device has reconnected to the VPN in the last 24 hours.

Device reboots – shows how many times a device has rebooted in the last 24 hours.
Device errors – shows if the device has had any errors in the last 24 hours.
VPN server – shows the current VPN server end point.

3. Technical Menu

This menu is typically used by a trained installer, be cautious when selecting items from this menu as it will affect the functioning of the device. The following functions and status checks can be carried out from this menu.

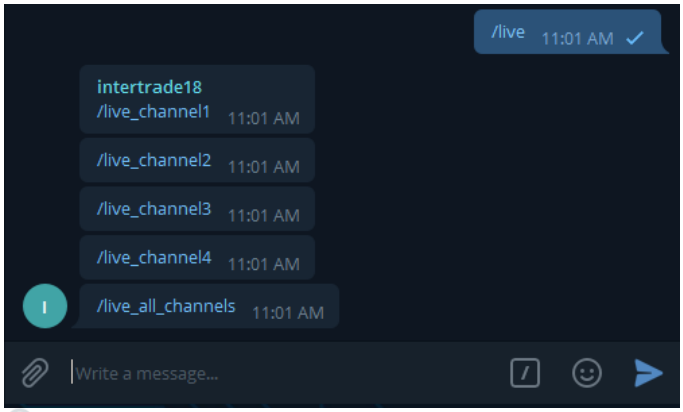
- **LIVE** – View your cameras live when via Telegram when connected to the VPN.
- **REBOOT** – To remotely reboot the device.
- **GETLOGS –** Request the basic device log files on the Telegram App.
- **GETKEYS –** Request the device's security key to use when adding the device to AVLYTICS software.
- **NETWORK and SOFTWARE –** request current local network statistics from the device and comms infrastructure for TELELGRAM.

This menu can be entered by typing the following command in your Telegram Group: **/menu**
Before making your selection, wait until the entire menu above reflects.

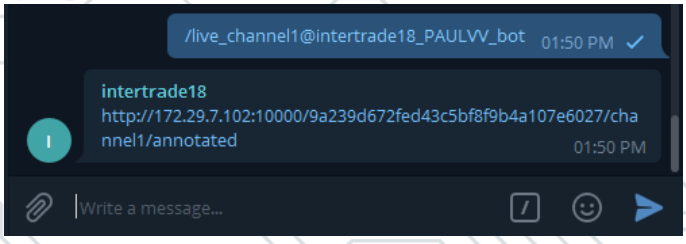
3.1 Live (via VPN only)

Using your VPN you are able to use this feature to view a live stream of your CCTV.

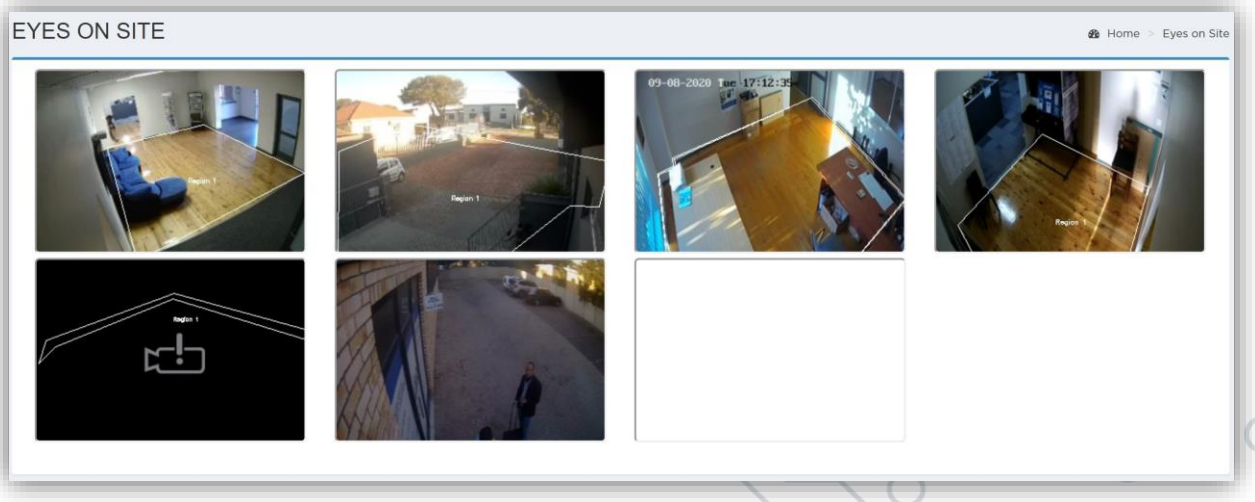
Step 1: Type **/live** to live stream your CCTV. On selecting your main function, the menu will reflect all available live options, per channel, as well as an option for live view of all channels simultaneously. Tap on the preferred option.



