

Aligo

Quick Start Guide

Aligo QTX100

Aligo TX100

Aligo RX100

VisionSC-A2



Engineering the **world's best** visual solutions


DATAPATH
EXCELLENCE BY DESIGN

Aligo Quick Start Guide

Thank you for purchasing Datapath products. The aim of this document is to quickly guide you through the process of initial setup. If any of the items are missing, please contact Datapath for further instructions.

CONTENTS

**1 x Aligo QTX100 unit,
1 x Aligo TX100 or
1 x Aligo RX100 unit or
1 x VisionSC-A2 card**

ALIGO QTX100 (TRANSMITTER UNIT)

- 4 x HDMI locks
- Mains Power Cable
- 2 x 19" cabinet mount attachments
- 4 x USB Cable Type A to Type B

ALIGO TX100 (TRANSMITTER UNIT)

- 5 x HDMI locks
- 4 x M4 mounting screws
- 12V DC external power supply*
- 4 x Rubber feet

ALIGO RX100 (RECEIVER UNIT)

- 4 x HDMI locks
- 4 x M4 mounting screws
- 12V DC external power supply*
- 4 x Rubber feet

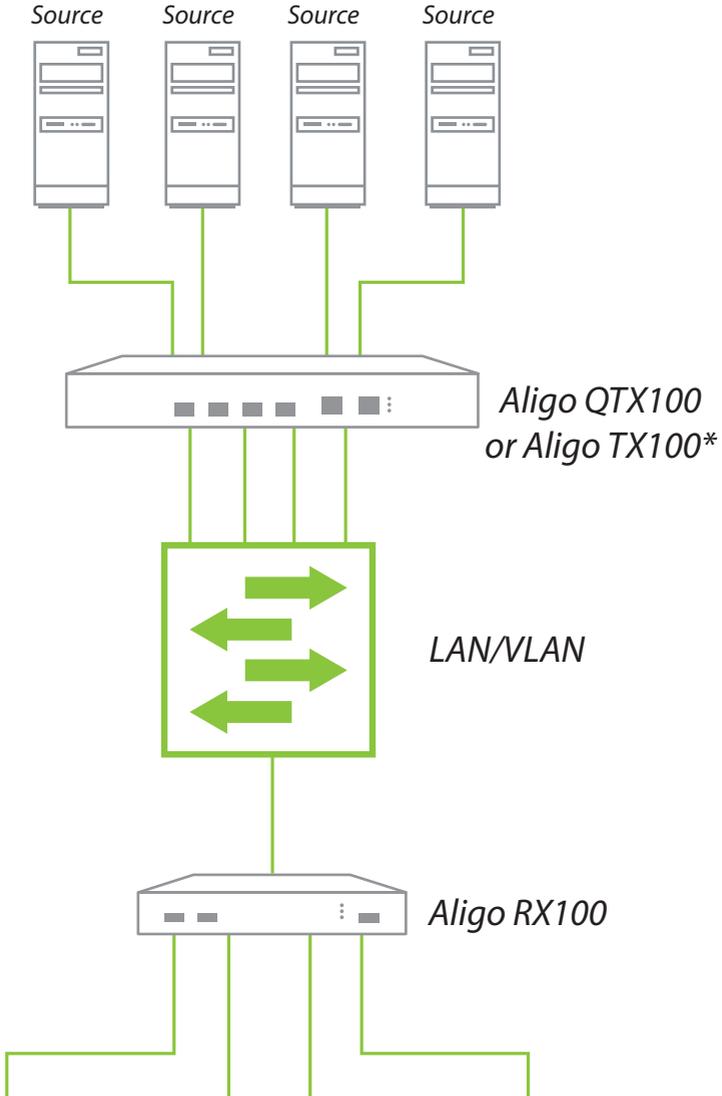
OPTIONAL ACCESSORIES (PURCHASED SEPARATELY)

- 10GB 850NM + Modules (Order Code - SFPPLUS10)
- Rack Mount Kit 1U (Order Code RMK01 (1U))
- Rack Mount Kit 6U (Order Code RMK06 (6U))



*Depending on which unit is ordered; units shipped for use in powered racks may not be supplied with individual power supplies or mounting screws.

STEP 1 CONNECTING THE ALIGO DEVICES



* Please note the Aligo TX100 only requires a single 10G connection and has only 1 port.

