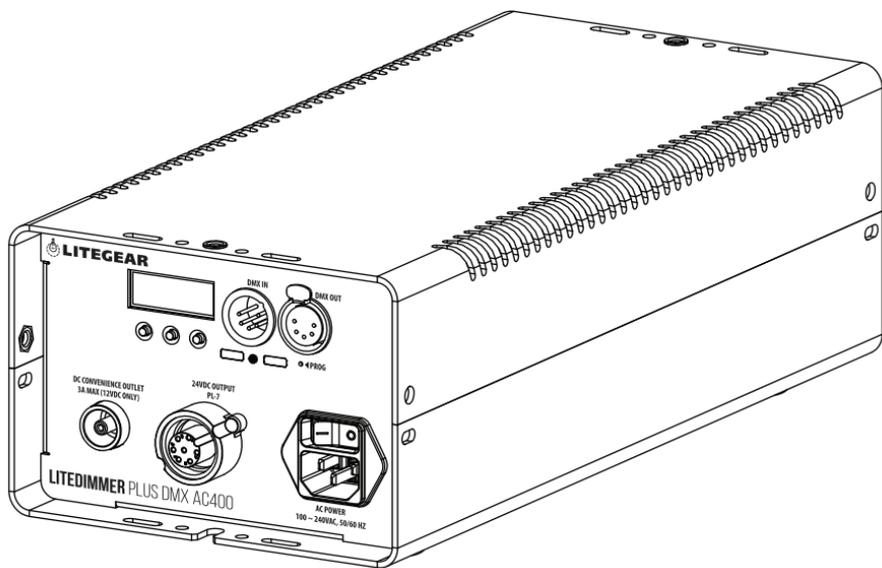


LITEDIMMERTM PLUS

AC400 DMX 4X8



v3.141592



ABOUT

The AC400 DMX 4x8 is the ideal companion for powering LiteMat+ Plus and LiteTile+ Plus units up to 400 watts. Its rugged housing includes several mounting options along with four ¼-20 (SAE) threads for attaching clamps, making it suitable for overhead setups. Locking connections provide AC input and DC output along with DMX pass-through. The unit operates all “Plus+Compatible” Hybrid fixtures up to 400W. The internal electronics include genuine LiteDimmer circuits known for smooth low end dimming, flicker-free operation, and rock solid reliability. Simple manual control is provided through the backlit display along with access to DMX settings. A 12VDC convenience outlet provides power for accessories such as LiteDimmer Wireless receivers or DMX consoles. Powering the AC400 DMX 4x8 is simple. It operates on any AC voltage between 90 and 305VAC and includes unique overload circuit protection called CurrentSense. CurrentSense technology allows for the 400W capacity to be doubled to 800W — still only allowing 400W of power to be used — without causing any damage to the fixture or the dimmer. Because 400W of power is being distributed evenly to the entire 800W-capable fixture(s), the result is ultrasoft light that is perfect for intimate setups. Be sure to see all other Plus+Compatible products that are useable with your new LiteDimmer+ AC400 DMX 4x8 unit.

CONTROLS & CONNECTIONS

The AC400 DMX 4x8 has the following controls:

A) Three Pushbuttons (Functions change depending on the current screen.)

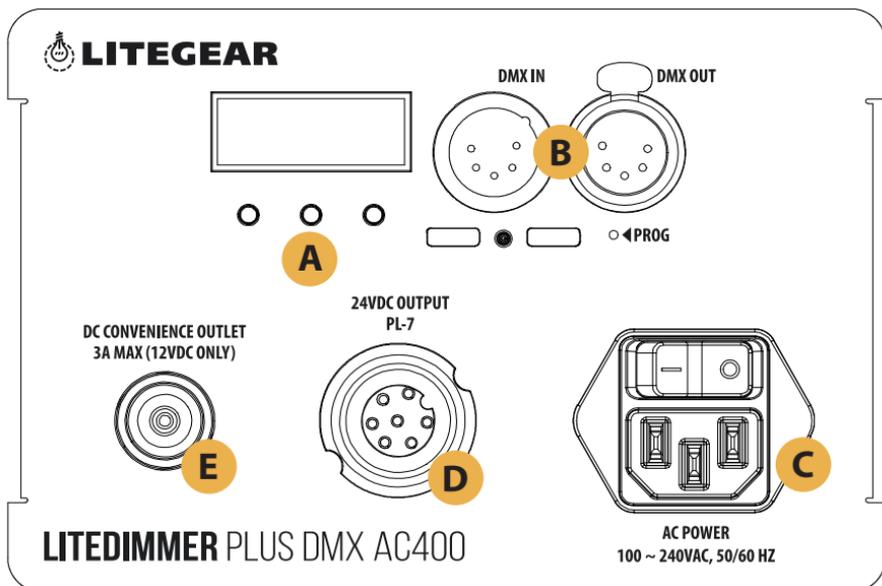
The AC400 DMX 4x8 has the following connections:

