### **Specifier Product Information**



### **System Summary**

This summary is intended to explain, in general terms, some of the possible uses and reasons for having the recommended equipment shown in the following pages.

These pages are only meant to be a starting point, a tool to begin the design process which will give you a better understanding of the types of components which are needed to put together a flexible and fully functional dimming system.

If, after reviewing this information, you have further questions you are invited to contact a local Leviton/NSI Lighting Controls Representative for further assistance in putting together a system that meets the needs of your facility.

### **General Layout**

This layout is recommended for a Medium Church with a platform located at one end of the facility. This Bill of Material is recommended for a platform approximately 20' by 40'.

### **Dimming & Control**

The dimmers dedicated to the platform circuits will allow a great deal of flexibility for lighting several different types of services or events which may be presented in a facility of this type. The system also supports the addition of additional lighting through the use of circuit splitters, known as "Two-fers", to add additional fixtures without the need to add dimmers. The difference in dimmer count between the circuits shown on the System Layout and the Bill of Material is the number of circuits being dedicated to House Lights.

The Control Console allows for control of up to 384 Stage Channels and 512 Moving Light Channels. For simplified Moving Light Control, the Console is equipped with seven encoder wheels, a trackball and a pre-programmed Moving Light attribute library. This library can be user defined, as well. This console operates in both two scene manual and multi-scene memory modes. In addition, a total of 192 submasters (24 sliders x 8 pages) can be programmed for manually accessed lighting scenes.

The Main Control Station allows for 4 programmable zones of control and 6 programmable presets or "looks" in any combination of house and platform dimmers. The preset stations can be programmed to be independent of the Main Control Station, or they can be programmed to mimic the preset buttons on the Main Control Station.

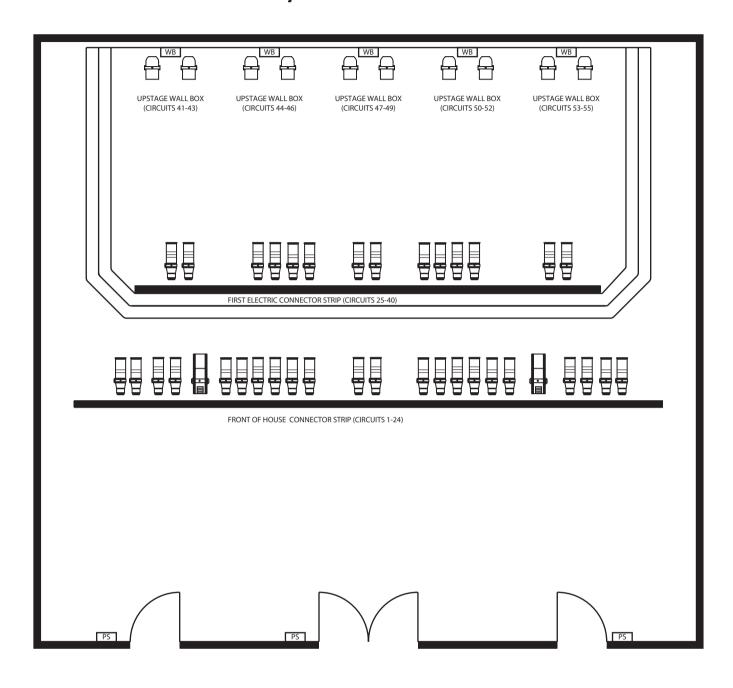
#### **Power Distribution**

The combination of Connectors Strips and Wall Pockets helps to maximize the flexibility of system by providing power distribution to upstage area of the platform, as well as the Front of House and First Electric positions. This allows for back lighting, in addition to the traditional front lighting, which draws attention to certain areas and visually increases the depth of the platform.

### **Fixtures & Accessories**

The selection of Fixtures and Accessories provides for a versatile lighting plot using general area lighting for the platform overall while maintaining a small amount of fixtures for highlighting key areas and providing backlight. The actual fixture requirement, however, would depend upon the requirements of the facility.