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HOW TO CONNECT THE ALIGO QTX100, ALIGO TX100 AND ALIGO RX100

- Connect the Aligo QTX100 or AligoTX100 to a mains power supply.
- Connect up to four graphic outputs from your video sources to the HDMI input connectors on the rear of the Aligo QTX100 or Aligo TX100. Note: Where only one input is required, then input 1 must be used first before using inputs 2-4. Input 1 must always be connected to a valid HDMI source in order to function correctly, and you can only use inputs 2, 3 or 4 when using input 1.
- Connect SFP+ transceiver modules into the 10Gb SFP+ cages on the Aligo QTX100 or Aligo TX100. There are four 10Gb ports on the Aligo QTX100 and one 10Gb port on the Aligo TX100. (See illustrations).
- Connect an OM3 (minimum) fiber cable into each SFP+ module and connect the other end to the network switch using another SFP+ module at the switch end. We recommend using the same manufacturer model and grade of SFP+ module at both ends of the link. Note: An SFP+ module and 10Gb network connection is required for each HDMI channel i.e. if all four HDMI inputs are used, then all four network connections must be connected. (Aligo QTX100 only).
- Ensure that the switch port chosen has been configured to use the same Local Area Network (LAN/VLAN) as the active Aetria Network Manager server (see Aetria Network Manager Quick Start Guide for more information).
- Now connect an Aligo RX100 into a spare switch port which has also been configured onto the same LAN/VLAN as the Aligo QTX100 or Aligo TX100 devices and the active Aetria Network Manager server. Connect the Aligo RX100 using the 10Gb SFP+ port located on the rear panel.
- Connect the Aligo RX100 HDMI output ports to the display devices. Note: Where only one output display is required, then output 1 must be used first before using outputs 2-4. Output 1 must always be connected to a valid HDMI sink in order to function correctly, and you can only use outputs 2, 3 or 4 when using output 1.
- Repeat as necessary for all Aligo devices required in the system, connecting all endpoints to the switch, or switches such that they appear on the same Local Area Network.
- Where KVM functionality will be required, connect the USB Type-B ports on the Aligo QTX100 or Aligo TX100 into spare USB ports on the source PC's that you wish to control. For more information on how to configure OneControl KVM feature please see separate Aetria documentation.
- When connecting USB and HDMI ports to the source PC's for KVM control, care should be taken to ensure that each USB channel matches its relative video channel in each case. i.e. USB1 should connect to the same source as HDMI1 video, USB4 to HDMI4 etc.

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DIRECT CONNECT

Direct connect is a function that allows users to connect an Aligo RX100 directly to an Aligo TX100 or an Aligo QTX100 without going via a network. Direct Connect can also be used in troubleshooting to test the Aligo's are working correctly.

It should be noted that when being set up in the Direct Connect format it may take up to 30 seconds for the Aligo's to recognise they are being used in the Direct Connect mode. It should be noted that the VisionSC-A2 card does not support Direct Connect

Setting up Direct Connect

- Connect the Aligo QTX100 or Aligo TX100 to a mains power supply.
- Connect up to four graphic outputs from your video sources to the HDMI input connectors on the rear of the Aligo QTX100 or Aligo TX100. Note: Where only one input is required, then input 1 must be used first before using inputs 2-4. Input 1 must always be connected to a valid HDMI source in order to function correctly, and you can only use inputs 2, 3 or 4 when using input 1.
- Connect SFP+ transceiver modules into the 10Gb SFP+ cages on the Aligo QTX100 or Aligo TX100 and the Aligo RX100. There are four 10Gb ports on the Aligo QTX100 and one 10Gb port on the Aligo TX100. (See illustrations on the following pages).
- Connect up to four OM3 (minimum) fiber cable into the SFP+ module on the Aligo QTX100 or one OM3 fiber to an Aligo TX100 and connect the other end to the SFP+ module on the Aligo RX100. The length of the cable can be up to 400m.
- Connect the Aligo RX100 HDMI output ports to the display devices. Note: Where only one output display is required, then output 1 must be used first before using outputs 2-4. Output 1 must always be connected to a valid HDMI sink in order to function correctly, and you can only use outputs 2, 3 or 4 when using output 1.

Important Information: When using Direct Connect mode, never connect the 1G network ports directly to a network switch

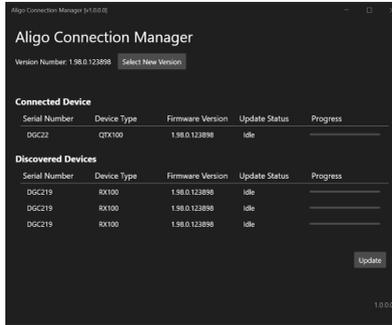
Updating Firmware on All Direct Connect Devices

To update firmware on Direct Connect devices users must first download and install the Aligo Connection Manager which can be found in the downloads section of the Datapath website. Install the application onto a PC/Laptop within close proximity of the directly connected devices.

- Connect the PC/Laptop to the 1Gb connector on the Aligo TX100 or QTX100 then open the Aligo Connection Manager application. The application will automatically detect all Aligo devices.
- At least one Aligo TX100 or QTX100 has to be connected to an Aligo RX100 device via a fiber cable to enable the update of all Aligo devices.

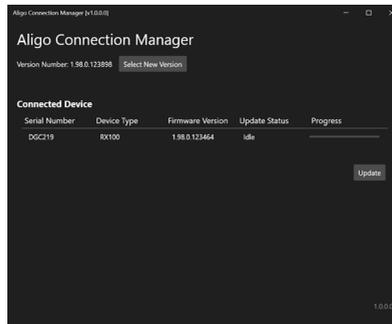
When all devices have been detected the following dialog is displayed:

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Updating Firmware on a Single Aligo RX100 Device

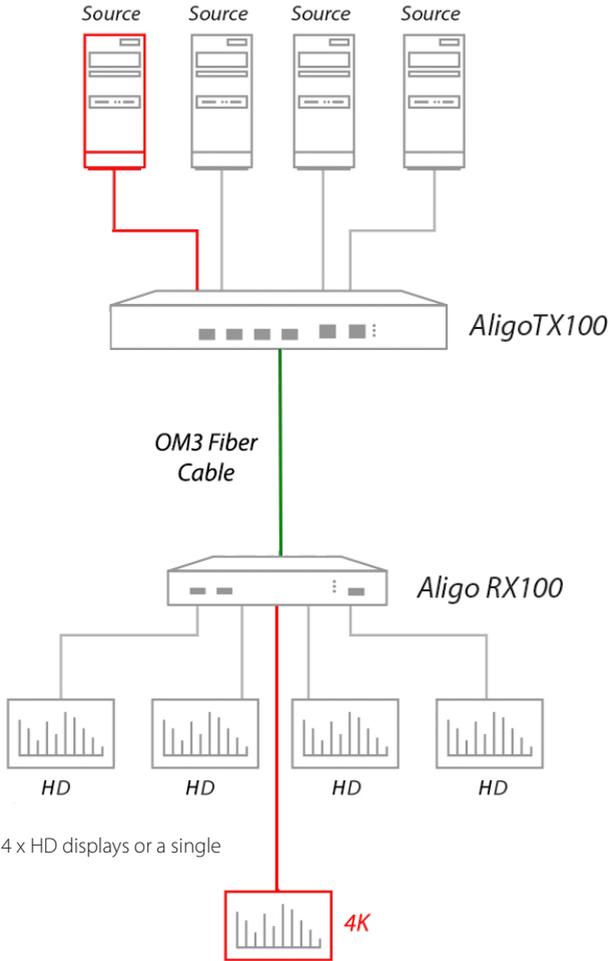
- Connect the Aligo Connection Manager directly to the Aligo RX100. The user interface will detect and display details of the Aligo RX100.
- The Aligo RX100 has to be connected to an Aligo TX100 or QTX100 otherwise it will not be detected by the Aligo Connection Manager.



- Click on **Select New Version** and browse to select the latest version of the firmware. New firmware versions are available to download from the Datapath website, it is recommended to check the downloads page regularly for updates.
- Once the firmware has been identified and selected, click on **Update**. Progress bars will indicate the status for each device. All devices are automatically rebooted to complete the installation of the new firmware.