Step 2: Once you have selected your preferred option, a link containing an IP address will appear, you may now view your CCTV feed live in your web browser by selecting this link.



An image similar to the one below will appear when viewing your CCTV in your web browser:

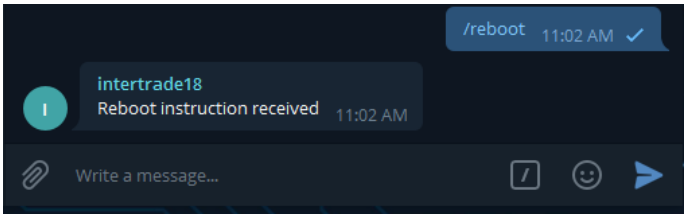


3.2 Reboot

This command should only be carried out by a certified AVLYTICS installer. This command is useful for remotely rebooting a device in the case of an on-site technical issue.

Step 1: Type in **/reboot** to remotely reboot the device on site.

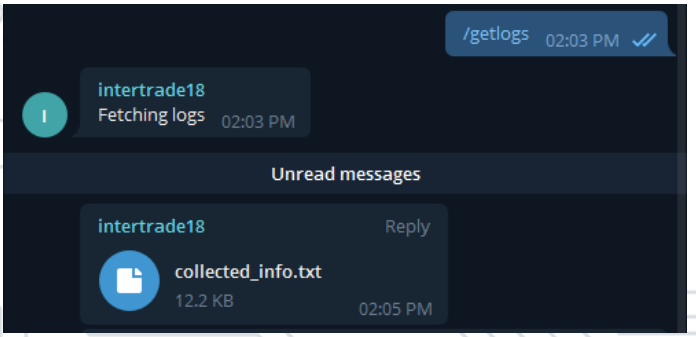
It will take on average 3-5 minutes for the device to reboot



3.3 Get Logs

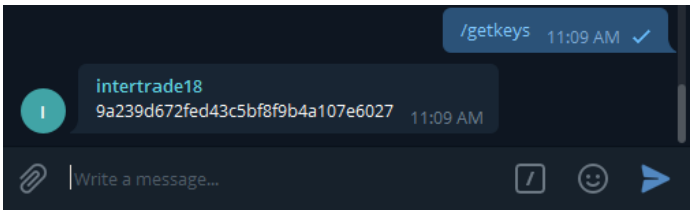
Step 1: Type in **/getlogs** to request the basic logs from the device on Telegram.

The information available will be displayed and may include Speed Test data, CPU load, Data sent and received information and more. For a full understanding of how to read the device logs, please review the *Interpreting Device Logs Manual.*