## **Church Layout Medium Advanced**







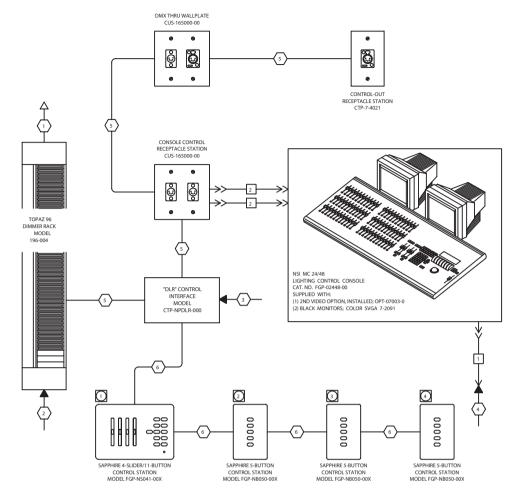








30∞ ELLIPSOIDAL



#### WIRE RUNS NOT BY LEVITON.

- 1 LOAD CIRCUITS: (60) 20A, 120VAC, 2 WIRE [PULL SEPARATE NEUTRALS]
- MAIN FEED:
  BUSSING RATED FOR 800 AMPS. MAX. CAPACITY. 39,
  4 WIRE PLUS GROUND 208Y/120VAC, 60HZ FEED. AMPERAGE RATING OF MAIN
  DISCONNECT TO BE DETERMINED AND PROVIDED BY OTHERS.
- 3 LINE: 15AMP, 120VAC, 2 WIRE PLUS GROUND, 60HZ.
- 4 LINE: 15AMP, 120VAC, 2 WIRE PLUS COMPUTER GRADE GROUND, 60HZ.
- (1) DMX CABLE: PER WIRING CHART LABELED PER DRAWING
- $\binom{6}{6}$  (1)- LUMANET CABLE: PER WIRING CHART LABELED PER DRAWING.

### CABLES PROVIDED BY LEVITON.

- 1 6' CONSOLE POWER CORD W/ NEMA 5-15P PLUG PROVIDED WITH CONTROL CONSOLE.
- 2 25' DMX CONTROL CABLE. MODEL CTP-7-3014

LUMANET CABLE WIRING CHART FOR "LN" CABLE RUNS BELDEN #9829 LOW CAPACITANCE SHIELDED 2 TWISTED PAIR & (2) 14 AWG MIN. STRANDED CU CONDUCTORS PAIR COLOR TERMINAL FUNCTION NO. SHIELD SHIELD WT W/BL STRIPE REM+ 1 BL W/WT STRIPE REM-N/C WT W/OR STRIP 2 N/C BLACK (14AWG) COM

\* SHIELDS TO BE TIED TOGETHER AND INSULATED.

### NOTES: (UNLESS OTHERWISE SPECIFIED)

- THIS DRAWING DOES NOT INDICATE THE NUMBER OR SIZE OF CONDUITS REQUIRED, BUT THE SEPARATION OF GROUPS OF WIRES. INTERCONNECTING WIRE AND CONDUIT ARE NOT BY LEVITON.
- WHEREVER CONTROL WIRES SHOWN MUST BE RUN CLOSE TO CLASS 1 REMOTE CONTROL
  AND SIGNALING CIRCUITS AND/OR ELECTRICAL LIGHT AND POWER CIRCUITS, THESE
  CONTROL WIRES MUST BE RUN IN SEPARATE METAL CONDUIT.
- PROVIDE AN EQUIPMENT GROUND, AS REQUIRED BY THE NATIONAL ELECTRICAL CODE, BETWEEN BUILDING SERVICE ENTRANCE AND THE DIMMER EQUIPMENT.
- 4. CABLE RUNS ARE CONTINUOUS BETWEEN CONNECTED DEVICES. NO SPLICING
- 5. "DMX" CABLE RUN FROM END TO END, INCLUDING PLUG-IN CABLE(S), NOT TO EXCEED 1000 FEET. DAISY CHAIN ONLY, NO STARRING ALLOWED.
- 6. LUMANET "LN" CABLE RUN FROM END TO END, NOT TO EXCEED 2000 FEET. DAISY CHAIN ONLY, NO STARRING ALLOWED.
- 3 1/2" DEEP INDUSTRY STANDARD GANG BACK BOXES NOT PROVIDED BY LEVITON. BACK BOXES MUST BE GROUNDED.
- 8. SET DEVICE ADDRESS TO THE NUMBER SHOWN IN THE SYMBOL.
- FOR LOW VOLTAGE CIRCUITS, THE MAGNETIC STEPDOWN TRANSFORMER PRIMARY SHOULD BE FUSED. USE MAGNETIC TRANSFORMERS ONLY. (TRANSFORMERS & FUSES NOT BY LEVITON)

DMX CABLE WIRING CHART. FOR "DMX" CABLE RUNS. BELDEN #9829 LOW CAPACITANCE SHIELDED 2 TWISTED				
COLOR	PAIR NO.	PIN/ TERM.		
SHIELD	SHIELD	1		
WT W/BL STRIPE	1	2		
BL W/WT STRIPE		3		
WT W/OR STRIPE	2 4 5			
OR W/WT STRIPE				

