

ETC Setup Guide

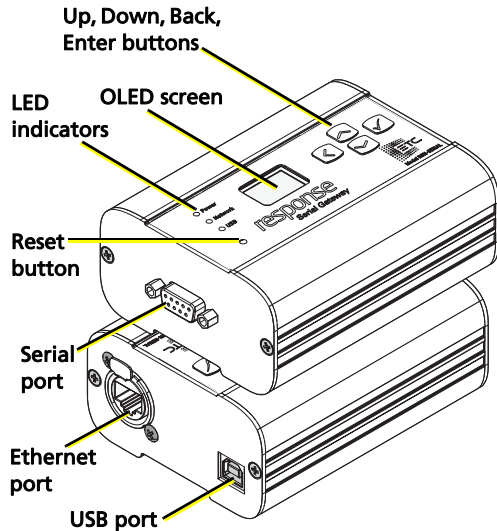
Response Serial Gateway

Overview

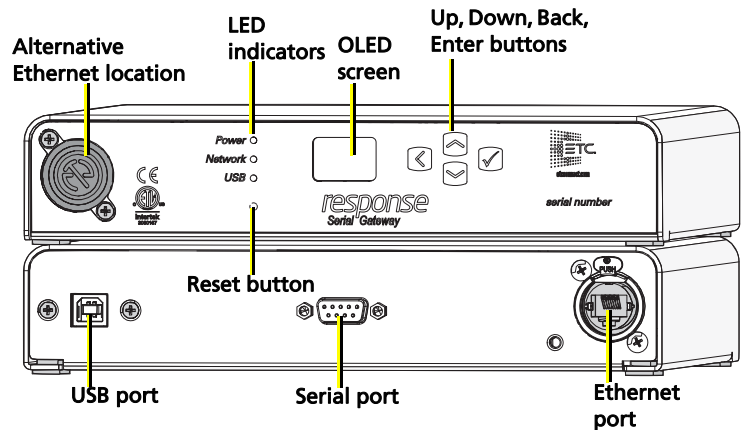
The Response Serial Gateway allows you to transmit and receive RS232 serial data to and from external sources and your lighting network or console. For information on using serial data in Eos, refer to the *Eos Family Operations Manual*.

There is a backpack and rack-mounted version of the Serial Gateway.

Backpack version



Rack-Mount version



LED Indicators

- Power - solid blue indicates that power is supplied
- Network - solid green indicates network connection and blinking indicates network activity
- USB - solid green indicates USB connection and solid red indicates connection without having fully detected, identified and loaded device drivers

Action Buttons

- Up, Down, Back buttons - The Back button allows you to return to the previous menu option and the Up and Down buttons navigate between menu options
- Enter - The Enter button allows you to advance to the next available menu option or commit a modified selection
- Reset - The Reset button provides a physical button to reset the gateway but does not restore factory settings



Corporate Headquarters ■ Middleton, WI, USA | +1 608 831 4116
Global Offices ■ London, UK | Rome, IT | Holzkirchen, DE | Paris, FR | Hong Kong | Dubai, UAE | Singapore
New York, NY | Orlando, FL | Los Angeles, CA | Austin, TX

Web etcconnect.com | Support support.etcconnect.com | Contact etcconnect.com/contactETC

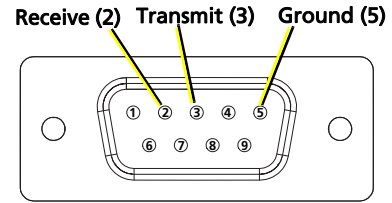
© 2022 Electronic Theatre Controls, Inc. | Trademark and patent info: etcconnect.com/ip
Product information and specifications subject to change. ETC intends this document to be provided in its entirety.
4267M2280 Rev D Released 2022-03

ETC Setup Guide

Response Serial Gateway Setup Guide

Serial Connection

The RS232 nine-pin connector on the gateway allows for connection of serial input or output.



Supported Serial Communication

The gateway supports the following serial communication schemes:

Baud Rate	Data Bit Configuration	Parity	Stop Bit Configuration
2400	8 Bit	None	1 Bit
4800		Odd	2 Bits
9600		Even	
14400			
19200			
38400			
57600			
115200			

Power and Connections

The Serial Gateway can use Power over Ethernet (PoE) or can be powered by USB. The following connection methods are available:

- Ethernet only: Ethernet is used to supply power (PoE) and to transport serial data over the network
- USB and Ethernet: Ethernet sends serial data over the network and USB is used only for power
- USB only: The gateway is powered by USB and can be connected to a PC for configuration as a USB virtual COM port. This allows you to configure the serial properties of the port using a terminal emulator on your PC.