3.4 Get Keys

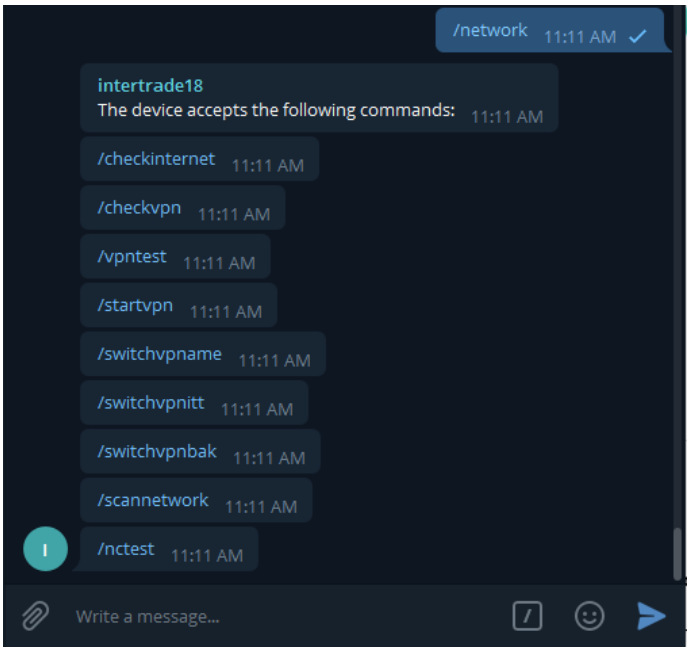
When adding a device to the AVLYTICS software, the installer requires the security keys of the device and these can be requested by typing in the command **/getkeys**



3.5 Network (Sub Menu)

The Network Menu gives the installer the ability to do some basic network checks remotely with the Telegram bot.

Step 1: Type **/network** to enter the NETWORK SUB MENU.



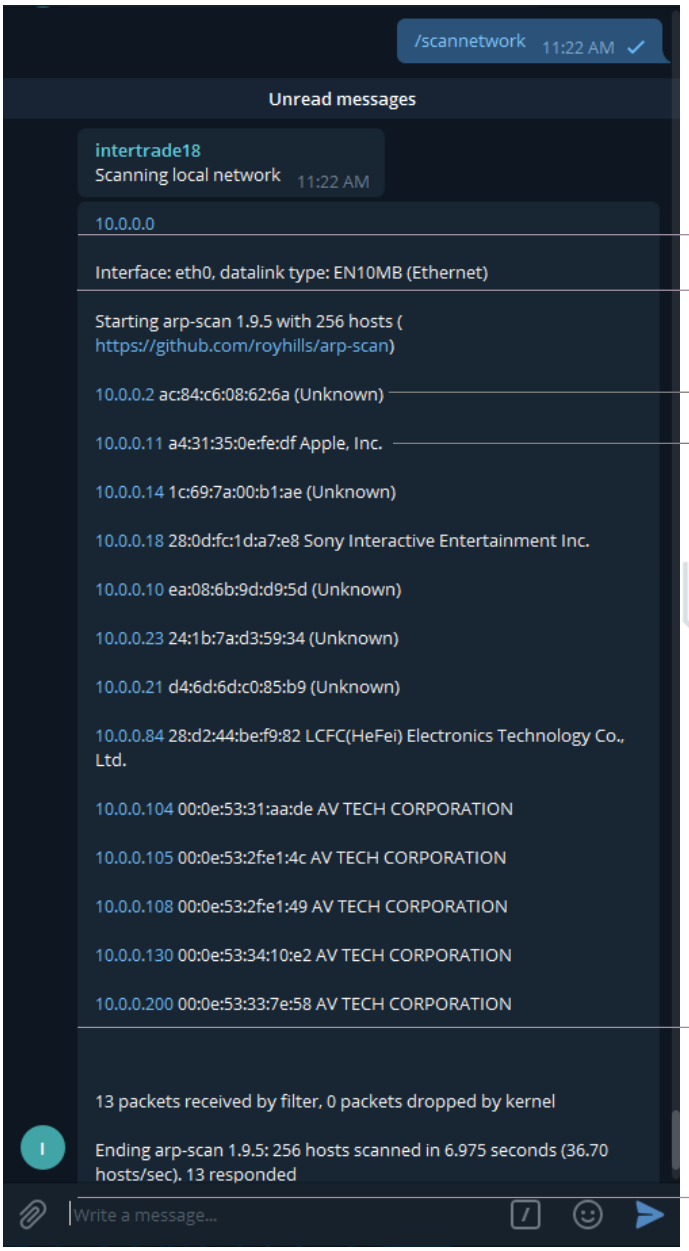
Step 2: Type **one of the following commands below to** enter perform the function.

