

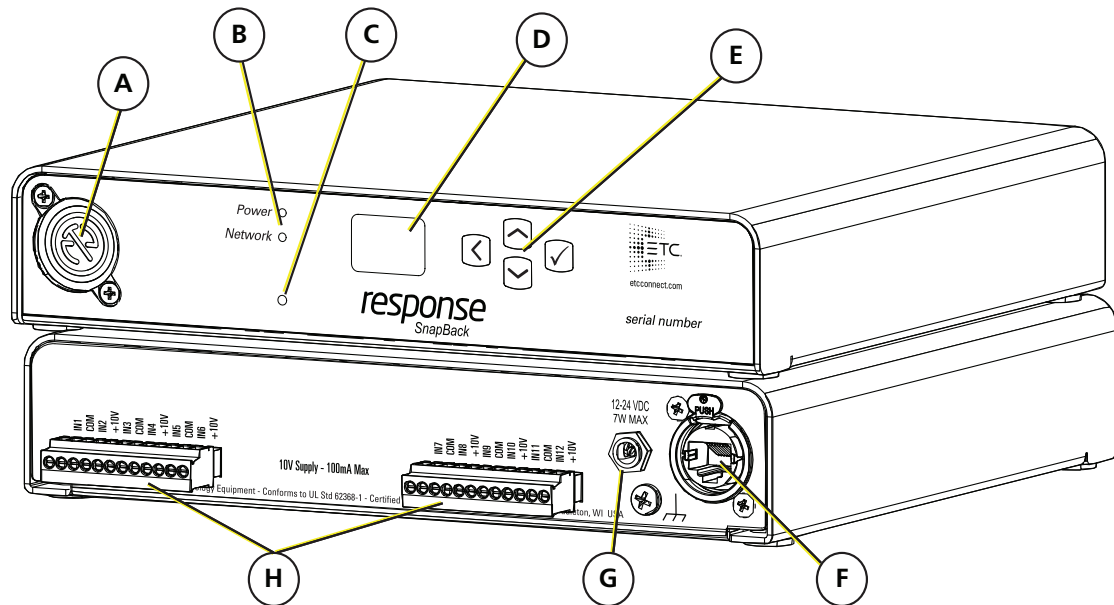
ETC Setup Guide

Response SnapBack

Overview

The Response SnapBack allows you to store sACN presets and then play them back using analog inputs or UDP commands.

The portable SnapBack model can be used on a tabletop or be rack-, pipe-, or bar-mounted using [optional accessories](#) (available separately).



A	Alternative Ethernet location
B	LED indicators
C	Reset button
D	OLED screen
E	Action buttons
F	Default Ethernet location
G	DC power input
H	Analog inputs

LED Indicators

- Power: Solid blue indicates that power is supplied
- Network: Solid green indicates network connection and blinking indicates network activity

Action Buttons

- Up, Down, Back buttons: The Back button allows you to return to the previous menu or 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 device



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Electrical Specifications

The device is powered by either auxiliary power or Power over Ethernet (PoE).

- Auxiliary power input rated voltage of 12-24 VDC, 7 W maximum, Polarity Independent
- 10/100Base-T, IEEE PoE 802.3af, Type 1, PD class 2

For auxiliary power, the device uses an external DC power supply (ETC part number PS372, available separately).

If you supply both PoE and auxiliary power, the device defaults to using auxiliary. If auxiliary power is lost, the device will reboot and then begin using PoE.



Note: Any external power supply must be rated at a maximum of 10 watts.

Analog Inputs

- 24 VDC maximum, can sense between 0–10 V (10 V, 100 mA utility supply provided)
- 0–10 V converted to 8-bit (0-255) digital values
- Can withstand up to 24 VDC (11–24 VDC registered as 255)

Presets

You can record and store up to ten presets per SnapBack. When a preset is recorded, all addresses on all of the configured sACN universes have their current values stored.



Currently, there is no way to save your preset data to external storage. When recording presets, always be aware of what data you might be overwriting.

Each preset corresponds to one of the analog inputs (1–10) if you are using them. Input 11 is reserved for future development and input 12 is Preset Off.



Note: When activating preset 12 (Preset Off) or sending the All Off UDP command, sACN transmission is discontinued.

When a preset is activated, any currently active preset is deactivated.



Note: Active presets are deactivated when you restart a SnapBack and do not automatically reactivate at startup. However, if analog inputs are active when you restart, the highest number active analog input activates the corresponding preset.

Depending on your control system, a single lighting network can support up to 50 SnapBacks. Each device must have a unique IP address and a unique device number in the range 1–50. When using SnapBack in an Echo system, the device numbers must be in the range of 1–16.

Presets Using Analog Inputs

You can use momentary or maintained contact closures to control presets. Currently, all presets must use the same type of contact closure per SnapBack.

For example, you could have a button station with 12 momentary button switches, each wired to their respective input on the SnapBack. Pressing button 1 would activate the corresponding preset, while pressing button 1 a second time would deactivate the preset. Pressing button 12 would deactivate any active preset.

