PRODUCT DESCRIPTION

MedLux® Cove is offered in both MRI-Safe and non-MRI versions. The MRI system features a unique (patent pending) control method designed specifically for operating LEDs in an EMI free environment. Only reputable name brand LEDs are used assuring long-life and even color consistency.

The MRI-Safe system also uses a proprietary driver module requiring only one (1) power filter and three (3) signal filter channels for the entire system. A keypad/controller module allows for finite color adjustment of the system and six (6) user defined programmable color settings. White only systems are controlled by a standard MedLux® MDL Dimmer, or XLIM dimming interface modules.

GENERAL SPECIFICATIONS - RGB & White LED Cove Light Fixtures

| Dimension/Size                  | 1.35"W x 0.75"H x 6.125", 12.125", 18.125", 36.125", 48.125" and 72.125" lengths |
| Construction                   | Enclosure base: Extruded ABS; LENS: Diffuse “Satin Ice” acrylic; End caps consist of injection molded diffuse “Satin Ice” acrylic |
| Light Source                   | RGB or White LEDs on 1” pitch, 1/3W per LED Net Lumens (white) - 227 per foot |
| Internal LED Board Length      | 1.00” x 5.93”, x 11.93”, x 17.93” or multiples thereof |
| Input                          | 24VDC @ 0.125A max. per foot (3W per foot) |
| Colors Available               | RGB - Continuously variable from a palette of 262,000 Fixed colors - Red, Green, Blue and Custom White – 2700K, 3000K, 3500K, 4000K, 5000K, 6500K |
| Electrical Interconnects       | Gold plated plug & socket; Connector exil-right angle on each end of profile |
| Safety Agency                  | UL2108, UL8750; cULus Listed, E361133 |
| Mounting Method                | Extruded plastic clip/rail system (supplied); Stainless steel hardware recommended |
**MedLux® Keypad/Controller Module**

**for Managing Multicolor LEDs**

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**GENERAL SPECIFICATIONS**

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**White/Monochrome Dimmer Kit (ECL-53-CR)**

- **Dimensions**: 4.5"H x 2.75"W
- **Input Voltage**: 16VAC, 50/60Hz, or 15VDC to 24VDC Class 2 Power Source (16VAC Transformer, Mounting plate, and Connecting Cable supplied)
- **Input Power**: 2.4 Watts, 4.8 VA (Assuming Non-PFC Power Source)
- **Safety Rating**: All circuitry meets NEC Class 2 requirements
- **Output**: 0 to 12 VDC, pulse width modulated, trapezoidal wave, 100mA max.
- **Operating Frequency**: Operating frequency = 140Hz
- **Controls**: ON - Press to activate dimmer, sets output to FULL ON
  ARROW UP - Press or Press-and-Hold to increase brightness
  ARROW DOWN - Press or Press-and-Hold to decrease brightness
  SAVE - Place current brightness setting into memory
  PRESET - Recall last "saved" brightness setting
  OFF - Press to turn lights OFF; dimmer "night light" remains active
- **Wiring Description**: Class 2 Plenum rated signal cable and installation instructions supplied
- **Mounting**: Separate standard single gang wall switch box, minimum 2"W x 2.75"H x 3"D (inside clearance, 20.3 cu. in. typical)

**RGB Keypad/Controller Module (ECL-47-KIT)**  
**NOTE**: Cannot be installed in the same room as the magnet.

- **Input Power**: 16VAC or 15VDC to 24VDC @ 5VA from a Class 2 recognized power source (supplied with system)
- **Outputs**: Four configurable signal channels providing: 130Hz PWM
- **Dimensions**: Keypad is 4.5"H x 5.0"W, flush to wall; Controller is attached to keypad, 2.8"H x 1.9"W x 2.7"D
- **Wiring Description**: Cat5 signal cable and installation instructions supplied
- **Mounting**: Requires standard double-gang switchbox, with minimum depth = 3"  
  **Note**: Keypad is too wide to permit side-by-side mounting in a quad-gang box
- **Maintenance**: No user serviceable parts; May be cleaned with most household cleaning agents
- **Basic Operation**: Cycles through a “rainbow” of color combinations; Cycle rate is user adjustable; “Color Hold” function allows any color to be selected and maintained statically indefinitely; Up to six (6) static selections can be placed in memory for immediate recall at any time.