Note: *You can select unsupported serial communication schemes when using a terminal emulator to configure serial port properties. Any unsupported schemes selected during this method of configuration are reverted to the Response Serial Gateway default properties.*



Note: Eos Family Consoles compatibility:

- Ethernet connection to Serial Gateway: Eos v2.9.0 and later
- USB connections to Serial Gateway: Eos v3.1.1 and later

ETC Setup Guide

Response Serial Gateway Setup Guide

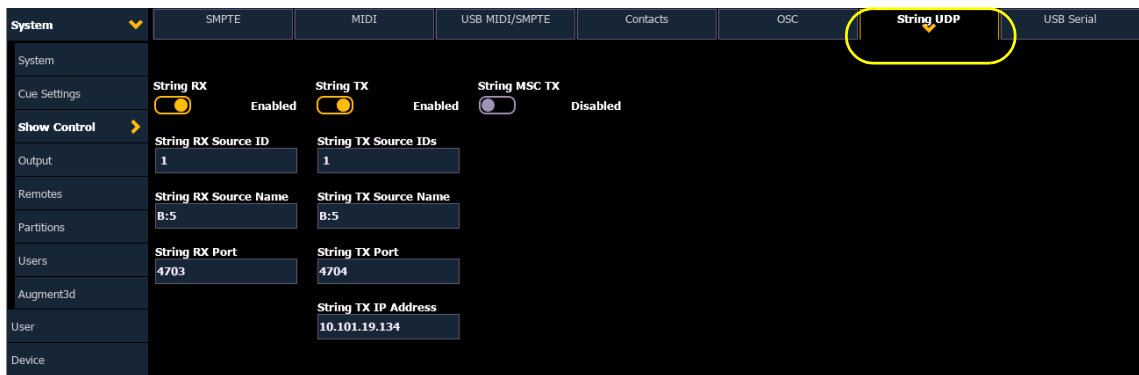
Using the Serial Gateway with Ethernet

You can use the serial gateway to pass strings to and from an Eos Family console. For additional information, refer to the *Eos Family Operations Manual* and reference the Show Control chapter.



Note: *You must enable UDP Strings and OSC from the Network > Interface Protocols section of the Eos Configuration Utility before using the Serial Gateway with an Eos family console.*

1. On your console, navigate to **Setup > System Settings > Show Control > String UDP**.
 - Configure the String RX column of fields only if the gateway is sending serial data
 - Configure the String TX column of fields only if the gateway is receiving serial data
2. Based on how you are using the gateway, set **String RX** and **String TX** to **Enabled** or **Disabled**.

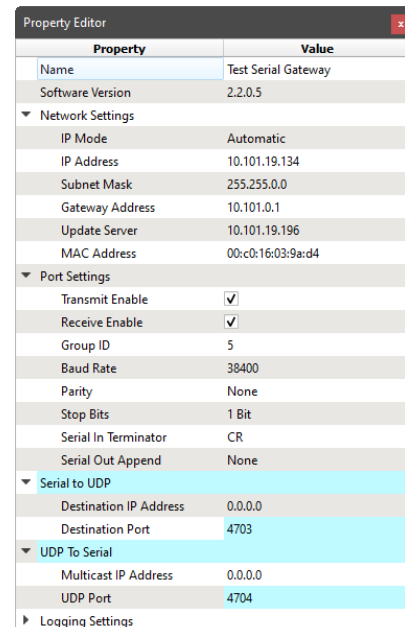


3. If you are using the gateway to send or receive serial data via ACN, you must configure the **String RX Source Name** and **String TX Source Name** fields. The name to enter here should be formatted as *B:<groupID>*, where *<groupID>* is the **Group ID/Source ID** of your gateway and *B:* designates bidirectional communication.



Note: *The gateway's Group ID that is set in ETC Concert is the same as the Source ID that is set directly on the gateway.*

4. If you are using the gateway to send or receive serial data via UDP, you must configure the **String RX Port** and **String TX Port** fields. These fields should correspond to the **Destination Port** and **UDP Port** properties of the Serial Gateway in ETC Concert. Additionally, if you are using the gateway to receive serial data, you must set the **String TX IP Address** field to the IP address of the gateway.



ETC Setup Guide

Response Serial Gateway Setup Guide

Identify the Serial Gateway in Eos

When you view the networked devices in the About System screen, there are two components that appear for the Serial Gateway. Both entries display the same IP address. The entry with a name of # (#), where # is the GroupID/SourcID of your gateway and has a device type of **StringIODevice** is the component that connects to Eos. The component with a name of **Response Serial Gateway** is listed as **OtherAcnDevice** device type and is not the component that connects to Eos.

Device Type	Name/Component	Status	Connected	Address
RdnDmxGateway	Net3 4-Port Gateway 4 IN [1TERM 3XLR]	Online		10.101.19.198
RdnDmxGateway	Net3 4-Port Gateway ETCNet3GW4P013a1e	Online		10.8.73.77
AcnBfrClient	ETC - RFR Client TPACKSO10-33093	Online	Connected	10.8.73.158
StringIODevice	5 (5)	Online	Connected	10.101.19.134
Echo Processor Time	ETC-Paradigm-Device ETC-Paradigm-Device-TIME	Online		10.101.11.102
Echo Processor Time	ETC-Paradigm-Device ETC-Paradigm-Device-TIME	Online		10.101.10.10
Echo Processor Time	ETC Conductor Time Device ConductorTime	Online		10.101.50.60
Echo Processor Time	ETC-Paradigm-Device ETC-Paradigm-Device-TIME	Online		10.101.11.103

Using the Serial Gateway with USB

You can also send serial messages between an Eos Family console and a Serial adapter using USB.