- **/checkinternet** - This function instructs the device to perform a ping probe and send 10 packets to Google to test the internet connectivity of your device. Without stable internet connectivity you will not receive alerts via Telegram or AVLYTICS Software.
- **/checkvpn** - This function instructs the device to ping the AME Cloud server, through the VPN connection. If the VPN has poor connectivity, you will still receive alerts through Telegram, however the AVLYTICS software/ control room notifications and alerts will be affected.

IMPORTANT NOTE:

- 10 Probes/Pings are carried out on the receipt of these commands (/checkinternet or /checkvpn).
- 3 indicators are reflected here per attempt.
  - Probe = Success "True" or "False", where "False" indicates an unsuccessful Probe/Ping.
  - Speed in milliseconds per Probe/Ping is also reflected with each attempt. Where responses are >100ms, this will adversely affect the device's communication quality.
  - IP Address:
    For **/checkinternet**: The responder **IP address** is the Public IP of the cloud server and should show as **129.232.211.202 .** Any failures in the process of probing will indicate a possible fault with the communication via the Telegram app.
    For **/checkvpn**: The responder **IP address** is the VPN IP of the cloud server and should reflect **192.168.7.5 .** Any failures in the process of probing will indicate a possible fault with the communication via the Control Room or AVLYTICS Software.

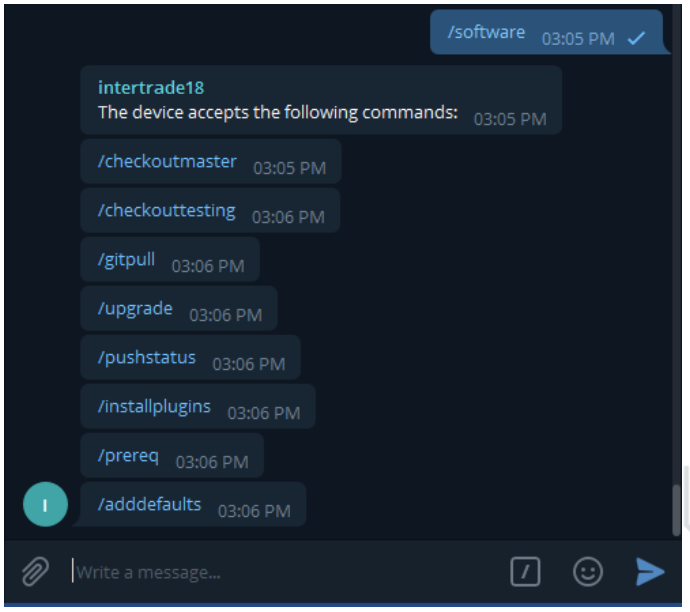
- **/vpntest** – Will activate the VPN checking mechanism.
- **/startvpn** – Will restart the VPN client software to create a new VPN connection.
- **/switchvpname** and **/switchvpnitt** and **/switchvpnbak –** The AVLYTICS Cloud has three VPN Endpoints/Servers that offer authentication and connection. The devices automatically switch to the next available endpoint, should the server in use be unavailable. If your **/status** results show that the ***VPN Status*** is ***BAD***, you can force the device to switch to a better connection. To switch between servers, select one of these functions, please note that the fastest endpoint/server is *AME* (switchvpname).
- **/nctest** – This is a test used to identify any virus/worms/rootkit or infiltrations on the device. If the test results show *'succeeded',* then there is a problem on the network or the device has been compromised.
- **/scannetwork** – This function is a useful tool which allows the installer to determine whether or not the DVR's IP address has been configured correctly on the HUB. When the Device scans the local network it will display all the devices detected on that network. Each line in the results represents a single device.



3.6 Software (Sub Menu)

The Software Menu should be used with caution and a status check should be performed after any of the software commands. The Software Menu commands allow the installer the freedom of testing the latest available test software on a device. It is recommended that the installer use the test versions on their own device, while keeping the client on the stable master release. Both master and test software release notifications are sent to the Telegram AME Notifications group (https://t.me/amenotifications). The installer can switch between these versions by issuing the device a checkout command.