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Presets Using UDP Messages

You can also configure your device to receive UDP messages to control presets. See [Configure UDP](#) or the SnapBack Device Help in Concert software for more information on how to configure UDP.

Supported UDP String Commands

The following commands are supported for use with the SnapBack. Any UDP string sent that does not match one listed below will be ignored. Use the parameters `dev_num`, `pst_num`, and `time` to configure the commands.

When used in an Echo control system, a SnapBack device only responds to the Echo space that matches the SnapBack device number. For example, SnapBack device number 2 only responds to UDP messages sent from Echo space 2.

- **dev_num**: The device number in the range of 1–50.
- **pst_num**: The preset number in the range of 1–10. You can also enter 0 in this parameter to deactivate the current preset for a device.
- **time**: The fade time for the preset activation or deactivation in the range of 0.0–600.0 seconds, where the decimal point is optional. This parameter is optional, and if omitted, the default fade time for the preset is used. The factory set default fade time is 2.0 seconds.



Note: All supported UDP commands begin with **E\$** and all responses begin with **E>**. Both commands and responses end with a terminator [term] that can be **\r** (carriage return), **\n** (line feed), **\r\n** (carriage return line feed), **\n\r** (line feed carriage return), or none. All responses use the same terminator that were sent in the command.

Activate Preset

Command	E\$pst act: dev_num, pst_num, time [term]
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Example: E\$pst act: 1, 4, 5 \r

- This example command activates preset 4 on device 1 with a fade time of 5 seconds.
- Response message sent is E>pst act: 1, 4 \r.

Record Preset

Command	E\$pst rec: dev_num, pst_num [term]
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Example: E\$pst rec: 2, 5 \n

- This example command records the current levels of all sources on the sACN universes that are configured on device 2 and stores them in preset 5.
- Response message is E>pst rec: 2, 5 \n.

All Off

Command	E\$off: dev_num, time [term]
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Example: E\$off: 1, 3 \n\r

- This example command deactivates the preset currently running on device 1 after 3 seconds.
- Response message is E>off: 1, 3 \n\r.

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Contact Resync

Command	E\$resync: dev_num [term]
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Example: E\$resync: 5 \r\n

- This command scans all analog inputs on device 5 and activates the preset for the highest number input that is active.
- Response message is E>resync: 5 \r\n.

Preset Status Query

Command	E\$pst query: dev_num [term]
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Example: E\$pst query: 5

- This command generates a response that identifies the active preset on device 5 and sends it to the IP/port that sent the query.
- If preset 8 is active, the response message is E>pst act 5, 8.
- If no preset is active, the response is E>pst act 5, 0.

Help

Command	E\$help [term]
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Example: E\$help \n

This command generates a response that provides information on these commands and sends it to the IP/port that sent the query.

Installation



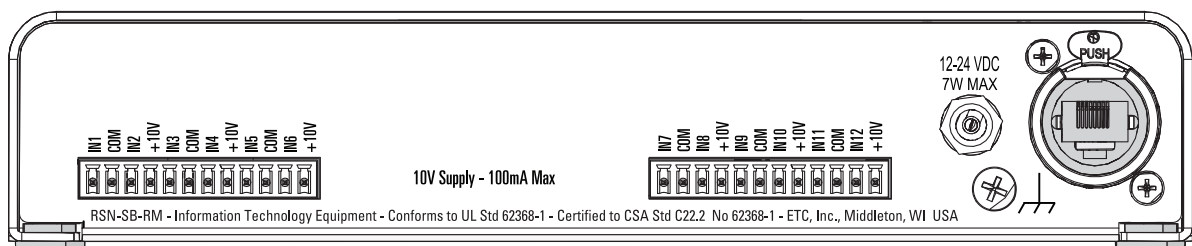
Note: *Installation must follow all national and local codes for electrical equipment.*

Analog Inputs

Wiring for your analog inputs are done on 12-position screw clamp terminal blocks. When terminating your wires, consider the following:

- Strip length: 6 mm (0.25 in)
- Wire size: 0.2–1.3 mm² (24–16 AWG)
- Torque: 0.5–0.6 Nm (4.4–5.3 lb-in)

Reference the pinout diagram on the back of the device for wiring details:



Once you have finished wiring, replace the connectors in their appropriate positions on the device.

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Switch the Network Port

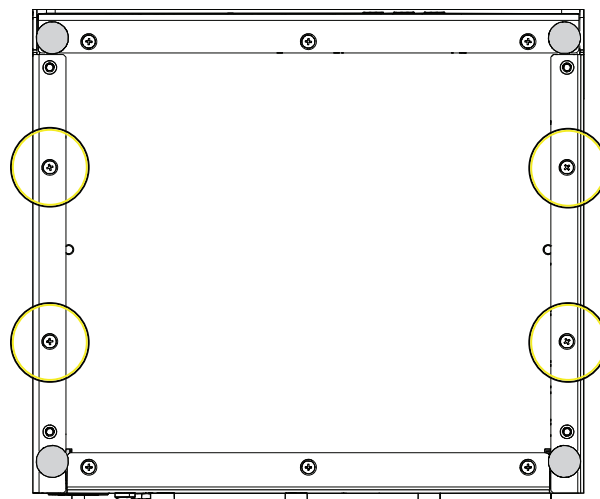
The Response SnapBack can have the Ethernet connector installed on the front or back of the unit. To switch the location, perform the following steps:



WARNING: RISK OF ELECTRIC SHOCK! Power must be off when you perform this procedure.