**Driver Module (ECL-42-01)**

- **Power Input**: 24VDC at 1.1A maximum
- **Signal Inputs**: PWM or Analog RGB (0-10VDC)
- **# of Output Channels**: Four (R, G, B, W or A)
- **Output rating**: 10/20VAC at 250mA maximum per channel; Sufficient for 325 - 430 feet of cove strip
- **Modulation**: Proprietary; MRI Compatible
- **Dimensions**: 11.5"H x 8"W x 5"D
- **Weight**: 6.1 lbs.
- **Safety Agency**: UL8750, UL1310
GENERAL SPECIFICATIONS  Continued - Page 3

**Power Supply Assembly (ELT600-24U; 600W)**
- **Output Voltage**: 24VDC +/- 3%
- **Output Current**: (600W): 25A maximum
- **Input Voltage**: 110/220VAC (switch selectable) Note: Optional step-down transformer available
- **Input Current**: (600W): 9.1A (1kVA) maximum @ 110V; 4.6A (1kVA) maximum @ 220V
- **Enclosure**: NEMA Type 1 (supplied)
- **Dimensions**: 12"H x 10"W x 6"D
- **Weight**: est. 16 lbs.
- **Safety Agency**: UL60950; EN60601

**Facility & Signal Filters (Optional)**
- **Facility Power filter** (P/N 019-00011): Input Rating: 277V AC/DC maximum, 2 x 30A maximum
  - Attenuation: 3dB maximum at 300Hz; 110dB minimum at 1MHz
  - Wiring: Standard L/N/E
- **Signal Filters (2 each)** (P/N 019-00009): Input Rating: 50VDC minimum, 2 x 300mA maximum
  - Input Impedance: 600 Ohm minimum, signal to ground
  - Attenuation: 3dB maximum at 23kHz; 110dB minimum at 1MHz
  - Isolation: No cross-coupling between channels

**Class 2 Wiring Distribution/Fuse Box (ECL-35M-xx/ECL-35V-xx; Includes fittings):**
- **Input**: 50VDC maximum, 24A maximum (Class 1 wiring required)
- **Outputs (6 each)**: 50VDC maximum, 3.3A maximum (Class 2 wiring allowed)
  - Note: Actual current available depends on input voltage per NEC section 725
- **Dimensions**: 10.5"H x 7.25"W x 3.75"D
- **Material**: Polycarbonate, Enclosure rated
- **Weight**: Est. 4 lbs.
- **Safety Agency**: UL8750; UL1310; NEC section 725
- **Approval/Rating**: ECL-35M-xx = for monochrome systems (white/any solid color)
  - ECL-35V-xx = for variable color systems (RGB)

**Wiring Method**
The MedLux® Cove System can have a total of 162 linear feet per power supply (480 Watts max. power). Class 2 wiring limits loading to no more than 3.33A per circuit and can operate a maximum of 27’ per circuit with up to six (6) circuits per supply. Separate Class 2 cables must be routed to the approximate mid-point of each 27’ run. Power and control feeds require appropriate facility and signal filters (supplied by others or offered as optional accessories).
Module Ordering Nomenclature

### MedLux® COVE LIGHT

**LED COLOR OPTIONS**

- **MCL**
- **MEDLUX COVE LIGHT**
- **27K**
- **30K**
- **35K**
- **40K**
- **50K**
- **65K**
- **RGB**
- **RED** (FIXED)
- **GRN** (GREEN)
- **BLU** (BLUE)

**MODULE LENGTH OPTIONS**

- **06**
- **12**
- **18**
- **36**
- **48**
- **72**

**DIMMING INTERFACE KIT CONTENTS**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>QTY</th>
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<tr>
<td>XLIM Dimmer Interface Assembly</td>
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<tr>
<td>Transformer Kit, 16VAC</td>
<td>1</td>
</tr>
<tr>
<td>100’ Wire</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes:**

- Medlux Cove product is designed for use as accent lighting only.
- Monochrome options are recommended when extended periods of white illumination is required.
- Please review "Designing for Gradient Cables" by following the link below: