

Warnings

Lowel Prime™ LED equipment is a professional lighting system. Read these instructions, as well as accessory instructions and applicable warnings before operating.

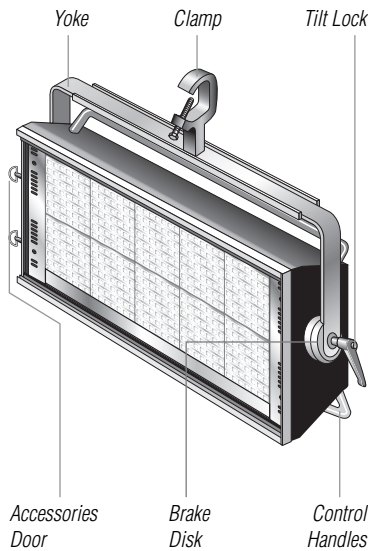
- **Do not leave fixture unattended.**
For fixed (stationary) use in studio's, theaters, and similar locations.
- **Not for household use.** Use only for photographic lighting (video & film imaging).
- **Always unplug unit before** changing fuse.
- **Do not use near standing water.**
- **Never bypass plug's ground pin.**
- **Do not interfere with unit's ventilation.**
- **Do not operate unit with** Accessory Barndoors closed.
- **Make sure clamp is tightened** at yoke.
- **Always use Safety Cable,** when attaching to overhead pipes or grids.
- **Always use with supplied Lowel AC Cable.**

LED Warnings

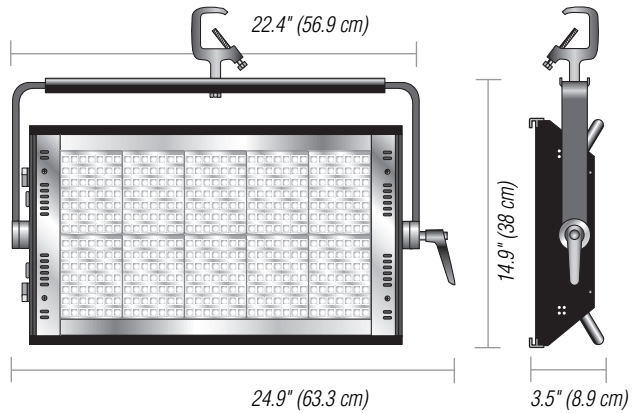
- **Avoid looking directly at the LED's** for extended periods of time.
- **LED's take time to reach standard** operating output level, and frequently have slightly higher output during the first 1/2 hr, when powered up.

Each fixture comes with:

- **Gel Frame**
- **Safety Cable**
- **Standard C Clamp**
yoke hanging mount device
- **Female 5/8" Stand Fitting**
- **2 Standard 120v AC power cables** with male Edison connectors (or appropriate international CE approved plug). For 120v, use the unswitched T1-808 AC cable for C-clamp grid, or pipe hung 'studio' use. Use T1-80 switched AC Cable for use on stand or boom where access to fixture power switch may be out of reach.



Specs & Performance: Daylight & Tungsten Models



Daylight Model

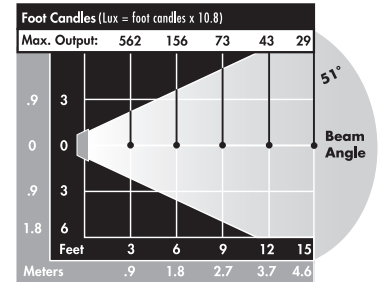
Code: PRM-400DA
Color Temperature: 5600°K
Color Rendering Index: 91+
Weight: 17.5 lbs (7.9 kg)

Tungsten Model

Code: PRM-400TU
Color Temperature: 3300°K
Color Rendering Index: 91+
Weight: 17.5 lbs (7.9 kg)

Lowel Prime LED is not a color mixing LED system. There are dedicated Tungsten and Daylight color models.