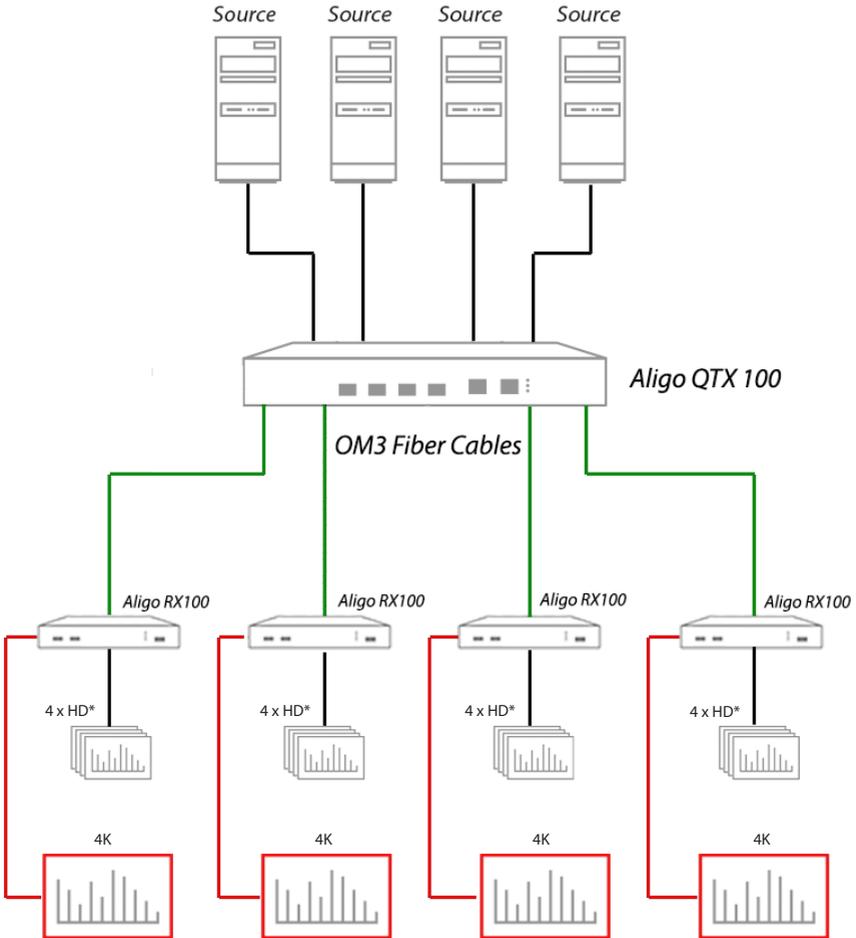
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Aligo TX100 - Aligo RX100



Connect to 4 x HD displays or a single 4K display

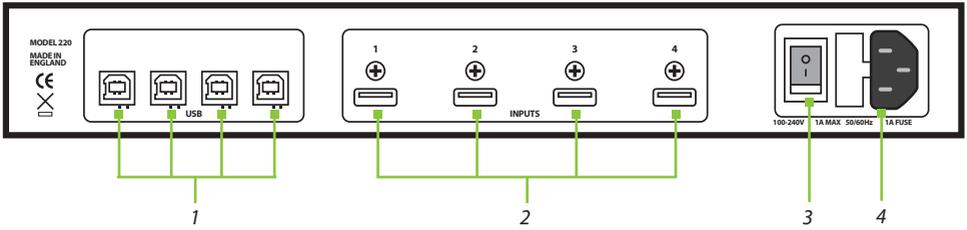
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* Users can only display on 4 x HD monitors in Direct Connect mode if the input source is 7680x1080 provided by an Image4K, otherwise only 1 x HD or 1 x 4k can be achieved.

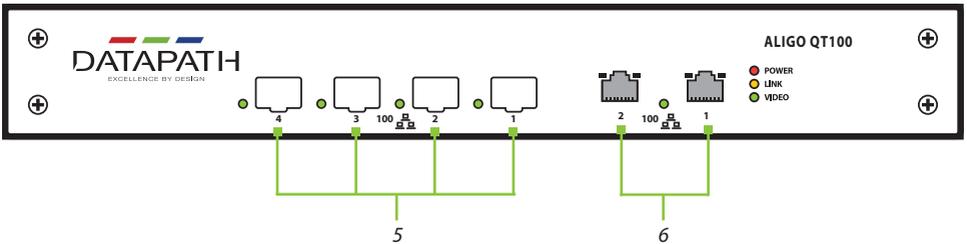
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ALIGO QTX100 REAR PANEL