Step 1: Type **/software** to enter the SOFTWARE SUB MENU.



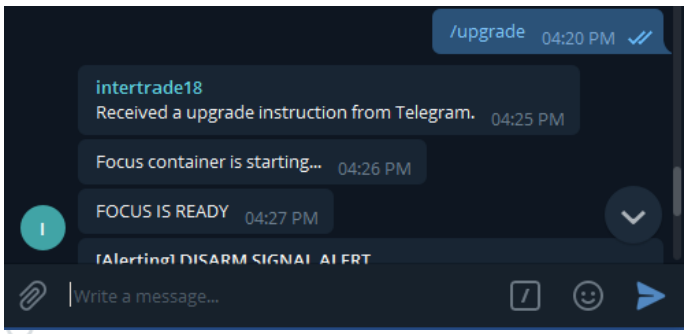
Step 2: Type **/checkoutmaster** to ensure that the device stages the latest stable software. The device will respond to Telegram with: ***Switching to master branch.***

OR

Step 2: Type **/checkouttesting** to stage the latest Beta-testing software. The device will respond to Telegram with: ***Switching to testing branch.***

Step 3: Type **/gitpull** to ensure that the various tools and connection scripts for a particular version are loaded. The device will respond with either: ***Already up to date*** OR a ***List of the file changes*** that were performed.

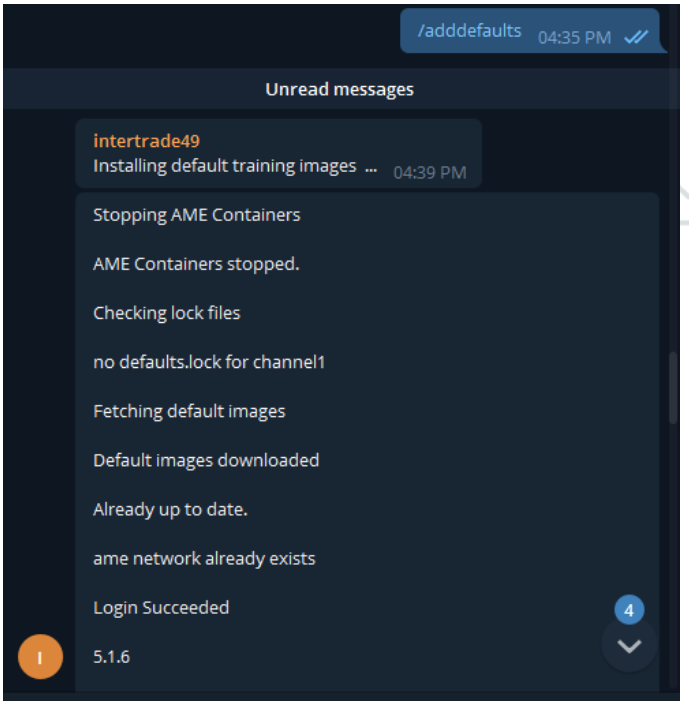
Step 4: Type **/upgrade** to start the software upgrade after switching versions, or 'gitpulling' new files. This feature allows you to upgrade the device to the latest version. Please ensure that a TEST SIGNAL (see item 4.1 in this manual) is received after the upgrade is complete.



Other functions in the Software Menu include:

- **/pushstatus** – This command can be used to force the device to send a message to AME-maintenance website. The device automatically reports to the maintenance platform every 10 minutes but if the device is not showing on the maintenance dashboard, the installer can force the device to report, with this command. The device will respond with: ***Pushing latest status to maintenance manager.***
- **/installplugins** – This command is used to ensure that all the latest plugins are installed. The device will respond with: ***Installing plugins.***

- **/prereq** – Perform this command **BEFORE** the **/installplugins** command. This command is used to ensure that all prerequisite software to run the plugins is installed on the device. The device will respond with: ***Installing Prerequisites.***
- **/adddefaults** – use to force the device to load 100 images of each Human presence, Vehicle, Animal, Background, and Rain. The devices are supplied with a preloaded set of default training images. If these images are corrupted or updated to a better performing default set or if the device is a legacy device that does not have defaults, the installer can add the default images by sending an **/adddefaults** command to the device. This may take some time to respond, be assured the configuration is loading in the background. Please ensure that a TEST SIGNAL (see item 4.1 in this manual) is received after the 'add defaults' is complete.



