

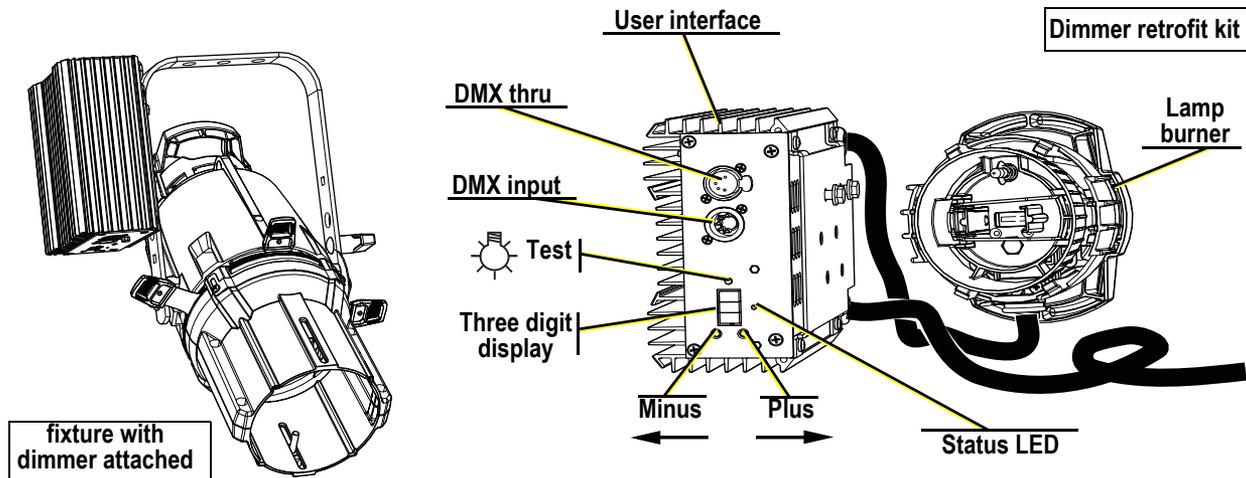
# ETC® Programming Guide

## Source Four® Dimmer/ES750/ES1



### Overview

The Source Four Dimmer, ES750 and ES1 are universal voltage input, 115V or 230V pulsed DC output, single dimmers. As a companion to Source Four LED, the Source Four Dimmer, ES750 and ES1 help to simplify the layout for systems where heavy use of LEDs, moving lights, and other self-dimming fixtures are planned. They also give additional efficiency benefits for 230V markets. The dimmers support the ANSI RDM E1.20 protocol (RDM) allowing remote configuration and monitoring of the dimmer over DMX wiring infrastructure.



**Note:** DMX is not self-terminating.

### Programming

#### Introduction

At the time of initial power up the software version number will first be displayed. Once the dimmer has booted, there is the option to either manually set the DMX address or adjust the light output intensity. Both functions can be performed through the user interface on the dimmer. The dimmer is also capable of RDM discovery and configuration. RDM functions include reporting status feedback, selecting the output curve and setting the DMX start address.

#### Setting DMX address

The DMX address will appear on the user interface display on two occasions:

- At time of initial power up
- After initial power up if the display is blank and either the plus or minus button has been pressed.

To change the DMX address, push the plus or minus arrow button. The DMX address will increase or decrease with acceleration based on length of time held down. This can also be done through the RDM interface.



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7145M2400 ■ Rev E ■ Released 2013-02 ■ ETC intends this document to be provided in its entirety.

# ETC Programming Guide

## Source Four Dimmer/ES750/ES1



**Note:** *If data loss is detected, the lamp output will be held at the last level specified.*

### Setting Intensity Level

- Pushing the test button will cause the fixture to enter test mode. This is true even if the current user interface is showing the DMX channel on the display. The current 0-100% light output level will be shown on the three digit screen. There is no time-out for test mode.
- Pressing and holding the test button will execute a test fade from 0-100%
- To exit test mode, press and release the test button. When exiting test mode the screen will go blank, DMX control will be restored and the dimmer will return to the current DMX address.