- 1 USB Type B connectors - KVM port for connecting to a USB host PC
- 2 HDMI input connectors - Connect up to four video sources to the Aligo QTX100
- 3 Power On/Off
- 4 Mains power connector

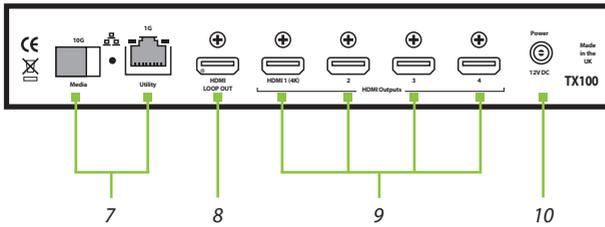
ALIGO QTX100 FRONT PANEL



- 5 10Gb SFP+ Networked Video Transmit Ports.
- 6 2 x 1Gb RJ45 Media and Management Ports (implementation specific).
Please speak to Datapath commissioning representative for further details

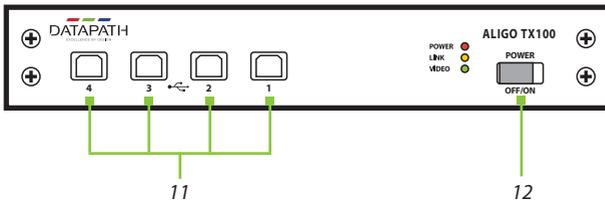
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ALIGO TX100 REAR PANEL



7	10Gb SFP+ and 1Gb RJ45 Networked Video Transmit Ports
8	Loop through for local monitoring of a 4K workstation
9	HDMI input connectors - Connect up to four video sources to the Aligo TX100
10	Mains power connector

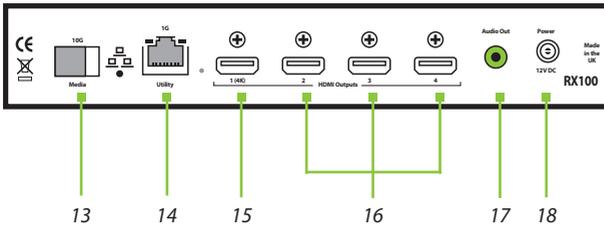
ALIGO TX100 FRONT PANEL



11	USB Type B connectors - KVM port for connecting to a USB host PC
12	Power On/Off

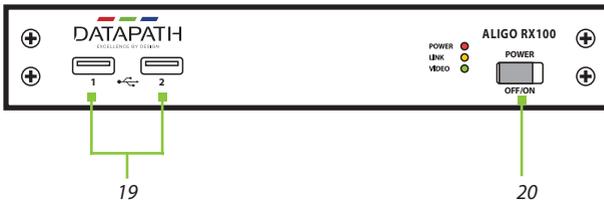
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ALIGO RX100 REAR PANEL



13	10Gb SFP+ Networked Video Receive Port
14	1Gb RJ45 LAN extension port for connecting to peripheral devices i.e. displays
15	HDMI 2.0 Primary video output port (4K)
16	HDMI 1.4 Secondary video output ports (HD)
17	Audio Out
18	Mains power connector

ALIGO RX100 FRONT PANEL



19	USB Ports for connecting to HID devices such as keyboard and mouse
20	Power On/Off

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LED'S

Power	The green power LED indicates that the device is connected to a power supply and is switched on. Amber power LED means power is available, but board is switched off (RX100 only).
Link	Off - The device is still powering up. Flashing on/off - Indicates the device has booted correctly (occurs approximately 30 seconds after power on) but it is not currently registered with the active Atria Network Manager server.* Solid on - Indicates that the device has booted and the device is currently registered by the active Atria Network Manager server.* (* also for Direct Connect)
Video	Flashing on/off - Indicates that no stable video has been received/transmitted since last power on. Off - Indicates that no stable video is currently being received/transmitted, but video has previously been received/transmitted on one or more channels since the last power on. Solid on - Indicates that a stable video source on one or more channels has been locked onto by the device and transmitted out onto the network (TX) / received from the network and output to HDMI sink (RX).
10G Ports	All 10G ports have LEDs on the 10G ports to indicate that each network channel has good, stable power.