4. Status and Fault Notifications

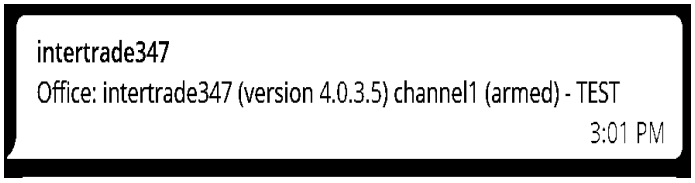
AUTOMATIC ALERTS sent from the device, notifying you of a status change in operation.

- **TEST SIGNAL** – A periodic test signal along with ARMED/DISARMED status is sent to the maintenance group. The factory default period is every 30 minutes.
- **FPS ALERT** – Received in cases where the FPS of a channel falls below 3.5fps. It is important to note that in this case, your device may not be able to make reliable detections, your FPS should ideally be set at 6.
- **CONFIG ALERT** – Alerting on a system's process error that needs to be addressed.
- **REGION ALERT** – Alerting on Detections.
- **ARM / DISARM STATUS ALERT –** A signal confirming that the device has been armed or disarmed. This alert also indicates which channels have been armed or disarmed.
- **VPN –** request VPN connectivity statistics and speeds for your operational containers through to FRONT END software.

4.1 Test Signal

A periodic test signal along with ARMED/DISARMED status is sent to the maintenance group. The factory default period is every 30 minutes.

Below indicates the Site Name, Current Device Software Version, Channel number with armed / disarmed status.



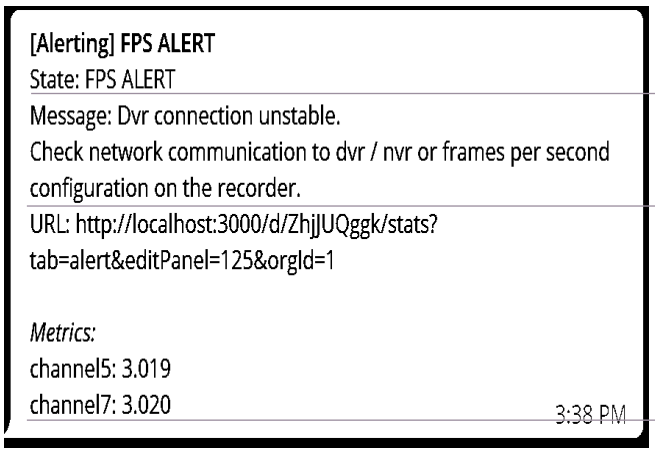
IMPORTANT NOTE:

A Failed TEST Alert can be caused by one of the following:

- Internet Connectivity loss, which may be either permanent or temporary.
- Or the AVLYTICS unit is powered off.

4.2 FPS Alert

In the case of the FPS of a channel falling below 3.5 on one or more channels. It is important to note that in this case, your device may not be able to make reliable detections, your FPS should ideally be set at 6fps and will require technical intervention in order to remedy.



IMPORTANT NOTE:

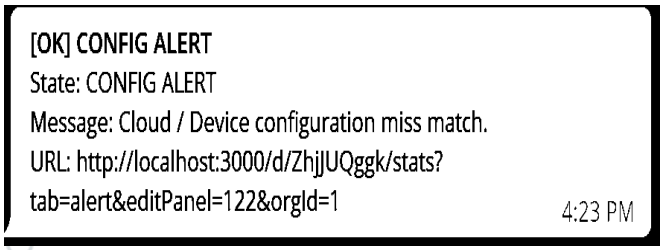
A FPS Alert may be caused by one of the following

- A disconnected camera.
- No power to camera.
- The IP address on camera has been changed.
- The DVR / NVR is not operational.