Note: *Serial over USB is only compatible if you are using Eos v3.1.1 or later and Response Serial Gateway software v2.2.0 or later.*

1. On your console, navigate to **Setup > System Settings > Show Control > String UDP**.
2. Based on how you are using the gateway, set **String RX** and **String TX** to **Enabled** or **Disabled**.
3. On your console, navigate to **Setup > System Settings > Show Control > USB Serial**.

Device Name	Baud	Parity	Stop Bits
Test Serial Gateway	38400	None	One

4. Configure the gateway by clicking in the columns below the following column headings:
 - **Device Name:** Use the digital keyboard to enter the device name
 - **Baud:** Select the appropriate baud rate
 - **Parity:** Select **None**, **Even**, or **Odd**
 - **Stop Bits:** Select **One** or **Two**

ETC Setup Guide

Response Serial Gateway Setup Guide

Configuration

You can perform the following tasks using the built-in interface on the Serial Gateway. Additional configuration of the Serial Gateway is done using ETC Concert software. Refer to the Serial Gateway device-specific Help in Concert for more information.

View Device Information

The home screen provides the gateway name and IP address, as well as the last transmitted and received serial data value. If serial data was transmitted or received in the last 5 seconds, the value has an asterisk (*) character appended.

To view additional information about your gateway, select the About menu from the home screen. From the About menu, you can select one of the following two options:

- Version - Provides the version of software running on the device
- Serial - Provides the serial configuration in the format <Baud Rate>-<Data Bits>-<Parity>-<Stop Bits>. This option also provides the last 4 bytes of serial data that was transmitted and received.

Lastly, to view or change the the Serial Source ID, select Setup > Source IDs from the home screen.

Configure Network Settings

To configure the network settings for your device, perform the following steps:

1. From the home screen, select Setup > Network.
2. From the Mode screen, you can use the up and down buttons to select Manual, Link Local or Automatic.
 - Automatic will attempt to automatically configure the IP address, Subnet, and gateway for your device via DHCP.
 - If you select Manual, you must configure the IP Address, IP Subnet, and IP Gateway screens and then select OK from the Apply/Reboot? screen.
 - If you select Link Local, you can have the addressing done using your system's link local addressing mechanism. Select OK from the Apply/Reboot? screen.

If your network settings are not valid after configuration, a warning appears for 3 seconds and then you are returned to the Mode screen and can try again.

Restore Default Settings

To restore the factory defaults for your device, select the Operations menu from the home screen and choose the Restore Defaults option. This removes all network and master/backup information that is configured for your gateway but retains the gateway name.

ETC Setup Guide

Response Serial Gateway Setup Guide

Update Software

The recommended method of updating the gateway is through UpdaterAtor. The UpdaterAtor application is available for download at etconnect.com.

There is also an option to update the software from the gateway using a TFTP server like Conductor. To upgrade the software, select the Operations menu from the home screen and choose the Update Software option. If you do choose to update directly from the gateway, the bootloader runs and the latest software is downloaded from the server indicated by the <#.#.#> IP address on the Update Software screen. If you need to modify this IP address, you can configure it in the Concert application using the Update Server property.



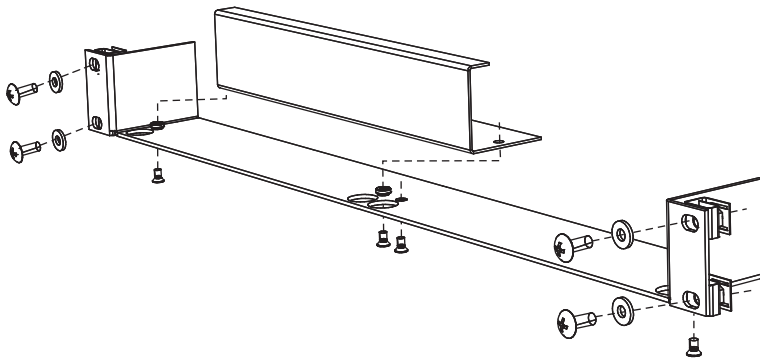
Note: *Regardless of whether you update from UpdaterAtor or directly from the gateway, the device must be on the network.*

Optional Accessories (Rack Mount Only)

The following accessories are available for use with the rack-mounted Response Serial Gateway.

Rack Mount Kit

4260K1001: The Gateway Rack Mount kit is capable of holding up to two gateways for mounting into a standard 19" rack enclosure. If you only need to mount one unit, a blanking plate is provided with the kit. This blanking plate can be installed on either side of the rack mount bracket.



Hanging Hardware Kit

4260K1005: The Hanging Hardware Kit allows pipe mounting of a gateway in a variety of orientations. You can vary the way the U-bolt (or c-clamp) attaches to the bracket and the way the bracket mounts to the gateway. The bracket attaches to any edge on the bottom of your gateway.