### Bill of Material Typical Medium Advanced Church

ITEM	QTY	PART NO.	DESCRIPTION
1.0	1	FGP-196-001	Dimmer Rack Topaz 96 Dimmer Rack 60 - 20A Dimmed Circuits 1 - 800A Maximum 208/120VAC WYE, 60Hz, 3ø4W plus
1.1 1.2 1.3	30 18 2	CTP-166-362 CTP-166-360 CTP-166-392	Ground Feed, with Main Lugs Only Dual 2.4kW Dimmer Module Airflow Module Phase Balanced Rack Control Module (Topaz 96, 2 per Rack)
2.0	1	CTP-NPDLR-000	Network Protocol Converter NPC/DLR
3.0 3.1 3.2 3.3 3.4 3.5	1 1 2 2 1 2	FGP-02448-00 OPT-31388-00 CTP-7-2091 CTP-7-5107 CTP-7-5061 CTP-7-3014	Control Console MC 24/48 24/48 Channel Control Console Second Monitor Card Color Monitor - SVGA, 17" Monitor Dust Cover (17") MC 24/48 Console Dust Cover 25' Console DMX Control Cable
4.0	1	CUS-165000-00	Control Receptacle Station Receptacle Plate containing: 2 - DMX Input Receptacle
5.0	1	FGP-NS041-00W	Control Station Sapphire Station w/ 4 Sliders & 11 Buttons, White Note: Requires 3-gang back box by others.
6.0	3	000-NB050-00W	Remote Station Sapphire Station w/ 5 Buttons, White Note: Requires 1-gang back box by others.
7.0	1	CUS-165000-00	DMX Thru Wallplate (for Moving Light Control) Receptacle Plate containing: 1 - DMX Input Receptacle 1 - DMX Output Receptacle
8.0	1	CTP-7-4021	DMX Out Wallplate (for Moving Light Control) Single-Gang Control Wallplate, with: 1 - DMX Output Receptacle Note: Requires 1-gang back box by others.
9.0	1	BOI-172000-00	Connector Strip  BAL Series Connector Strip, with:  48 - Feet of 4.75" high x 3.375" deep Wireway  24 - 20A Circuits  16 - 20A L5-20 (Locking) 18" Pigtail Receptacles  11 - Single Pipe Hanger Brackets  and Standard 2" Die Cut Circuit Labels

# Bill of Material Typical Medium Advanced Church (continued)

ITEM	QTY	PART NO.	DESCRIPTION
10.0	1	BOI-172000-00	Connector Strip  BAL Series Connector Strip, with:  40 - Feet of 4.75" high x 3.375" deep Wireway  16 - 20A Circuits  14 - 20A L5-20 (Locking) 18" Pigtail Receptacles  9 - Single Pipe Hanger Brackets  and Standard 2" Die Cut Circuit Labels
11.0	5	BOI-174000-00	Recessed Mount Plugging Box RM Series Plugging Box, with: 3 - 20A L5-20 (Locking) Flush Receptacles  Note: All Batten Pipes shall be by others.
12.0	16 16	CTP-650-045 OPT-00006-02	20 Degree Ellipsoidal Spotlight 20 Degree Ellipsoidal with "C" Clamp, Color Frame, Safety Cable and 3' cord 20A L5-20 (Locking) Connector (attached to Fixture)
12.2	16	CTP-176-187	750W EHG Lamp
13.0 13.1 13.2	20 20 20	CTP-650-035 OPT-00006-02 CTP-176-187	30 Degree Ellipsoidal Spotlight 30 Degree Ellipsoidal with "C" Clamp, Color Frame, Safety Cable and 3' cord 20A L5-20 (Locking) Connector (attached to Fixture) 750W EHG Lamp
13.2	20	CIF-170-107	Note: The 30 Degree Ellipsoidal Spotlight is shipped with the parts to convert it to a 20 Degree or 40 Degree unit.
14.0 14.1 14.2 14.3 14.4	10 10 10 10 10	FGP-PAR64-B OPT-00006-02 CTP-158-003 CTP-138-059 CTP-176-059	PAR64 Black PAR64 with Color Frame and 3' cord 20A L5-20 (Locking) Connector (attached to Fixture) C-Clamp Safety Cable 1000W FFR Lamp (MFL), 120V
15.0 15.1	2 3	BOI-157000-00 CTP-7-3013	Moving Light High End Systems Trackspot with Lamp 12' DMX Control Cable
16.0	50	BOI-128000-00	Color Media Sheet of Lee Color Media, Standard Color
17.0	1	FGP-ECO-020	Engineering Check-Out (ECO) Service Engineering Check-Out: Maximum one (1) day ECO by NSI Technician on-site (USA only). This service covers stan- dard NSI equipment only, with no greater than 96 dimmer channels and no greater than 5 control stations. ECO re- quires a minimum of three (3) weeks advance notice.



For more information, contact your Leviton representative or:

Leviton Manufacturing Co., Inc.

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