### RDM and User Interface Error Notifications

- Over Current Notification - Output wiring short
- No Load Notification - Lamp has burned out or has been removed
- Over-temp - Fixture has exceeded operating temperatures and will shut down



**Note:** *Dimmer will automatically re-enable when fixture is back within operational temperature range. No user intervention is required to clear the error.*

### LED Status Indicator

LED Color	Description
Solid Green	Normal operation
Slow Blinking Green	No DMX detected
Fast Blinking Green	Invalid or incorrectly wired DMX
Solid Red	Error condition exists

### Switching Output Voltage

The dimmer can be configured to output 230V in place of the default 115V.

#### To view the current output voltage:

- Step 1: Press and hold both the plus and minus buttons. The output voltage will be shown on the three digit display.

#### To change the current output voltage:

- Step 1: Press and hold both the plus and minus buttons.  
Step 2: While holding the plus and minus buttons, hold down the test button. The voltage that you will be changing to will appear blinking, then a 5-count, count down will be shown.

Once the countdown is complete, the new voltage will be applied and saved.



**WARNING:** *Make sure your lamp voltage matches your dimmer voltage. Default dimmer output regulates to 115V at 100%. A dimmer set to 230V will damage a 115V lamp.*

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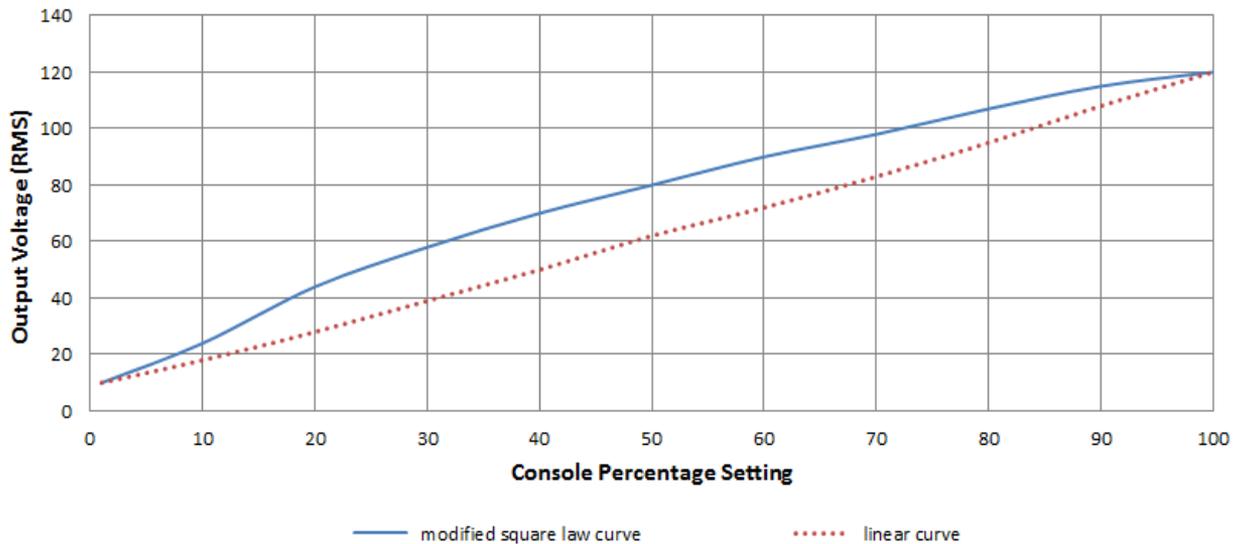
## Source Four Dimmer/ES750/ES1

### Dimmer Curves

There are three available dimmer curves that can be set on the dimmer. These curves can only be set through the RDM interface.

- ETC Modified Square - A more uniform response to control level changes. This is set as the default curve.
- Preheat - Same as Modified Square but allows for a minimum level to be set to the curve to maintain a warm lamp, reduce inrush and lengthen lamp life.
- Linear - matches control level increase to dimmer voltage 1:1.

### Dimmer Curves



### Output Rating

Refer to the table below to determine the maximum wattage lamp you can use with your dimmer.

Input Voltage	Output Voltage Setting	Maximum Wattage
115V	115V	750W
230V	115V	750W
230V	230V	1500W



**WARNING:** *The ES750 can ONLY be wired to tungsten lamps. Wiring to any other load type will cause dimmer failure.*



**Note:** *To maintain a correct dimmer curve, the dimmer must have a minimum load of 100W.*