However, for optimal color balance of light output, tungsten color models have a small qty of daylight (C) LEDs, and daylight color models have a small qty of tungsten (W) LEDs, integrated into the front panels.



The color temperature of each fixture can be changed slightly (approx 100-200 degrees K) by changing settings in the in DMX mode. This may help critical color balance to other light sources. See Changing DMX Operation Mode, in the SET Function section of this instruction sheet.

Beam Angles: points at which intensity drops to 50% of maximum. Foot Candle readings taken with Tungsten color model, at center of beam, using a Minolta CL-200 meter.

Mounting the Fixture

On Lighting Rail:

Attach clamp tightly to yoke of fixture, according to clamp mfrs. instructions. Hang clamp on pipe or grid and tighten the large screw so that the clamp and fixture are securely mounted. Do not loosen bolt attaching clamp to fixture, to position light. Attach safety cable between the fixture and the rail for necessary security.

On Stand:

There are 2 options for stand mounting of the fixture, using the 5/8" female stand fitting or using the optional Male Stud. Choose proper size stand for fixture. For all models, the Lowel Grand Stand or larger is preferred, however the following stands may also be used. Always use sufficient stabilizing weight on stand base.

Model	Lowel Stand
200	KS or KSA
400	KSA
600	Grand Stand*

*Do not use with top stage extended

Female 5/8" Stand-fitting:

For use on stand only. Allows mounting the fixture on 5/8" male stand stud. Make sure the stand is large enough to support the weight of the fixture while maintaining good balance at the desired height. Attach the female stand-fitting tightly to the yoke and rotate yoke so it is on the underside of the fixture. Tighten yoke, clamp locking lever, and place female stand-fitting over stand, making sure that its locking screw is loosened enough to allow the fitting to completely fit over the 5/8" stand stud. Tighten knob, making sure its screw is under the safety cut of the stand fitting stud. Add additional weight to base of stand for increased stability.

Male Stud (Code, FLS-MS):

For use of fixture with Matthews style stands that have a female cup instead of a male stud. Attach the optional Male Stud in the same manner as described above for Female 5/8" Stand Fitting, again rotating the yoke to the underside of the fixture and tightening yoke clamp. Carefully place Male Stud into female cup on stand top and tighten. Add additional weight to stand base for increased stability.

Fuses & Power Consumption

Note - Most electrical equipment briefly consumes a higher amount of electrical current during start-up (ignition). Consult the below chart to confirm that your electrical wiring is sufficient for the fixtures used. All fuses must be rated at 250VAC. **Lowel Prime LED's auto-set from 90-240 VAC.**

Model	Fuse	110V		240V	
		Nominal Current	Peak Ignition Current	Nominal Current	Peak Ignition Current
400	3 A / 250 V	1.076 A	1.5 A	0.619 A	0.92 A

PRIME LED Model 400 Consumes 135 Watts

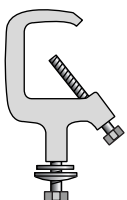
Problems, repairs & info

Repairs, problems, suggestions and requests for brochures/catalogs, instructions and parts lists can be handled through your Authorized Lowel Dealer/Distributor or directly through Lowel. Electrical repairs should be made only by Lowel or by a qualified electrician.

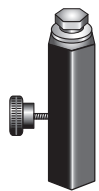
Lowel Prime LED equipment is a product of the ongoing collaborative relationship between Lowel-Light and Fluotec, Mexico

Lowel-Light Manufacturing, Inc.