B) DMX Input/Output: 5-pin XLR connector

C) AC Power Input (with power switch): C13/C14 plug

D) DC LED Output: PL7 connector

E) DC Convenience Outlet: Barrel (2.1 x 5.5 mm) connector



POWERING THE AC400 DMX 4X8

The AC400 DMX 4x8 runs off of AC voltage (90VAC to 305VAC; 50/60 Hz).

Additionally, the AC400 DMX 4x8 comes equipped with a 12VDC convenience outlet for powering ancillary devices, such as a LiteDimmer Wireless TRX unit (sold separately).

HOW TO INSTALL

To install the AC400 DMX 4x8, complete the following:

- 1) Position the power switch (located above the AC power input) to off.
- 2) Install the AC input lead into the AC power input.
- 3) Connect the load to the PL7 DC output connector. Be sure to observe the power capacity (400W) of the AC400 DMX 4x8.
- 4) If a DMX connection is desired, provide DMX signal to the DMX input of the AC400 DMX 4x8.
- 5) Position the power switch to on.

You are now ready to operate the AC400 DMX 4x8.

When installing the AC400 DMX 4x8, be sure to exploit the various rigging points available, including slots for zip ties, Velcro® wraps, drywall screws, and ¼-20 screws (SAE), just to name a few.

DMX MODE

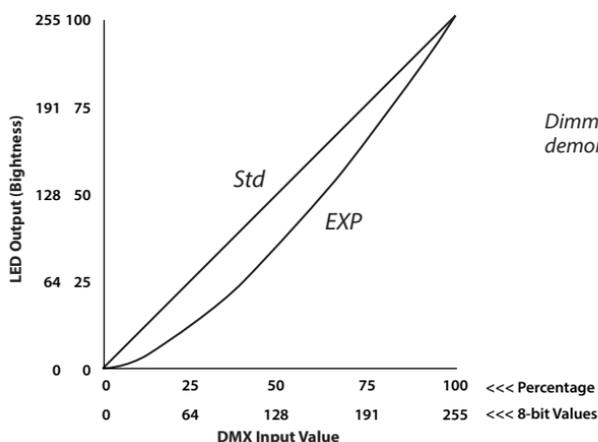
The default operating mode for the AC400 DMX 4x8 is DMX Mode, in which the AC400 DMX 4x8 is always checking for and responding to an active DMX signal.

- There are several settings that can be adjusted during DMX operation (see “**Settings**” section).
- Additionally, the DMX start address must be set (see “**Setting DMX Start Address**” section).
- If no DMX signal is present or if local (non-DMX) control is preferred, change the mode to Local Mode (see “**Local Mode**” section).

SETTINGS

The following settings can be adjusted on the AC400 DMX 4x8:

- Smoothing (**Smooth**)
Smoothing increases resolution during fades and, in doing so, helps to eliminate visible “steppiness” in the dimming range, especially at the low end. If high speed changes are needed, smoothing may be turned off.
- DMX Bit Rate (**DMX**) (*only applies to DMX Mode operation*)
 - A) 8-bit: Accepts 8-bit data streams.
 - B) 16-bit: Accepts 16-bit data streams. 16-bit operation can provide greater resolution. Not all DMX consoles support 16-bit DMX streams. This bit rate should be selected only when it is known that the DMX console is outputting a 16-bit data stream.
- Dimmer Response (**Curve**)
 - A) Standard (**Std**): The standard dimming curve is a linear curve, meaning that for every increase in input intensity control there is an equal increase in output intensity control.
 - B) Exponential (**EXP**): The exponential dimming curve allows for greater resolution in the low end of the dimming range. At the low end of the dimming range, changes in input intensity control translate to relatively small changes in output intensity control at the low end and larger changes as the input intensity control increases.



Dimmer Response chart is for demonstration purposes only.