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VISIONSC-A2 CAPTURE CARD

The VisionSC-A2 card is a dual channel 4K Aligo receiver capture card designed for use within a Datapath video wall controller or Aetria Workstation within an Aetria environment. The VisionSC-A2 capture card does not currently support Direct Connect.

To install your VisionSC-A2 card, follow these simple steps. You will need a flat-blade and / or a cross-head screwdriver to hand.

Power down the PC (including peripherals), switch off at the mains and disconnect all the cables connected to the computer, noting the positions for accurate reconnection.

Remove the PC cover.

Locate a vacant PCIe slot on the motherboard and remove the backing plate (retain all screws).

Remove the card from its packaging and secure it firmly into the empty PCIe slot.

Screw the VisionSC-A2 bracket to the back panel of the PC and replace the cover.

Connect a network cable distributing the AV signals to SFP connectors on the card (SFP connectors and cables not supplied).

Reconnect all cables to the PC and power on.

The RJ45 port behind the bracket is not intended for customer use. This is used solely during the manufacturing process.

STEP 2 CONFIGURING ALIGO DEVICES WITHIN AETRIA

Check Device Connections and Network Configuration

First, double check all Aligo devices are connected to the network switch and to their respective video sources and displays as above before proceeding.

Also ensure that all Aligo devices are on the same Local Area Network (LAN/VLAN) as the Aetria Network Manager server. This will have been pre-configured by Datapath and should be connected, powered up and running before going any further.

Once all Aligo devices are connected and powered up, you can verify each device is ready to connect by checking the link LED is flashing (as per the table on page 7), indicating that it is ready and waiting to be provisioned within Aetria.

Aligo Device Discovery (Provisioning)

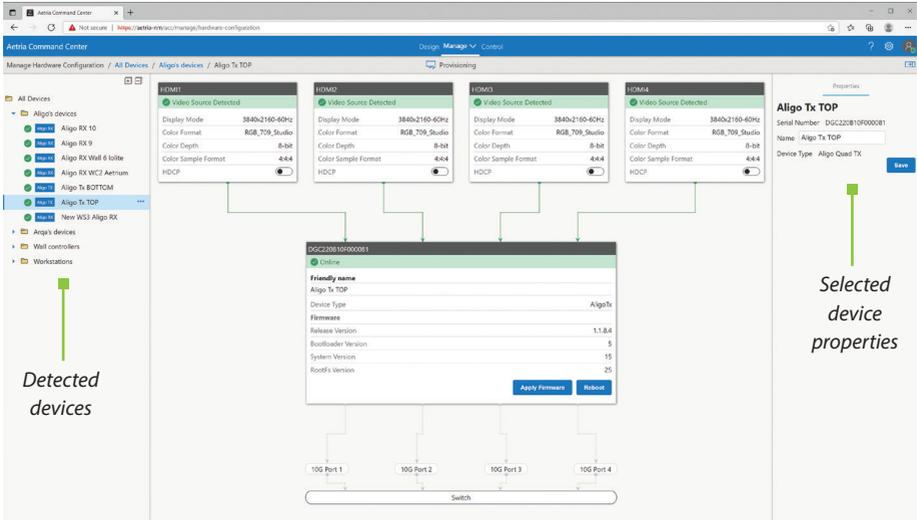
On any machine connected to the Aetria Network, open up a web browser and navigate to the Aetria login page by following the login instructions. Enter user credentials.

Once within the Aetria Command Center, go to the Manage tab, and select **Hardware Configuration**. Then click on Provisioning (highlighted right) to discover the new Aligo sources and add them to the system.

Under the All Devices panel, you will find any new Aligo devices that have been provisioned on the network. Once a device has been successfully provisioned, the link LED on each device will be in a solid ON state.

From this point on please refer to the Aetria Command Center Quick Start Guide for further details on using the system.

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From within Atria you can check all devices are communicating properly by checking the serial numbers against the discovered devices.

You have now successfully added your new devices to the Atria system.

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Class A Declaration of Conformity

Datapath Ltd Declares that this product complies with the essential requirements and other relevant provisions of;

- European Union Directives 2014/30/EU, 2014/35/EU, 2011/65/EU and 2015/863/EU
- UK Government Electrical Equipment (Safety) Regulation 2016, Electromagnetic Compatibility Regulation 2016 and RoHS Regulation 2012

A copy of our Declaration of Conformity is available on request.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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