

## Parts & Electrical Information

### XTL lighting systems (gray base bulbs)

**Certified to current FAA Advisory Circular 150/5345-44**  
Specification for Runway and Taxiway Signs

#### LUMACURVE XTL System

The LUMACURVE XTL system maintains a constant sign brightness in accordance with FAA A/C 150-5345-44 with appreciably higher efficiency relative to traditional lighting systems, and is available in new signs or in kit form for retrofit. This system ensures delivery of a constant voltage to the 10V/20W halogen lamps at all constant current regulator (CCR) current steps without internal modification (true for both high (2.8A - 6.6A) and medium (4.8A - 6.6A) intensity circuits.) The lamps authorized for use in this system are Standard Signs, Inc. P/N #"XTL Quartz" with 10V/20W Bipin quartz halogen lamp & custom ceramic adapter base. They are available directly from Standard Signs, Inc.

**Important:** *The LUMACURVE XTL lighting system is designed exclusively for FAA styles 2 & 3 operation on a series circuit together with non-sign fixtures, such as edge lights, where the sign brightness control components are necessary to maintain constant sign brightness regardless of CCR step. Non-sign resistive load must be present on the circuit for proper CCR operation. Design consideration should be given to CCR loading at all current steps. XTL Signs should NOT be installed on a circuit that powers only signs. For circuits dedicated to signs, please request LUMACURVE lighting systems designed for FAA style 5 operation.*

**DO NOT CHANGE LAMPS WITH SIGN ENERGIZED.** A burned out lamp causes an E610 controller to reach max power and exceed the lamps' rated voltage. Inserting a replacement lamp in an energized sign will shock the lamps and damage filaments.

#### Installation:

System lamp voltage is factory set but we recommend that one sign per CCR be spot checked with a DC voltmeter after installation. Lamp voltage is read across the white and brown leads at the sign terminal strip on the light bar (P/N #CLT 8A). If voltage varies from recommended settings (9.5V at lowest CCR step for all size signs), all signs on that circuit should be checked and adjusted. To adjust, turn the small screw in the upper left corner of the printed circuit board (E610) controller mounted on the inside of the end panel (P/N #CLT-4).

**Note:** *The adjustment screw is designed only for fine-tuning and does not function as a dimmer. Signs must not be operated at less than 9.5 volts.*

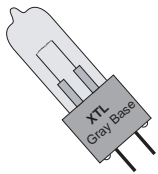
There is a 10-minute warm-up period for lamps to come to set voltage but sign brightness meets FAA specifications even at cold voltages.

### STANDARD SIGNS, INC.

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# LUMACURVE PARTS LIST



## XTL Lighting Systems

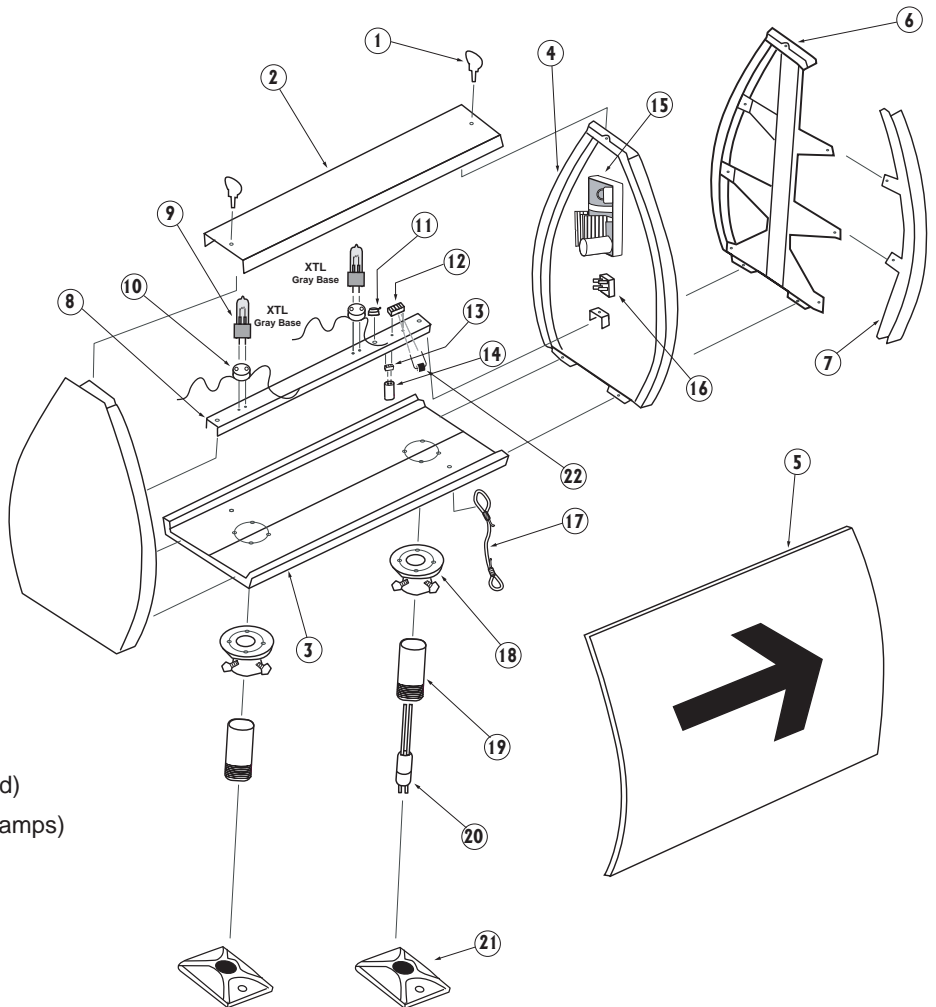
(Gray Base 10V/20W quartz halogen lamps)

**Certified to current FAA Advisory Circular 150/5345-44**

Specification for Runway and Taxiway Signs

View our FAA Certificate of Conformance

Item	Description
1.	340/345 Turn Fastener
2.	*CLT-2 Cover
3.	*CLT-3 Base
4.	*CLT-4 End Panel
5.	*CLT-5 Legend Panel <sup>1</sup>
6.	*CLT-6 Multi-Module Insert (Tree)
7.	*7-A Face Insert Channel <sup>1</sup> (Track)
8.	*8-A Light Bar
9.	XTL Quartz XTL 10V/20W Quartz Lamp
10.	E400A Lampholder
11.	480 Cable Clamp
12.	420 Terminal Strip
13.	420 Terminal Strip (section)
14B.	E611 Capacitor for E610 (2 required)
15B.	E610 PCB Controller, 75 Volt (1-8 lamps)
16.	E540 Bridge Rectifier 35A/1000V
17.	CLT-19 Tether
18.	130 Slipfitter
19.	*140 6" Frangible Coupling
20.	430 Cord & Plug
21.	15 Floor Flange
22.	E416 Surge Protector



One lamp systems only require:

E550 Resistor 3 OHM 25w (and mounting brackets)

**22** Enlarged View  
E416 Surge



### To help in placing your order:

\*Prefix part number with one of the following sign sizes: "S" (small/ size 1), "M" (medium/ size 2), "L" (large/ size 3 & 5)

<sup>1</sup> Specify one of the following sign types: L-858Y ("Y"ellow), L-858R ("R"ed), L-858L ("L"ocation), or Blank/ Black