CAUTION! Before you set up and operate your device, see the "Important Safety Instructions" in your switcher and router manuals.
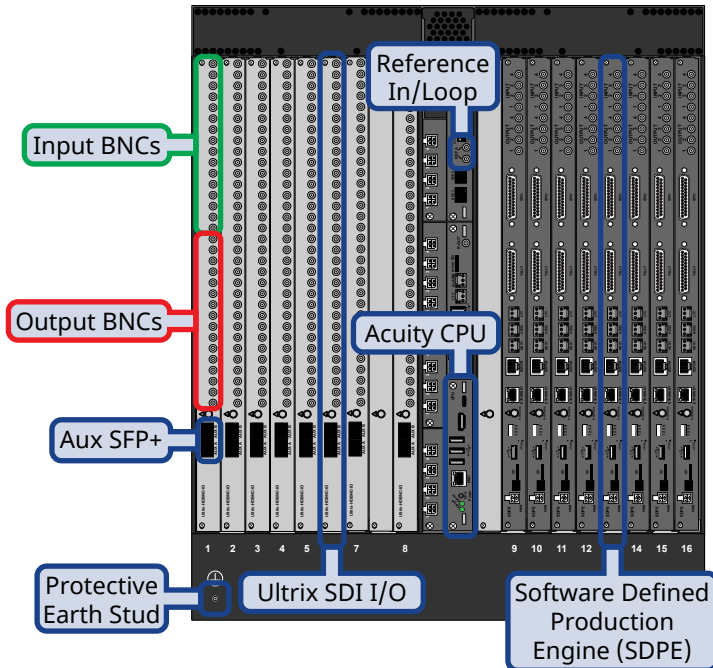
Installation and Cabling

Ultrix FR12 Frame

NOTICE Adequate ventilation within a rack frame must be maintained. Ensure side to side ventilation is not compromised. Refer to the Ultrix Installation Guide for more information.
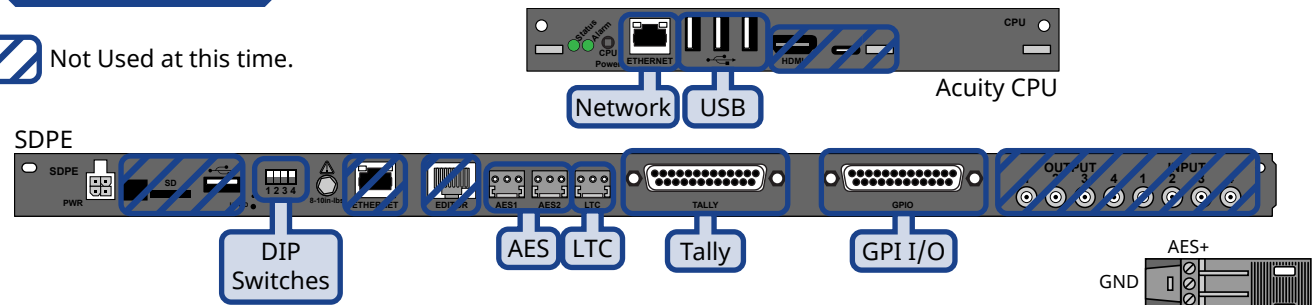
Notes:
• The Ultrix FR12 frame supports the Acuity switcher platform with up to 8 MEs.
• The Ultrix FR12 requires an Ultricore BCS to configure and operate the system.
• The switcher uses the Reference input to Ultrix for timing.
• All power supplies must be connected to operate the switcher.
• The Input and Output HD-BNCs on the SDPE blade are not used at this time.
• Physical sources and destinations on the router must be mapped internally to inputs and outputs on the switcher.
• The Ultrix SDI I/O blade is used to provide the sources and destinations that the switcher can access.
• The REF B connection is not supported at this time.
• A 1GbE ethernet connection is required for Ultrix.

Reference In/Loop

Input BNCs

Output BNCs

Acuity CPU

Aux SFP+

Protective Earth Stud

Ultrix SDI I/O

Software Defined Production Engine (SDPE)

Acuity Switcher

⊘ Not Used at this time.

CPU

Acuity CPU

Network USB

SDPE

DIP Switches

AES LTC Tally GPI I/O

CAUTION! Electrical shock hazard. The Power connector (PWR) must always be disconnected when the SDPE blade is not installed in the frame.

AES+
GND
AES-

LTC-
LTC+
LTC-

Notes:
• The switcher is made up of a single Acuity CPU board, and a number of SDPE blades. Each SDPE blade provides a single HD/UHD ME.
• The number of SDPE blades a system can have depends on the size of the Ultrix frame and the other blades that are installed.
• Only the Ethernet port on the Acuity CPU card can be used to connect to the Acuity software.
• The Power, Ethernet, USB, SD, and Input/Output HD-BNCs on the SDPE blade are not used at this time.
• The GPI and Tally ports on each SDPE blade are independent of each other. As you add more SDPE blades, each ME has an independent set of GPIs and Tallies.

Tally
(female DB25)

Pin	Tally	Pin	Tally
1	1	14	14
2	2	15	15
3	3	16	16
4	4	17	17
5	5	18	18
6	6	19	19
7	7	20	20
8	8	21	21
9	9	22	22
10	10	23	23
11	11	24	24
12	12	25	Common
13	13		

GPI I/O
(female DB25)

Pin	GPI	Pin	GPI
1	I/O 1	14	I/O 14
2	I/O 2	15	I/O 15
3	I/O 3	16	I/O 16
4	I/O 4	17	I/O 17
5	I/O 5	18	I/O 18
6	I/O 6	19	I/O 19
7	I/O 7	20	I/O 20
8	I/O 8	21	I/O 21
9	I/O 9	22	I/O 22
10	I/O 10	23	I/O 23
11	I/O 11	24	I/O 24
12	I/O 12	25	Ground
13	I/O 13		

Power and Cabling

Read the instruction manual for your Ultripower and Ultrix FR12 before starting work or operating equipment.

CAUTION! Risk of electrical shock. Enclosure shall be connected to earth ground via protective earth stud and 18AWG conductor or larger.

NOTICE The Ultrix FR12 frame and SDPE blades require multiple Ultripower units to be tied together in a group to provide power to the router and switcher at the same time. The Ultripower group and Manager must be set up before connecting power to the system. Refer to the documentation for your Ultripower for information on setting up groups and using the Manager.

Mains Power

Connect external reference

Connect video inputs as needed (sources)

Connect video outputs as needed (destinations)

Protective Earth Ground

Ultricore BCS

Ultricore BCS

Ultripower - Ultrix

Note: Ensure that the end of the power cable with the ferrite bead is connected to the Ultripower.

Ultripower - Acuity

Note: Additional Ultripower units will be required, depending on the number of SDPE blades and the configuration of Ultrix.

Ethernet 1GbE

To DashBoard

Note: Terminate the REF LOOP connector and set the DIP to TERM if the router is the last device in the reference chain.

ROSS

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