

**NOTE TO SPECIFYING ARCHITECT REGARDING
SECTION 11087-48
PERFORMANCE LIGHTING SYSTEM
(48 DIMMERS)**

Complete performance lighting system of intermediate size (dimmers, control, distribution, and light fixtures).

Recommended for educational theatres with ambitious theatre program and a moderate budget.

Phone 800-548-8982 for clarification or assistance. No charge, of course.

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PART 1-GENERAL

- 1.01 Furnish and deliver a stage lighting control system described hereinafter. Equipment shall conform to all applicable provisions of local electrical code, National Electric Code, and NBFU current issue. The lighting control system specified as the standard is Janson-ETC digital lighting system (Janson Industries 800 548 8982; FAX 330-455-5919).
- 1.02 Provide and install dimmers and controls as specified herein and as shown on the drawings. Contractor is to receive, mount, connect, and place all equipment in operation. Contractor will furnish all conduit, wire, connectors, and hardware, and other incidental items necessary for a complete and properly functioning lighting and dimming system.
- 1.03 Shop drawings shall be submitted for approval within 30 days after receipt of contract. No fabrication of equipment is to proceed prior to approval of these drawings. Submittal package shall contain six (6) sets of the following.
- A. Complete material list.
 - B. Sets of catalog cut sheets of standard equipment.
 - C. Sets of shop drawings detailing all mechanical and electrical equipment including riser diagrams, wire counts, internal wiring and physical dimensions of each item.
- 1.04 Prime electrical contractor shall furnish and install new dimmer panel and connect the power and the load circuits to the new dimmer panel. Furnish and install and connect all circuits that terminate in gridiron junction boxes, wall boxes, outlet boxes, etc, as well as all dimmable circuits that home-run to dimmer rack SR..
- 1.05 Base bid includes 96 performance dimmers (48 modules), which include all dimmable house light circuits plus all house dimmer modules required.

PART 2-MATERIALS

- 2.01 LIGHTING CONTROL SYSTEM TO CONSIST OF:
- A. Dimmer Rack Model Sensor to contain:
 - 1-SR 24 dimmer enclosure for 24 modules designed for 3 phase, 4 wire and ground operation at maximum of 400A, 120/208V, 60 HZ AC.
 - 12-D20 dual dimmer modules (24 dimmers)
 - 12-AFM Air Flow modules or constant breaker modules
 - 1-CEM 48 Electronic modules
 - 1-Locking door with filter
 - B. Express 24/48 Control Console-96 channels x 1,024 dimmers-to contain:
 - 24-Channel two-scene operation
 - 48-Channel one-scene operation
 - 96-Maximum channel count
 - 600-Cues
 - 500-Groups
 - 1-Set effects with 100 steps each
 - 2,000-Macros/Regions
 - 10 pages of 24 Submasters
 - 2-Timed/Manual fader pairs
 - 1-3 1/2" Diskette drive
 - 1-Single VGA output
 - Printer port
 - UL, cUL, CE listed

- C. Sensor CEM (for use with Sensor Rack)
- D. Accessories:
 - 1-CD-25DMX Digital control cable
 - 2-ECPB-DMX Console plug-in stations
 - 1-Color VGA monitor
 - 1-Control console dust cover
 - 1-Monitor dust cover
- E. 1-Model SB08 Sensor backup station
- F. 1-Sensor handheld controller
- G. Provide Model ELTS for emergency power to 8 designated circuits

2.02 DISTRIBUTION EQUIPMENT

- A. Connector Strips
 - 1 CS-40-12BPR31 Connector strip 40'-0" Long with 24-18" pigtails and 20A PIN connectors wired on 12-20A circuits plus 9 hanging brackets complete with D-JB8 Gridiron junction box 1-45 ft run of 12/30, SO multiconductor cable, cradles and standard Kellems strain relief(circuit aabb....)
 - 1-CS-40-8BPR31 Connector strip 40'-0" Long with 16-18" pigtails and 20A PIN connectors wired on 8-20A circuits plus 9 hanging brackets complete with D-JB5 Gridiron junction box, 1-45' run of 12/26 SO multiconductor cable, cable cradles and standard Kellems strain relief (circuit aabb....)
 - 1-CS40-10BPR31 Connector strip 40'-0" Long with 20-18" pigtails and 20A PIN connectors wired on 10-20A circuits plus 9 hanging brackets complete with D-JB6 Gridiron junction box, 1-45' run of 12/20 SO multiconductor cable, cable cradles, and standard Kellems strain relief. (Circuit aabb....)

NOTE: All pipe and rigging is specified in a different section of the specifications.

- B. Pigtail and Outlet Boxes
 - Surface mounted junction boxes at stage roof steel (3) D-JBO5-30
 - (1) 12 circuit gridiron junction box
 - (1) 8 circuit gridiron junction box
 - (1) 10 circuit gridiron junction box
 - (18) Pipe mounted outlet boxes each with 2-20A PIN connector complete with U-bolts for mounting. (Each box has 2 outlets; 1 circuit) These front-of-house boxes shall be wired using conduit. Connector strip is not required.
 - D-OB-4-B-U

2.03 THEATRE FIXTURES AND ACCESSORIES

- A. Focusing Units
 - 4-ETC Source Four 19 degree ellipsoidal with HPL 575 lamp, installed 2 P&G connector, c-clamp, colorframe and safety cable
 - 4-ETC Source Four 26 degree ellipsoidal with HPL 575 lamp, installed 2 P&G connector, c-clamp, colorframe, and safety cable
 - 4-ETC Source Four 50 degree ellipsoidal with HPL 575 lamp, installed 2 P&G connector, c-clamp, colorframe, and safety cable
 - 24-ETC S4PAR-EA-B Source Four PAR spotlights complete with c-clamp, colorframe, safety cable, 4 lens set, 1M lead with 20A pin connector and HPL 575 lamp
 - 12-ETC 426J-B Source Four JR ellipsoidal spotlights complete with c-clamp, colorframe, safety cable, 1 M lead with 20A pin connector and HPL 575 lamp
 - 12-ETC 450J-B Source Four JR ellipsoidal spotlights complete with c-clamp, colorframe, safety cable, 1M lead with 20A pin connector and HPL 575 lamp
 - 12-Altman 165Q 6" fresnels complete with c-clamp, colorframe, safety cable, 1M lead with 20A pin connector and 500W BTL lamp
 - 10-Altman Sky cyc-01 complete with c-clamp, safety cable, 1M lead with 20A pin connector and 1500W FDB lamp

- B. Follow Spotlight
1-Altman Follow Spotlight, Comet with lamp, and 25 ft of feed cable, iris, color boomerang, tripod, and dolly