AVERTISSEMENT : RISQUE DE DÉCHARGE ÉLECTRIQUE! L'alimentation doit être éteinte avant d'exécuter cette procédure.

1. Using a Phillips screwdriver, remove the four screws on the bottom of the device and slide the cover off from front to back.
2. Using a Phillips screwdriver, remove the two screws from the nuts securing the blank plate to the device.
3. Remove the two screws securing the Ethernet connector to the device.
4. Move the Ethernet connector to the desired location on the device and secure with the two screws removed in step 3.
5. Secure the blank plate to the other location using the screws and nuts removed in step 2.
6. Slide the cover back on the device, from back to front and secure with the four screws you removed in step 1.

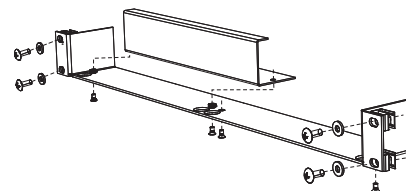


Optional Accessories

The following accessories are available for use with the SnapBack:

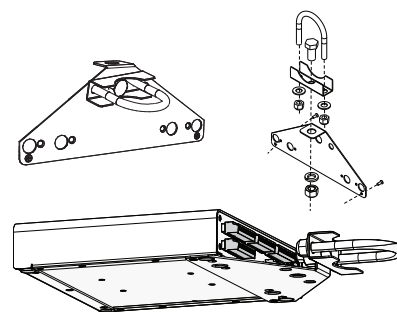
Rack Mount Kit

4260K1001: The Gateway Rack Mount kit is capable of holding up to two devices for mounting into a standard 19 in 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 device 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 device. The bracket attaches to any edge on the bottom of your device.



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Configuration and Operations

The following sections provide information on basic configuration directly from the device. Detailed configuration can be performed using the ETC Concert application, available from etcconnect.com/Concert.

Configure Universes



Note: *When configuring Universes from the SnapBack device UI, you can only select contiguous universes. You can configure non-contiguous universes in Concert.*

1. From the home screen, select **Setup > Universe**.
2. Select **1st Univ.** and enter the sACN universe that is the first of the contiguous universes configured on the device. Press **Enter** to return to the Universes screen.
3. Select **# of Univ.** and enter the number of contiguous universes (1–10) that are configured on the device.

For example, if you enter 55 as the 1st universe and 9 as the number of universes, your device is configured for universes 55–63.

Record Presets

1. From the home screen, select **Setup > Preset**.
2. Select the **Preset #** field and choose which preset you want to record.
3. Select **Record**, and then select **Yes** when asked if you are sure.
4. The **Recording...** prompt appears and then returns to the Presets screen.

This action records all current values for all sources (other than the SnapBack itself) on the sACN universes that are configured on the device and stores them in the preset you selected.

Configure UDP

From the home screen, select **Setup > UDP Settings** to go to the UDP Settings screen. From here, you can configure the following:

Port and Message Receive Mode

1. Select **UDP Port**, where you can then set the UDP receive port (port to which UDP messages are sent from Unicast IP address). By default, this port is 4703.
2. Select **Rx Options** and choose from **Subscriber Only** or **All Incoming**.
 - **Subscriber Only** allows you to limit the UDP messages your device accepts based on subscriber IP addresses.
 - **All Incoming** allows UDP messages to be accepted from any IP address (when sent to the configured port).

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Subscription Devices

SnapBack supports up to two subscribers to UDP status. Any time the status of the SnapBack changes, it reports those status updates to the configured subscribers. In addition, SnapBack can be configured to accept incoming commands from those subscribers only.

Select **Subscription** and then either **Subscriber 1** or **Subscriber 2** to configure the following for a subscription device:

- **0.0.0.0:** In the first row, enter the IP address of the device that is listed as a subscriber.
- **Port:** Enter the UDP port on which the subscriber receives UDP messages.
- **EOM:** Enter the string terminator the subscriber will use. This can be set to None, CR (carriage return), LF (linefeed), CRLF, or LFCR.
- **Enabled:** Select **Yes** or **No** to enable or disable a subscriber.

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 information and sets all properties and presets to default values.

Update Software

The recommended method of updating the device is through UpdaterAtor. The UpdaterAtor application is available for download at etcconnect.com/UpdaterAtor.

There is also an option to update the software from the device 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 device, 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 device, the device must be on the network.*

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UI Flowchart