4.3 Config Alert

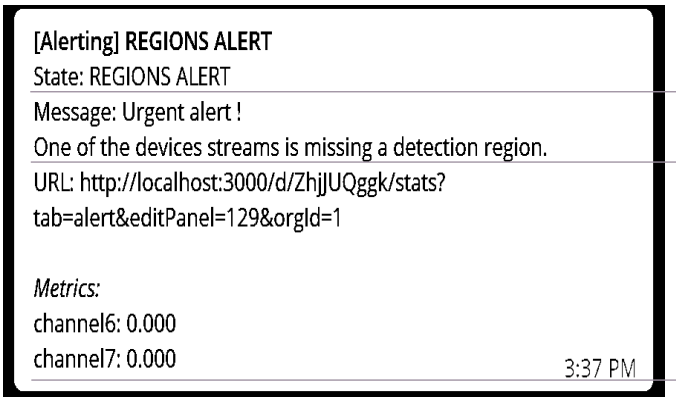
Alerting on a system's process error that needs to be addressed.

Below indicates the Site Name, Current Device Software Version, Channel number with armed / disarmed status.



4.4 Region Alert

NB! Please note that a channel without a region set is unable to make detections.



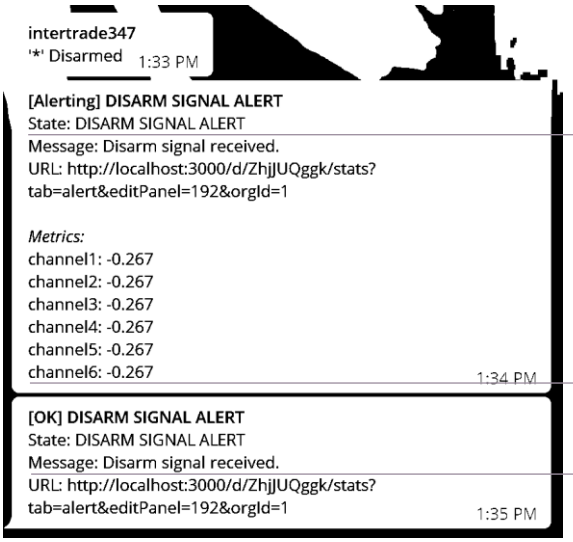
Fault Description

Possible Cause

Channels identified with no regions set

4.5 Arming State Alert

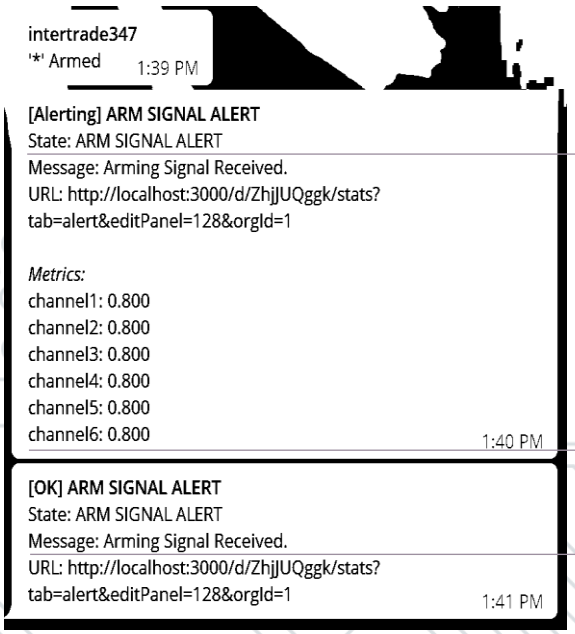
A signal confirming that the device has been armed or disarmed. This alert also indicates which channels have been armed or disarmed.



Disarm Status Alert

The channels that have been disarmed

Confirmation of STATUS Change to DISARM



Disarm Status Alert

The channels that have been disarmed

Confirmation of STATUS Change to ARMED

END OF DOCUMENT

Thank you

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