

**Encore Presentation System Router support
(Code Revision 2.33.00 or higher)**

- **AutoPatch**
- **Barco MatrixPRO-II Analog, 3G SDI and DVI**
- **Barco MatrixPRO Analog, SDI and DVI**
- **Barco FSN Presentation Switcher**
- **BlackMagic Videohub SDI**
- **DVILink 18x18 DVI**
- **Extron**
- **FSR Pathfinder**
- **GefenPRO DVI**
- **Grass Valley**
- **ISIS**
- **Lantronix UDS-200/UDS-2100 Serial-to-Ethernet device**
- **Leitch**
- **LightWare**
- **Nevion SDI**
- **Nvision SDI**
- **Opticis DVI**
- **Purelink DS-1818M II DVI**
- **Sierra**
- **PureLink-2 (PM Series – 32x32 HDMI, DVI, 3G-SDI, firmware 2.20)**

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Setup

For serial connection refer to the **Router User Manual** for the RS232 pin out of the router. Connect the router to the EXT COMM port on the back of the Encore Controller. See Appendix A (Pin outs Section) of the **Encore User Manual** for information on how this port is physically wired. Also see **Application Note: Encore to Router Connections** distributed with every Encore Presentation Switcher code bundle.

When using ETHERNET to control the router, make sure to set the IP address of the router to work with the 192.168.0.xxx range in order to be compatible with the Encore Controller network. A good example of an IP address to use would be 192.168.0.245. Any 192.168.0.xxx address will work provided it does not conflict with the Controller, VPs, other routers and other devices on the network. Consult the Routers users guide for help on setting up the router's IP address.

In the SYSTEM>ROUTER SETUP menu, after choosing the "Protocol", select ETHERNET, LANTRONIX or RS-232, as appropriate, for the "Communication Type". In the "Router Type" field, select "ANALOG" or "SDI" or "DVI" depending on the type of router. In the COMM SETUP sub-menu, dial the IP address of the router and the port number. The port number is usually 23, the default Ethernet telnet port. If the router communicates on a different port the correct selection will be displayed and it will be fixed (shown in brackets). Press TEST COMM to establish communication with the router.

After returning to the ROUTER SPECIFICATION menu page from COMM SETUP, dial in the "Number of Inputs" and "Number of Outputs" to gain full access to the router.

Ethernet Communication

For optimum performance, it is recommended that a 10/100MBit or 100MBit Switch is used when connecting the Encore Controller to Video Processing gear and routers

Routers and other Devices Supported

- **AutoPatch routers**
 - Via a direct straight through serial cable to the Encore Controller EXT COMM port. Ethernet connection is only supported via the Lantronix device.
 - Only level 0; only one connection type (Analog, DVI or SDI). Mixed configurations are not supported
- **Barco MatrixPRO-II Analog and 3G SDI and DVI routers (Ethernet Only)**
 - IP port number: 23

- **Barco MatrixPRO Analog, SDI and DVI routers**
 - Pressing the "SAVE" button on the Controller will cause the current state of the router to be saved as Preset 1 in the router.

- **Barco FSN Presentation Switcher** (Ethernet only)
 - When connected to an FSN Presentation Switcher (P/N: R9004627), the Encore Controller can be setup to recall FSN Presets when Encore Presets are recalled or independently via User Keys on the Encore Large Controller
 - IP Port number: 3000

- **BlackMagic Videohub SDI routers** (Ethernet only)
 - Consult the Blackmagic users guide for help on setting up the router's IP address. The RS-422 control on these routers is NOT supported with the Encore family of controllers. This support was tested on the Smart Videohub 16x16 running the Blackmagic Videohub Ethernet Protocol v2.1. This version of the Ethernet Protocol was released with Videohub 4.5.1 software.
 - IP port number: 9990

- **DVILink 18x18 DVI router**

- **Extron routers**
 - TEST COMM defaults the router to 32x32. The router configuration can not be auto detected by Encore. Just setup the number of inputs and outputs to match the router.
 - IP Port number: 23

- **FSR Pathfinder routers**
 - Via Serial or Ethernet. When using a serial connection, the cable type used must be a NULL Modem.

- **GefenPRO DVI routers** (Ethernet only)
 - IP port number: 23 (default; it may be changed at the router)
 - This support was tested on a GefenPRO 16x16 DVI Matrix router running Matrix Firmware 6.0.13.

- **Grass Valley routers** (Ethernet only)
 - IP port number: 12345

- **ISIS routers**

- **Lantronix UDS-200/UDS-2100 Serial-to-Ethernet device**
 - When using Lantronix devices to connect additional routers to the Controller, make sure the Controller is Powered ON and the Lantronix

device is connected to the Encore network, before applying Power to the Lantronix device. This will ensure that the Lantronix device will get a 192.168.0.xxx address from the Controller since the Controller is a DHCP server. If the Lantronix device does not see a DHCP server within 10 seconds, it will automatically assign itself a 169.xxx.xxx.xxx address which is not compatible with the Controller address scheme.

- Refer to the Lantronix documentation concerning the disabling of "AUTO IP" mode if you want to set a static IP address on the Lantronix device.
- **Leitch routers**
 - When the Encore Controller connects to a Leitch Router via Ethernet, a Telnet session is established between the Controller and the Router. As part of establishing this connection, the router requires a User Name and Password to be entered. The Controller does this automatically when attempting to connect to the router by using the default factory account. To ensure that a connection is successful, verify that the Leitch Router has the following User Name and Password account.
 - User Name: leitch
 - Password: leitchadminRefer to the router "Installation, Configuration, and Operation Manual" for more information on how to create user accounts.
 - For SERIAL connections use a straight serial cable between the Leitch Router and the EXT COMM port on the controller
- **LightWare routers**
 - Select the Extron Protocol
- **Nevion SDI routers** (Ethernet only)
 - IP port number: 4381
- **Nvision SDI routers** (Ethernet only)
 - IP port number: 5194 or 9193 (Nvision 9000)
- **Opticis DVI routers** (Ethernet only)
 - Router support confirmed on the ODM88 using Software Release 100917K. Contact Opticis for information on how to obtain software upgrades for the ODM series of routers.
 - IP port number: 23
- **Purelink DS-1818M II DVI routers**
 - Select "DPI/PureLink" for the Manufacturer in the router setup menu.
- **Sierra routers**
 - IP port number: 10001

- **PureLink PM Series**
 - Select the PureLink-2 protocol for the Manufacturer in the router setup menu.
 - Supports both Ethernet and RS-232 communications.
 - Router's factory reset default IP is 192.168.0.2, which conflicts with SP2 Controller. Thus, set it to a unique IP or to the default IP suggested by the controller. Consult the PureLink users guide for help on setting up the router's IP address.
 - IP port is fixed at 23.
 - Only one TCP/IP session is possible with the router. If router is currently connected with an Encore family controller, you will not be able to open a telnet session via your PC (or vice versa).
 - Serial communication requires a straight-through cable between the router and the EXT COMM port on the controller. However, if you're troubleshooting using a serial port from a PC, you'll need a NULL modem cable/adaptor.
 - Serial port default settings: 19200 baud, 8 data bits, no parity, 1 stop bit, and no flow control.
 - If the router ID is changed from the router *after* connection has been established with the controller, you will need to re-establish the connection again in order for the new ID to be read by the controller.
 - Support for this router was tested on a PM Series – 32x32 HDMI, DVI, 3G-SDI unit, running firmware 2.20.