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www.lowel.com



Clamp



Female 5/8" Stand Fitting



Safety Cable



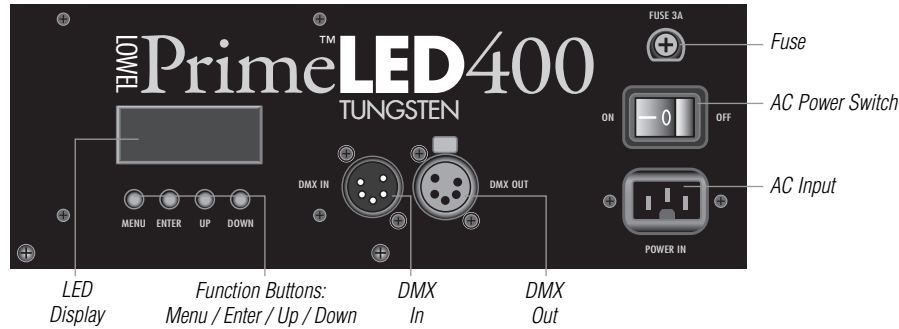
Male Stud (optional)

Manual & DMX Operation

Controlling Lowel Prime LED

The fixtures of the Lowel Prime LED Series are all dimmable models, which can be controlled either manually on the fixture or remotely via a console with DMX-512 protocol.

To operate the Control Panel, first familiarize yourself with the placement and functions of the controls.



Rear Panel Connections & Functions

Power In

This IEC connector accepts the AC cable. The fixture will auto-set itself from 90-240 VAC. Use the proper cable for the country of use.

AC Power Switch

Turning on the AC Power switch causes the fixture to light at whatever dimming level it was at when last powered down (factory shipped at 100%). The unit will retain its previous dimming level even if unplugged.

Fuse

Always power down & unplug the fixture before changing its fuse. Open the fuse holder with a phillips head screwdriver to replace the fuse. Lowel Prime 400 LED's use fuses rated at 3 Amps and 250 Volts.

DMX In/Out Connectors

There are two 4 pin XLR style DMX connectors, labeled IN and OUT. In a DMX chain, remember that the last fixture in the chain needs a DMX Terminator plugged into its DMX Out connector.

LED Window & Function Buttons

The LED window shows the status of choices made with the function buttons beneath it.

MENU Repeated pressing of the MENU Key scrolls the unit thru its sub-menu list (DIMM, RUN, DMX, SET).

ENTER To select a menu or confirm the values selected.

UP Button To increase a value, 1 step at a time, or scroll up thru a sub-menu.

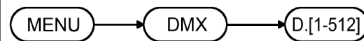
DOWN Button To decrease a value, 1 step at a time, or scroll down thru a sub-menu.

Manual Dimming 0% to 100%

Lowel Prime fixtures can be dimmed manually on the rear of the unit, or by DMX console.

To manually dim the light to a desired level, press the MENU button until you see DIMM, then Press ENTER. Use the Up & Down buttons to set dimming level from 1-100. Powering the fixture down keeps its dimming level set, so it will return to that level the next time it is turned on.

DMX Addressing & Dimming

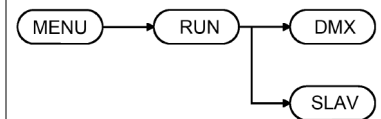


DMX-512 protocol allows you to assign one of 512 possible control addresses to the fixture. Multiple fixtures must be connected to each other, daisy chain style, using DMX cables, with the DMX OUT on the console connected to the first fixture's DMX IN connector. The DMX OUT connector of the 1st fixture is then connected to the DMX IN connector of the second fixture, and so on, until all fixtures are connected. The last fixture needs a DMX Terminator plugged into its DMX OUT connector.

When the fixture is receiving a valid DMX signal, a blinking red dot is visible in the lower right corner of LED Window.

To ADDRESS a fixture, scroll the MENU list to DMX, and hit ENTER. Next, scroll to the DMX address number you want for the fixture. Pressing ENTER again sets fixture to that address. Then scroll to DIMM to use. After addressing the whole chain, fixtures may be controlled alone or in a group, from the DMX console. Manual dimming on each unit is inoperative during DMX operation.

Slave Controlling Fixtures Without Console



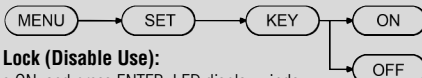
Multiple fixtures, connected with DMX cables as described above, can all be controlled as one by using the Slave function. This means they will all dim up or down together, controlled by the first fixture in the chain (not by a DMX console).