2.04 MANUFACTURER'S SERVICES:

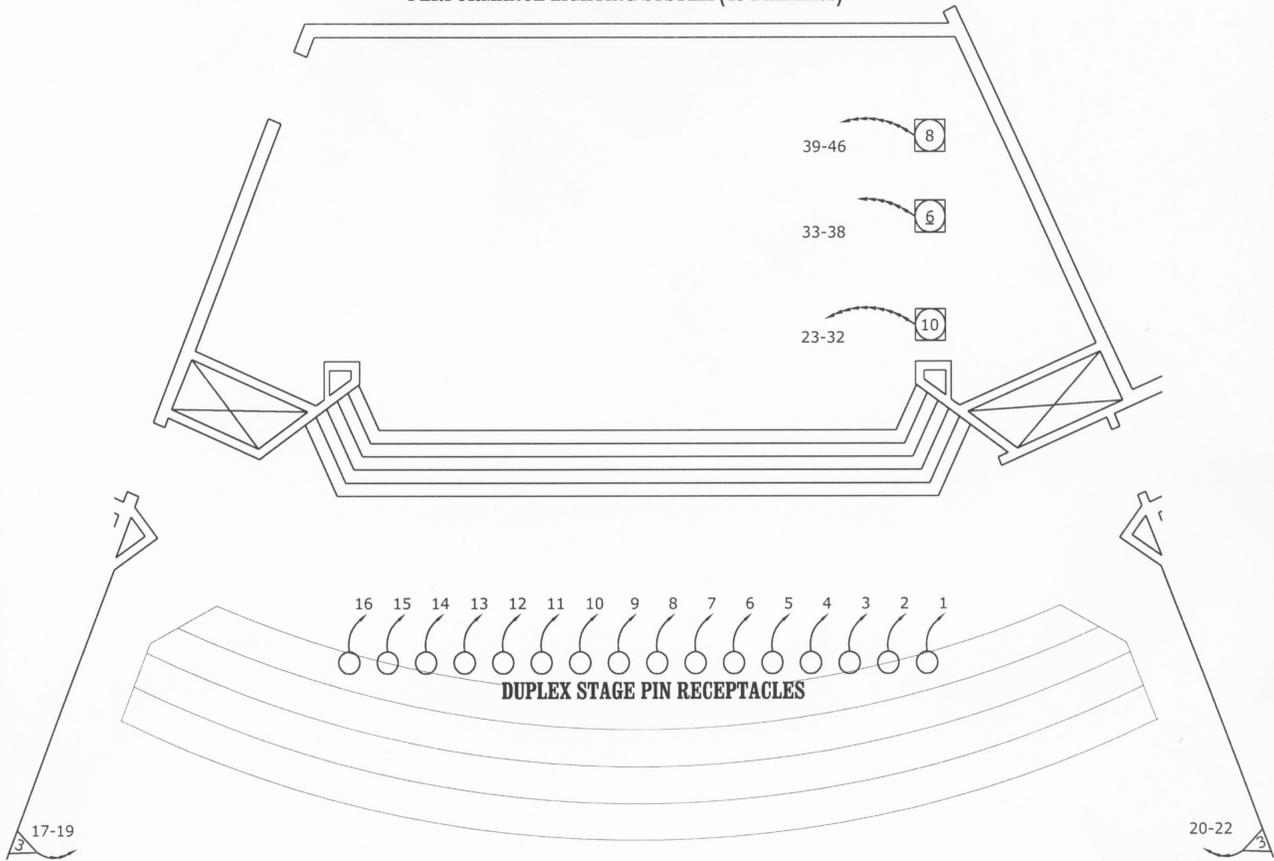
- A. Seven sets of B size drawings for approval submitted within 2-6 weeks of receipt of order.
- B. Two-year limited warranty on parts and workmanship.
- C. Services of a factory engineer to energize system and instruct user personnel. Such services shall be supplied on 21 days notice.
- D. Production requires 1-6 weeks for delivery of equipment after receipt of written approval and release.
- E. Four sets of Operation Manuals.

PART 3—EXECUTION

3.01 Furnish all of the above equipment complete with all lamps, color frames, plastic color mediums, cords, plugs, cradles, pipe clamps and all other equipment necessary for a complete installation ready for use. All equipment shall be furnished and installed completely, and shall be left ready for use. All equipment furnished and installed shall be consistent with requirements of the National Electric Code.

END OF SECTION

**SECTION 11060
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☐ = GRIDIRON JUNCTION BOXES:

*NUMBER INSIDE SYMBOL INDICATES NUMBER OF CIRCUITS ON TERMINAL BLOCK.
*ARROWHEADS REPRESENT NUMBER OF CIRCUITS.

SUMMARY OF PERFORMANCE LIGHTING DIMMABLE CIRCUITS

- * 1 - 16 = HOUSE LIGHTS
- * 17-22 = SIDEWALL TORMENTOR POCKETS
- *23-32 = ELECTRIC #1
- *27 - 32 = ELECTRIC #2
- *39 - 46 = ELECTRIC #3
- *47 - 48 = AVAILABLE FOR OTHER CIRCUITS
- *PERFORMANCE LIGHTING CIRCUITS HOME-RUN TO DIMMER RACK
- *ALL DIMMER CIRCUITS REQUIRE (2) WIRES FOR 20 AMP SERVICE
48-2400 WATT DIMMERS
- *LOCATE DIMMER RACKS NEAR MAIN POWER FEED
- *120-208 VOLT (3) PHASE POWER - 320 AMPS MAXIMUM

FLOOR PLAN OF ELECTRICAL CIRCUITS
SCALE: NONE