- - PRELIMINARY - -

FireFly FF-301 Instructions and Specifications

QUICK START

If you're one of those folks that just wants to start using your new FF-301 now and read the instructions later, it's quite easy to be up and running in literally seconds. Three easy steps are all that are necessary for professional lightning simulation.

1) Connect lights (up to 1500 watts per channel) to the left and right channel socks on the rear of your FF-301

2) Connect your amplifier or amplified speakers to the 1/8" stereo AUDIO OUTPUT jack on the rear of the lightning simulator.

3) Connect AC power.

No other connections or adjustments are required for basic operation.

WHEN POWERING UP…

Upon power up, the FF-301 goes through a quick self-test and the Lights-Alive logo appears. After a total of approximately three seconds, the system is fully functional. If the audio source was in the loop mode at power down, the 301 will begin operation with no human intervention.

CUSTOMIZED SETTINGS

Five pushbuttons allow you to fully customize your FF-301 settings. Pressing the center MENU button gives you access to twelve (12) additional windows. Pressing the UP and DOWN buttons scrolls through the windows. The (+) and (−) buttons alters the setting for that particular window. Pressing MENU again will exit the program mode and save our changes. The windows in order are:

POWER OFF
Press the (+) button for a soft power down. In this mode, the simulator stops all audio and does not trigger any lights. The LCD panel light is also extinguished. The FF-301 will immediately resume operations when any of the five pushbuttons are pressed.

LEFT LEVEL

The left level sets the sensitivity of that lightning channel. If it is set too low, sound will not trigger "lightning". If it is set too high, the lights will be on constantly during most "lightning strikes". The range of this control is 0-25. The factory default setting is 15.

RIGHT LEVEL

The right level is identical to the above, except it adjusts the right channel.

DIMMER DEPTH (SENSITIVITY)

The dimmer depth adjusts when and how deeply the dimmer channel will dim connected lights during hard "lightning strikes". Like the lightning channels, the range is 0-25 with a factory default of 15.

STROBE SENSITIVITY

Your FF-301 can control most professional strobes via a low voltage strobe control channel. The stronger the "lightning strike", the faster the strobe will fire. This adjustment allows you to set the response per your personal preference. Like all other sensitivity settings, the range is 1-25 with a factory default of 15.

LEFT THRESHOLD

Threshold settings adjust the minimum voltage applied to your lights at all times. Proper adjustment increases the sensitivity and range of lights connected to your FF-301. Adjustment is achieved by increasing the setting until your lights just begin to glow, then reducing the setting until they go out. This is a critical adjustment with a range of 0-50. Factory default is 4, but the number may be considerably higher, depending on your lights.

RIGHT THRESHOLD

Same as above, except that it adjusts the right channel.

MAXIMUM DIMMER LEVEL

This setting adjusts the maximum brightness of the dimmer channel. The range is 1-20 with a factory default of 10.

AUDIO SOURCE

Audio source options include LOOP, TRIGGERED, EXTERNAL and NONE. LOOP will provide an uninterrupted audio loop, thus providing continuous lightning. TRIGGERED allows the use of any Lights Alive Mantis Sensor or most third-party sensors. Once triggered, the 301 will provide lightning for forty (40) seconds, then it resets and waits for the next trigger. EXTERNAL allows you to connect your own audio source. NONE silences the audio and stops the lightning.

BACK LIGHT
With a range of 0-10 and a factory default of 9, this adjustment controls the brightness of all menu screens, except the main "run" window.

MAIN SCREEN BACK LIGHT
Range is 1-10, with a factory default of 1, this adjustment if for the main "run" window. Generally this channel is adjusted to dim the screen while running.

FACTORY RESET
If you get lost and prefer to start over, FACTORY RESTART will return all settings to a factory default that works well for most types of lights.

ADVANCED OPERATION

The FF-301 will work right out of the box with no adjustments as mentioned in the QUICK START section. However, you can customize some of the settings to optimize the system to better fit your needs.

LEVEL adjustments should be set so that lights react to subtle sounds, yet lights aren't on solid during a lightning strike. For the dimmer channel, the **LEVEL** will determine the depth of dimming or how dim the light will become during a strike.

THRESHOLD controls are one of the most important settings. Set too high, the lights will always glow. If set too low, the system will still work, but the lights will seem more "choppy" and they will lose sensitivity to subtle sounds. Always adjust this control until your lights just begin to glow, then back it down a step or two.