On the first fixture in the chain, in MENU, select RUN and hit ENTER. Using the up/down buttons shows 2 choices, DMX and SLAV. Select DMX for the first fixture in the chain and SLAV for the rest.

The SET Function

Locking / Unlocking User Control

This tamper proof security ability allows the user to disable the function buttons, locking out the fixture from manual control. It can be restored by use of a keycode password.

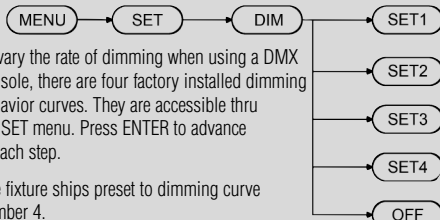


■ To Lock (Disable Use):

Choose ON, and press ENTER. LED display window will show only a single red dot. NOTE: Lock takes approx. 10 seconds to engage.

■ **To Unlock (Enable Use):** Press these buttons in the following order: MENU + UP + DOWN + UP + DOWN + ENTER. Then press: MENU + SET + KEY + OFF.

Accessing Stored Alternate Dimming Curves



To vary the rate of dimming when using a DMX console, there are four factory installed dimming behavior curves. They are accessible thru the SET menu. Press ENTER to advance at each step.

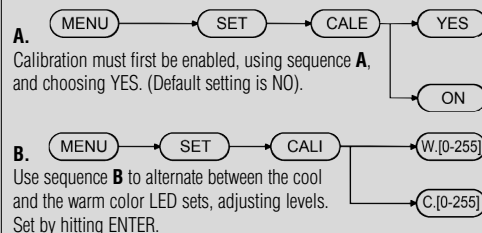
The fixture ships preset to dimming curve number 4.

Choosing SET allows access to functions that most users will not ever need access to. They include locking access to fixture controls, using stored alternate dimming curves, mfrs calibration settings, as well as restoring the fixture to all of its original (pre-calibration) settings.

IMPORTANT – If you accidentally wander in any of the SET sub-menu's, hit MENU button to return to the main Menu.

Enabling / Adjusting Factory Calibration

It is not recommended to make adjustments to the Calibration settings. They are used by the factory to calibrate the fixture to established specifications. Calibration levels for Warm and Cool LED sets are listed on a label found on the rear panel for use in restoring the fixture to Mfrs. Spec. after Resetting it.



A. Calibration must first be enabled, using sequence **A**, and choosing YES. (Default setting is NO).

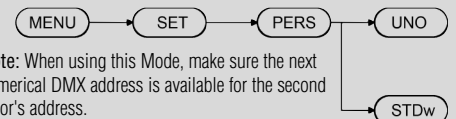
B. Use sequence **B** to alternate between the cool and the warm color LED sets, adjusting levels. Set by hitting ENTER.

Changing DMX Operation Mode

This sequence allows the daylight & tungsten LEDs to be separated, and given DMX addresses, for separate control.

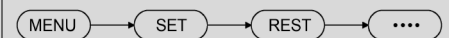
■ **UNO** - the fixture operates as 1 address.

■ **STDw** - creates separate DMX channels for each color. Second color gets next numerical DMX address.



Note: When using this Mode, make sure the next numerical DMX address is available for the second color's address.

Resetting the System



Reset the fixture to its factory default settings, by following the above button sequence. See the chart for default values.

MENU	DEFAULT VALUE
DIMM	D.100
RUN	DMX
DMX	D.001
SET -> KEY	OFF
SET -> DIM	DIM4
SET -> CALE	NO
SET -> CALI	W255
	C.255
SET -> PERS	UNO

The '4 dots' sequence is as follows: UP + DOWN + UP + DOWN + ENTER. UP + DOWN + UP + DOWN + ENTER. LED says OK when fixture is reset