SETTINGS (cont'd)

To change any of the DMX settings, complete the following steps:



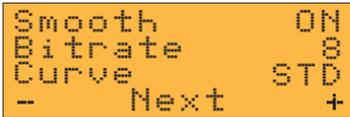
Home Screen (Step 1)



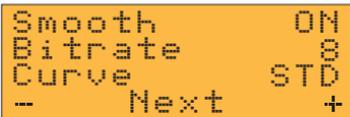
Settings Screen (Step 2)



Settings Screen (Step 3)



Settings Screen (Step 4)

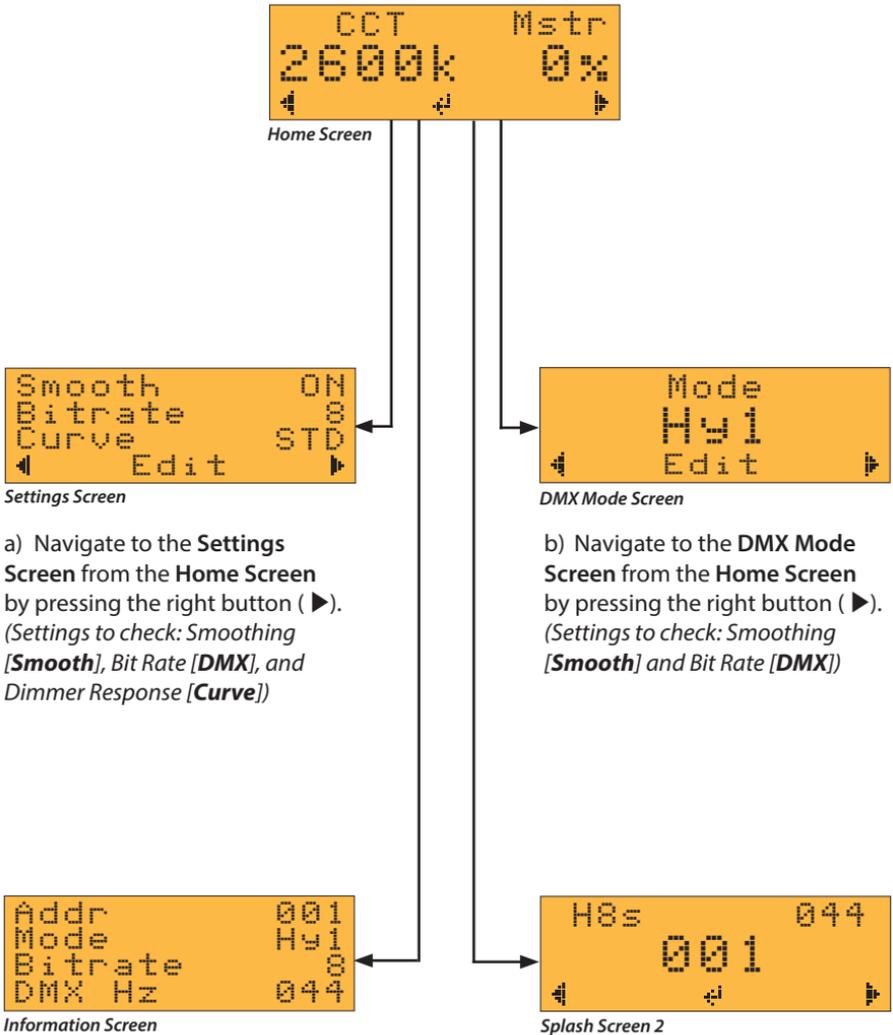


Settings Screen (Step 5)

- 1) Navigate to the **Settings Screen** from the **Home Screen** by pressing the right button (▶).
- 2) Press the center button (**Edit**) from the **Settings Screen** to begin editing the settings. A cursor will begin flashing on the "**Smooth**" line.
- 3) Using the right button (+) and the left button (-), toggle between turning Smoothing (indicated by **Smooth**) on and off. When satisfied, press the center button (**Next**) to advance to the next setting, DMX Bit Rate (indicated by "**DMX**"). A cursor will begin flashing on the "**DMX**" line.
- 4) Using the right button (+) and the left button (-), toggle between 8-bit (**8b**) and 16-bit (**16b**) bit rates. When satisfied, press the center button (**Next**) to advance to the next setting, Dimmer Response (indicated by "**Curve**"). A cursor will begin flashing on the "**Curve**" line.
- 5) Using the left button (-) and the right button (+), toggle between the standard (**Std**) and exponential (**EXP**) curves. When satisfied, press the center button (**Next**) to confirm any changes to the settings.

CHECKING SETTINGS

To check the AC400 DMX 4x8 for both DMX Mode and/or Local Mode parameters, complete any one of the following steps:



a) Navigate to the **Settings Screen** from the **Home Screen** by pressing the right button (▶).
(Settings to check: Smoothing [Smooth], Bit Rate [DMX], and Dimmer Response [Curve])

b) Navigate to the **DMX Mode Screen** from the **Home Screen** by pressing the right button (▶).
(Settings to check: Smoothing [Smooth] and Bit Rate [DMX])

c) Navigate to the **Information Screen**, which is only a splash screen (i.e., it automatically times out), from the **Home Screen** by pressing the center button.
(Settings to check: Smoothing [Smooth] and Bit Rate [DMX])

d) Upon power-up, **Splash Screen 2** (which appears immediately before the **Home Screen**) will display settings before timing out. (Settings to check: Smoothing [Smooth] and Bit Rate [DMX])

UNDERSTANDING YOUR DMX MODE SCREENS



DMX Mode Screen

DMX Mode Screen

H = Hybrid (*Single Circuit**)

8 = DMX Bit Rate (8 = 8-bit, 16 = 16-bit)

s = Smoothing (s = ON, <blank> = OFF)



Settings Screen

DMX Settings Screen

Smooth = Smoothing (s = ON, <blank> = OFF)

DMX = DMX Bit Rate (8b = 8-bit, 16b = 16 bit)

Curve = Dimmer Response (Std = Standard; EXP = Exponential)

* "Single Circuit" means that the entire unit functions as a single unit. For example; you cannot control one half of the luminaire separately from the other half.

SETTING DMX START ADDRESS

To set the DMX start address for the AC400 DMX 4x8, complete the following steps:



Home Screen (Step 1)

1) Navigate to the **DMX Address Screen** from the **Home Screen** by pressing the right button (▶).



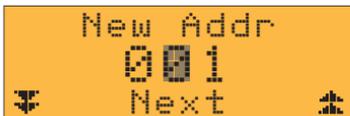
DMX Address Screen (Step 2)

2) Press the center button (**Edit**) from the **DMX Address Screen** to begin editing the DMX start address. A cursor will begin flashing over the lowest digit of the DMX start address.



DMX Address Screen (Step 3)

3) Use the right button (▲) to increase and the left button (▼) to decrease the right digit. When the desired value is displayed, press the center button (**Next**) to advance to the center digit.



DMX Address Screen (Step 4)

4) Repeat Step #3 for the remaining digits.



DMX Address Screen (Step 5)

5) When satisfied with the value of the final digit, press the center button (**OK**) to confirm the DMX start address.

Note: The AC400 DMX 4x8 operates with Hybrid functionality, which means the DMX start address corresponds to the intensity control while the next consecutive address corresponds to the CCT control. For example, if the DMX start address is 357, then DMX channel 357 is intensity and channel 358 is CCT.

CHECKING DMX START ADDRESS

To quickly check the current DMX start address for the AC400 DMX 4x8, complete the following steps:



Home Screen (Step 1)

- 1) From the **Home Screen**, press the center button(↵). This will invoke a screen with information about the current state of operation for the AC400 DMX 4x8, including the DMX start address indicated by "DMXadr," to appear before timing out and reverting back to the **Home Screen**.



DMX Information Screen (Step 1)

LOCAL MODE

To control the AC400 DMX 4x8 locally without a DMX signal, complete the following steps:



Home Screen (Steps 1)



Local Mode Screen (Step 2)



Local Mode Screen (Step 3)



Local Mode Screen (Step 4)



Local Mode Screen (Step 5, 6, & 7)

Power Monitoring Screen (Step 6)

- 1) Navigate to the **Local Mode Screen** from the **Home Screen** by pressing the right button (▶).
- 2) Press the center button (**Edit**) from the Local Mode Screen to invoke local control of the AC400 DMX 4x8. A cursor will begin flashing over (**Mstr**) master intensity in the top right of the screen.
- 3) Use the right button (+) to increase and the left button (-) to decrease the master intensity. Master intensity is displayed in percentage (0% to 100%). When the desired intensity is displayed, press the center button (**Next**) to advance to Kelvin (**CCT**) adjustment.
- 4) Use the right button (+) to increase and the left button (-) to decrease the CCT. CCT is displayed in degrees Kelvin (2600K to 6200K). When the desired Kelvin is displayed, press the center button (**Next**) to confirm CCT adjustment.
- 5) To continue making master intensity (**Mstr**) and/or Kelvin (**CCT**) adjustments, press the center button (**Next**), and repeat Steps #3 and #4.
- 6) Press the right button (i) To view dimmer power monitoring information such as:
 - Operating temperature (**Temp**) in °F and °C
 - Operating voltage (**Volts**) in volts DC
 - Output current (**Pwr**) in amps*Note: This screen will timeout and revert to Step #3. Repeat Steps #3 and #4.*
- 7) To exit Local Mode and revert to DMX operation, press the left button (◀).

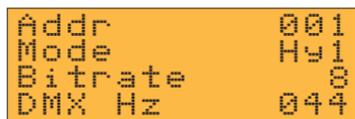
TROUBLESHOOTING

If the AC400 DMX 4x8 is experiencing irregular operation, checking the following may be able to help identify the problem(s):

- **DMX Frequency (DMX Hz)**
 - With low DMX refresh rates (less than 20 Hz), steppiness (especially on the low end of the dimming range) is possible. The maximum refresh rate when sending information for all 512 channels of a DMX universe is 44 Hz. Higher refresh rates are possible when sending less than 512 channels of information. A DMX frequency of 0 indicates that no DMX signal is being received.



Splash Screen 2



Information Screen

Where to find this information:

Splash Screen 2 and Information Screen

- Navigate to **Splash Screen 2: Splash Screen 2** appears immediately after **Splash Screen 1** without any prompting.
- Navigate to the **Information Screen**, which is only a splash screen (i.e., it automatically times out), from the **Home Screen** by pressing the center button (↵).

- **Operating Temperature (Temp)**
 - The AC400 DMX 4x8 is comprised of a dimming element and a power supply element. The maximum operating temperature of the power supply element is 158°F (70°C). The dimming element can handle slightly higher temperatures. An overly high operating temperature could cause component failure. Be sure to monitor the temperature, and ensure that the AC400 DMX 4x8 is in an environment that allows it to cool properly.

Where to find this information:

Power Monitoring Screen

- Navigate to the **Power Monitoring Screen** from the **Home Screen** by pressing the right button (▶).

Power Monitoring Screen

- **Operating Voltage (Volts)**
 - The operating voltage of the AC400 DMX 4x8 is 24VDC. Large deviations from this voltage could cause issues.

Where to find this information:

Power Monitoring Screen

- Navigate to the **Power Monitoring Screen** from the **Home Screen** by pressing the right button (▶).

Power Monitoring Screen

TROUBLESHOOTING (cont'd)

- Output Current (Pwr)
 - The maximum output current of the AC400 DMX 4x8 is 16.67A. Excessive current could cause damage to components and ultimately dimmer failure.

Where to find this information:

Power Monitoring Screen

— Navigate to the **Power Monitoring Screen** from the **Home Screen** by pressing the right button (▶).

Power Monitoring Screen

- Input Control Values(Ch1, Ch2, Ch3, Ch4) — For internal purposes only. You may be asked by a LiteGear Service Technician to refer to this screen.
 - If the AC400 DMX 4x8 is experiencing irregular operation, verify DMX channel output. Valid DMX channel output values range from 0 to 255.

Where to find this information:

Power Monitoring Screen

— Navigate to the **Power Monitoring Screen** from the **Home Screen** by pressing the right button (▶).

Debugging Screen

- Blank Screen
 - If the screen is on but not displaying any information, press the center button.
If this does not solve the problem, perform a factory reset (see “**Factory Reset**”).

