



# Light-Lynx

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## LAYOUT LIGHTING SYSTEM

**Light-Lynx** is used in conjunction with the **Time-Lynx** fast clock system, which supplies the time source for the lighting modules.

The **Light-Lynx** layout lighting system is actually two sub-systems. The first is designed to control the layout room lighting, and the second controls the lighting in buildings on the layout. The sub-systems may be used either together or individually.

## ROOM LIGHTING SYSTEM

The standard room lighting system provides three control channels for white (day), blue (night), and red (sunrise/sunset) incandescent lamps.

A MASTER DIMMER MODULE contains the driver circuits and controls for each channel, and drives from one to ten SLAVE DIMMERS. Each SLAVE DIMMER can control up to 6 AMPS (720 WATTS) of 120Vac incandescent (not fluorescent) lamp load. One or more slave dimmer is required for each color, depending on the total lamp load of each color.

The MASTER DIMMER MODULE receives time information from the **Time-Lynx** MASTER CLOCK MODULE, and at sunset, over the course of one scale hour, ramps the white channel down, the blue channel up, and the red channel up and back down.

At sunrise, the white channel ramps up, the blue channel ramps down, and the red channel ramps up and back down.

By using blue lights to simulate night, the layout may be flooded with blue light allowing the operators to still see clearly for operation. This is just what theaters and movies do.

The red channel ramps up and back down during the scale hour of sunrise and sunset, providing the warm pink colors that we see at these times.

The MASTER DIMMER contains controls for setting the minimum and maximum light levels for each color as well as switches to select automatic or manual operation.

A four wire cable connects the MASTER DIMMER to the MASTER CLOCK, and a two wire cable connects each channel to its SLAVE DIMMER(s), all via terminal connections.

These signals are all low voltage (12Vdc) and no precautions are necessary. The SLAVE DIMMERS connect to the lamp load similar to a standard wall switch or dimmer. These connections are made via wire pigtailed and control dangerous 120Vac. If you are not familiar with this type of wiring, contact your local electrician.

A custom package can be provided which contains all the slave dimmers. The box has a standard line cord to plug into a wall outlet, and has three wall outlets for plugging in the three line cords from the three different color room lights. This may allow for easier installation on some railroads. Contact **Rail-Lynx** for more details.

## BUILDING LIGHTING SYSTEM

The **Time-Lynx** MASTER CLOCK MODULE has 16 on/off output channels that drive external relays. The contacts of each relay can be used to control the lighting in buildings or any other device that requires activation based on time. By using multi-contact relays, several different lamp voltages can be driven by the same output channel.

Each channel can be configured to turn on after sunset, off at some later time in the evening, on again early in the morning and off again at sunrise. The selected times may be, hours and minutes after sunset, hours and minutes before sunrise, or at a specific scale time.

The selection and loading of the on/off times is done via a serial data port on the MASTER CLOCK MODULE, using any IBM compatible computer. When the program is loaded it is stored in non-volatile memory. The computer is only required to load (or change) the times, not for normal operation. **Rail-Lynx** can do the loading, at no charge, for anyone who does not have access to a computer.

The 16 outputs and common return connections are made to the MASTER CLOCK MODULE via 2 10 position terminal blocks.

### RAIL-LYNX

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