MAXIMUM DIMMER LEVEL allows you set the maximum brightness of the lights connected to the dimmer channel. You can now dim those lights, while still having the FF-301 flicker and dim them more during a "lightning strike". This adjustment is purely a matter of preference.

AUDIO SOURCE defaults to internal, so no adjustment is necessary to operate the FF-301 out of the box. However, you may prefer your own thunder track audio. If so, you can select EXTERNAL and connect your CD/DVD deck, portable CD player, MP3 player, iPod, iPad, laptop or other line level or earphone level audio source. Most of these sources will require their levels to be set fairly high, then you can tweak the level using the level controls within the FF-301.

You may also like the idea of lightning on demand. When the AUDIO SOURCE is set to triggered and you have connected a Lights Alive brand Intelligent Sensor or trigger through our proprietary LADC connection, there will be a 40-second burst of thunder and lightning each time the sensor is tripped. Most third party sensors may

also be used by connecting to the screw terminals located on the back of the FF-301. A simple switch closure is all that is required, making it possible to use pushbuttons, pressure mats or other basic trigger devices. We also provide regulated 12volt DC at up to 250mA at the screw terminals to power external triggers.

While the use of strobes for lightning is strongly discouraged as the primary light source, the FF-301 does offer a strobe control channel. When used to supplement ProLight-200 LED fixtures or incandescent light, strobes can add to the light intensity and provide an additional effect. Only professional strobes with low voltage control circuits should be used. Strobes should be connected with industry standard cables utilizing ¼" TR (mono) plugs on both ends. Assuming your strobe permits, multiple strobes may be daisy-chained together per the instructions with your particular strobe. Strobes should NOT be connected via the FF-301's AC outlets.

SPECIFICATIONS AND FEATURES

MAXIMUM POWER HANDLING -
 Left Lightning Channel – Up to 1,500 watts
 Right Lightning Channel – Up to 1,500 watts
 Dimmer Channel – Up to 750 watts
 TOTAL SYSTEM – <u>All lights combined must not exceed 3,000 watts</u>

ELECTRICAL ISOLATION – Low voltage is provided by an isolated switch mode power supply. Solid-state optical isolation is also utilized to separate low voltage and audio circuits from AC power circuits.

SAFETY FEATURES – A user accessible master fuse (20 amp) is located on the back panel. Individual channels are internally fused. Internal surge suppression is also included.

LIGHTS SUPPORTED – Lights Alive ProLight-200 LED (preferred), incandescent, halogen plus many dimmable LEDs and dimmable compact fluorescent bulbs.

THRESHOLD – This feature extends the life, improves response time and increases sensitivity of incandescent and halogen bulbs. It also improves apparent sensitivity of LED fixtures.

FACTORY DEFAULT – When in doubt, start over. The factory default option allows you to quickly return to known working values and be back in operation within seconds.

CONTROL METHOD – Digitally generated phase cut dimming. The amplitude (volume) of the thunder determines the intensity of the light.

ELECTRICAL REQUIREMENT – 120 volts, 60 Hz, up to 20 amps (depending on lights connected).

PREFERRED ENVIRONMENT – 0ºF to 100ºF, 10-90% (non condensing) relative humidity.

WARRANTY – Lights Alive provides an unprecedented five (5) year limited warranty on all FireFly models. We will repair or replace (our option) any unit that is found to be defective in materials or workmanship within five (5) years of the date of purchase. This warranty does not apply to units that have been physically damaged, improperly connected, altered, subjected to water, power spikes or any other issue beyond the control of Lights Alive. No other warranty is expressed or implied. By using this equipment, you understand and agree that Lights Alive will not be responsible for injuries or damages, whether direct or indirect, even if they are a result of our negligence.

To obtain warranty service, please call or email support@lights-alive.com for a return authorization number, then return the unit, prepaid, including a copy of your original invoice and a detailed description of the problem to Lights Alive at the address listed below. For your protection, we suggest insuring your package and using a method that will provide tracking information. If we find the unit to be defective and under warranty, we will promptly repair or replace it. If it is a non-warranty issue, we will contact you with details and options.

A WORD OF WARNING

Your FF-301 is equipped with security screws to prevent personal injury and/or damage to your system. There are no user serviceable parts inside. Any attempt to defeat these security screws to gain entry into the enclosure will void your warranty. In addition, opening the enclosure could subject you to high voltage that could cause serious injury or death.

SUPPORT

If you need help with your FF-301, Lights Alive is there for you. Please feel free to contact us at:
      Email: Support@Lights-Alive.com
      Phone: 317.280.3000, option 2
      Web: www.Lights-Alive.com