

Getting Started Guide: Cabling

AWS ELEMENTAL APPLIANCES

Introduction

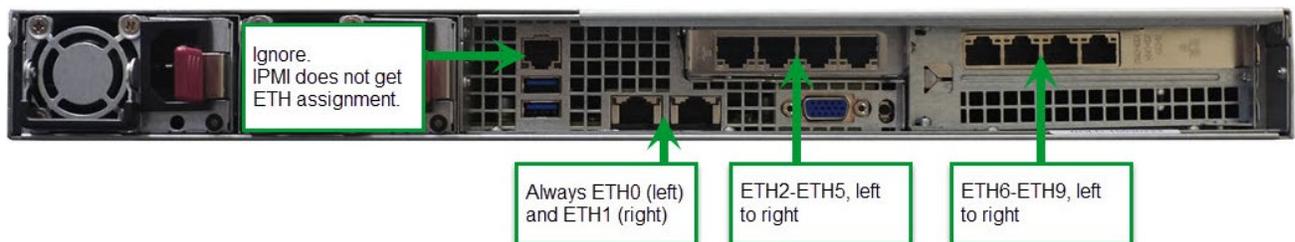
This guide describes how to connect cables to ports. It applies to all AWS Elemental appliances. This guide is organized by cable and connector type and assumes that you already know which cables need to be hooked up to the appliance.

This document applies to all AWS Elemental x8x series models, for example, the L081AE, S280AE, and D283AE.

Cat5 Ethernet with RJ45

Depending on the system you are hooking up, there are two, six, or ten RJ45 ports for Ethernet. To determine the ETH port numbers:

1. First, ignore the IPMI RJ45 port. Also, if your system has ASI inputs, ignore the RJ45 port on the ASI card shown on page 2. Neither of these ports gets an ETH port assignment.
2. Find ETH0 and ETH1, which are always located near the center bottom of the appliance, as called out in the image below.
3. Determine the numbering of the remaining ports by working from left to right, as in ETH2-ETH9 assignments in the example below.



Fiber optic with SFP+, for Ethernet or Fibre Channel

You may have SFP+ ports used for Ethernet and/or SFP+ used for fibre channel. To determine the port numbers:

1. Identify which function the SFP+ ports perform by looking at the faceplate around them.

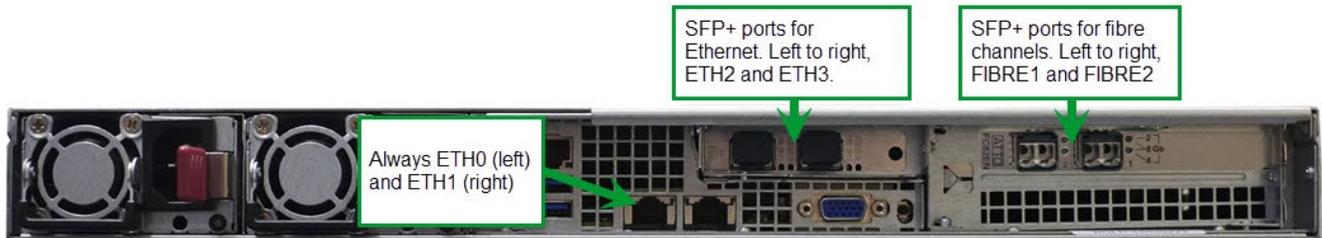


SFP+ Ports for Ethernet



SFP+ Ports for Fibre Channel

2. Determine the numbering for ETH ports by working from left to right, starting with ETH2, as in the picture below.
3. Determine the numbering fibre channel ports by working from left to right, starting with FIBRE1, as in the example below.



Note: An AWS Elemental appliance may have SFP+ ports in locations other than those shown in the above example. Make sure to check the faceplate around the ports to determine the port type.

Coaxial Cables with BNC, for SDI or ASI

Identify the card on your appliance using the pictures below, then consult the notes to determine port assignments.

Video I/O Card	Card Faceplate	Notes
SDI Card		<ul style="list-style-type: none"> ▪ Left BNC port: not used ▪ Center BNC port: SDI1 ▪ Right BNC port: LTC timecode
ASI Card		<ul style="list-style-type: none"> ▪ Three BNC ports: ASI1, ASI2, ASI3, numbered right to left, as shown by the numbers on the faceplate

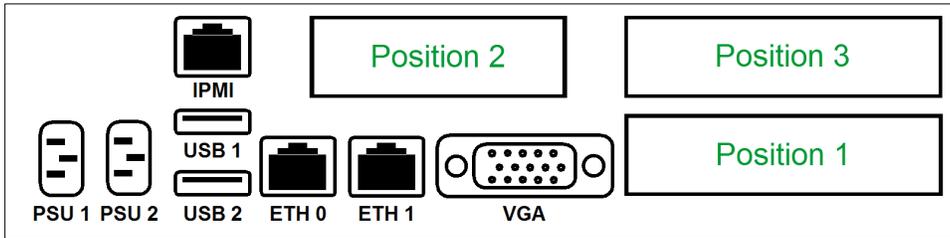
Coaxial Cables with Patch Cables to DIN Ports, for SDI

To determine SDI port numbers follow these three general steps. Each step is discussed in further detail in the subsections below.

1. Determine the order of the SDI cards on your appliance.
2. Determine the relative port order within each card that has DIN connectors.
3. Count SDI port assignments from one card to the next.

First: Determine the Order of the SDI Cards

Look at your appliance and determine the location of any SDI cards with DIN ports. There may be one or two cards. Note their position number in the diagram below.



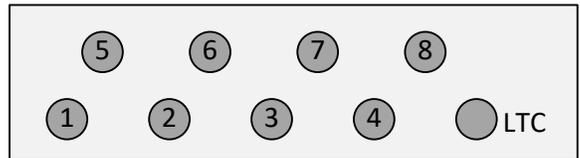
Second: Determine the Relative Port Order Within Each Card

Determine the port numbers within each SDI card, as shown below.

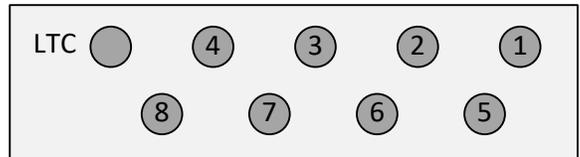
Note: When this SDI card is installed upside-down, it has an RS-422 port alongside the nine DIN ports. When the card is installed right-side-up, the RS-422 port is not present. Either way, the port numbers will match the numbers printed on the metal next to each port, as shown in the diagrams below.



DIN Port SDI/HD-SDI Card



Upside-Down DIN Port SDI/HD-SDI Card



Third: Count SDI Port Assignments from One Card to the Next

If your appliance has more than one SDI card, the card with the lowest position number (as described on the previous page) will have the lowest port assignments. On the first card, ports will have assignments as shown above. On the second card, SDI1 becomes SDI9 (the next available number), SDI2 becomes SDI10, and so on, as in the example below.

Note that all ports have assignments, even when they are not connected. So the first port on the second card is always SDI9.



LTC on DIN Ports

Although two cards may be present, connect up either zero or one LTC ports. Do not connect up both ports.

Maximum Ports Per Card with 3G SDI

For 3G SDI, you cannot connect more than four ports per card.

For 4k 3G, connect the four cables to the four ports in the bottom row OR the four ports in the top row, as illustrated below. You cannot connect two sets of four cables to the same card.