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FACTORY RESET

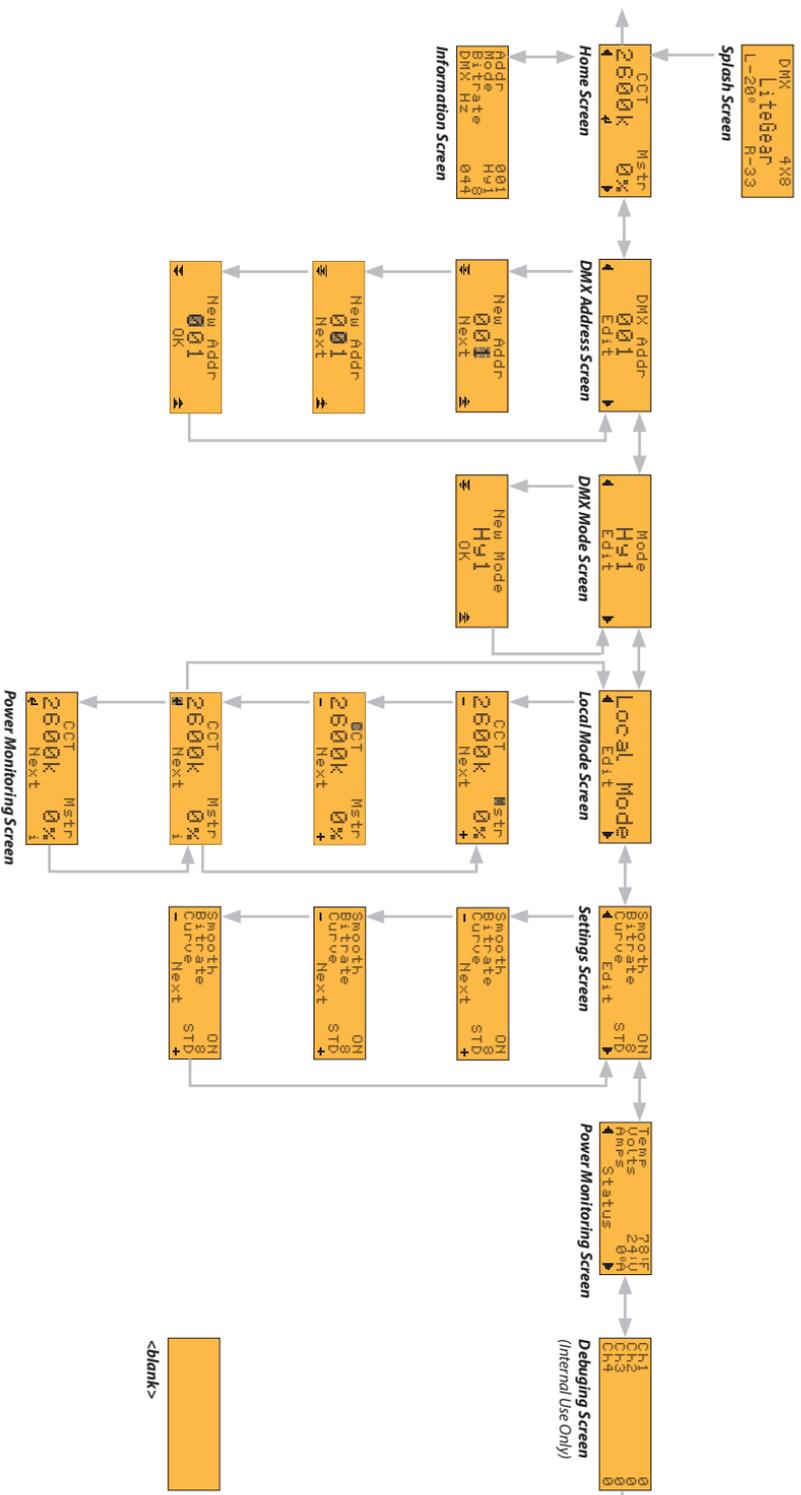
If the AC400 DMX 4x8 is experiencing irregular operation, a factory reset may be needed. Resetting the operating system can restore normal operation in many cases. To perform a factory reset, perform the following steps:

- 1) Turn the AC400 DMX 4x8 off by flipping the switch above the AC input.
- 2) Press and hold the left button.
- 3) While holding the left button, turn the AC400 DMX 4x8 on by again flipping the switch above the AC input.
- 4) The device will power up to a factory reset screen. When prompted, confirm a factory reset by pressing the right button, which corresponds to “Yes.”
- 5) The device will then begin flashing a red indicator light and will prompt to be restarted. At this time, cycle power going to the AC400 DMX 4x8 to finish the operation by turning the AC power switch off and then back on.

Your preferences and settings may now have to be reset.

If the AC400 DMX 4x8 is still experiencing irregular operation after a factory reset, contact LiteGear Technical Support for assistance.

DISPLAY SCREEN FLOW CHART



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