

# TL-F500

## LED Fresnel



- Cool Touch
- 3,200K, CRI > 95
- LED life > 20,000 hours
- DMX512, 1 or 2 channel control
- Wireless DMX built-in option
- Effects include Fire and Strobe
- Stand-alone operation
- Light weight - only 2.4Kg
- Fast PWM option (3840Hz) for TV and film

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**THEATRELIGHTNZ**



## F500 FEATURES

The TL-F500 is a white LED Fresnel spotlight suitable for general lighting in small theatres and TV studios, and for exhibition and lighting display including art galleries and museums. It is available fitted with colour runners to hold colour filters and beam shaping barndoors for theatre use, or without colour runners for general display use. The model can be changed by the customer as the parts are supplied for the other model. A number of lens types, LED wattage ratings, and colour temperature options are available to special order, with either 3 or 5 pin XLR connectors. The F500 can also be ordered fitted with an internal wireless DMX card by Lumen Radio (WDMX compatible) with either an internal 2dB antenna or an optional external high gain antenna for distances over 500 metres.

The major benefits over an equivalent spotlight using an incandescent bulb are the marked savings in running costs. The light output is similar to many 500/1000 watt incandescent Fresnels, but at a little over 10% of the power costs. In addition, whereas most Theatre or TV rated incandescent bulbs are expensive and have a lifetime of under 750 hours, the F500 has an expected lifetime in excess of 20,000 hours, resulting in much reduced lamp replacement and maintenance costs. Additionally the very low Infra-Red and UV output of LED luminaires makes the F500 ideal for display and Museum lighting. The F500 LED module is manufactured to Theatrelight specifications using Osram LED chips with an integrated collimating lens, light mask, and PMMA Fresnel lens for maximum optical efficiency in conjunction with a high power factor, universal mains power supply of proven reliability.

### EXTERNAL CONTROLS

**LID LATCH:** The top lid may be removed for cleaning the lenses, or reversed to hide the operators instructions

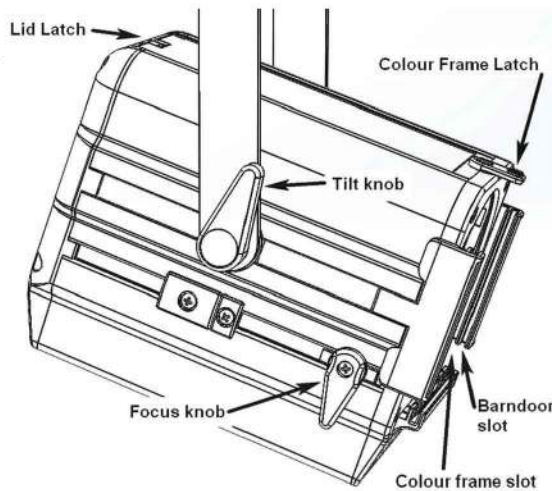
**COLOUR FRAME LATCH:** Always set this latch forward to prevent colour frames and barndoors from falling out

**TILT KNOB:** Easy friction washer enables one hand point and focus

**FOCUS KNOB:** Fast focus setting - just a quarter turn from unlock to lock

**COLOUR FRAME SLOT:** Use the inner slot for colour frames

**BARNDOOR SLOT:** Use the outer slot for barndoors



### BACK PANEL CONTROLS (XLR 5 version shown)

**POWER CONNECTOR:** IEC female

**DMX IN/THRU:** XLR 5 pin standard. XLR 3 pin option to order

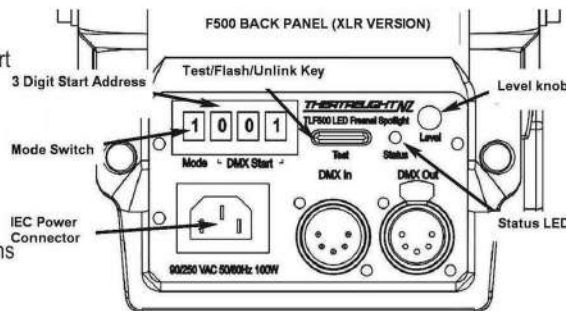
**MODE SWITCH:** Sets fade and effects

**3 DIGIT START ADDRESS:** Sets DMX Start address from 1 to 512

**TEST/FLASH/UNLINK KEY:** Flashes the intensity/rate to 100%, cancels DMX held channels, and unlinks Wireless DMX versions if held for over 3 seconds. The internal blue LED mimics LED level, and shows link present in Wireless DMX versions

**STATUS LED:** Green/Red LED indicates DMX and Temperature

**LEVEL KNOB:** Presets level or rate (0 to 100%) for standalone operation



### PHOTOMETRIC DATA

3200K 100 watt/16 LED chip model, beam width 5-50 degrees, Lux measurements minimum, +/-10%:

#### TL-F500T Theatre, Spot focus

Distance (m)	2	3	4	5	6	7	8
Beam Diam (m)	0.3	0.45	0.60	0.75	0.90	1.05	1.20
Lux	30,000	13,333	7,500	4,800	3,333	2,449	1,875

#### TL-F500T Theatre, Flood focus

Distance (m)	2	3	4	5	6	7	8
Beam Diam (m)	2	3.00	4.00	5.00	6.00	7.00	8.00
Lux	1,000	444	250	160	111	82	63

Your Local Distributor:

## F500 SPECIFICATIONS

**MODELS:** /T: Theatre version- colour runners fitted, blanking pieces supplied; /D: Display version - blanks fitted, colour runners supplied

**HOUSING:** Anodised aluminium extrusion sides, molded plastic front and back

**COLOUR:** Non-reflective black. Custom colours can be supplied for larger orders

**YOKE:** Anodised aluminium, with easy adjusting tilt friction lock, and adjustable yoke balance point

**WORKING TEMPERATURE:** -30 to +35C ambient

**CASE TEMPERATURE:** 30C maximum above ambient

**WORKING POSITION:** Any

**HUMIDITY/:** 95% max, non-condensing

**IP RATING:** IP20 (indoor use only)

**DMX FAIL BEHAVIOUR:** 10 minutes hold, then 5 min fade out for Modes 1-5, off for Modes 6-9

**COOLING:** Variable speed fan cooling. LED level is faded out if over temperature. Fan is off when LED is below 35C

### LED OPTIONS:

Incandescent halogen white (3,200°K ±200K), CRI >95  
Film daylight white (5,600°K ±400K), CRI >90

Cool white (8,000°K ±500K), CRI >85 (max lumens output for display use). Other colour and CRI choices to order

**DIMMING RESOLUTION:** Standard dimming resolution is a 16 bit (1 in 64,000) fade to the 8 bit (1 in 256) target resolution of DMX without requiring the use of two DMX channels for 16 bit dimming. A fast PWM version can be supplied for Film and TV camera work

**EXPECTED LIFETIME:** >20,000 hours (~10 years at 6 hours per day, 6 days a week)

**INPUT POWER:** 90-250 vac, 50/60 Hz, 100 watts

**STANDARDS:** AS/NZS 3760, CE

**DIMENSIONS:** 220mm long x 180 mm wide x 170 mm high

**WEIGHT:** 2.4 kg, barndoors 0.2 kg

The F500 is supplied with a colour frame, and a 2m power cable, IEC to 3 pin plug or bare ends to order. Barndoors and built in Wireless card optional.

### CONTROL MODES

The F500 may be operated as a Standalone light using the potentiometer to set a fixed level or effect, as a One Channel DMX controlled light (modes 1-9), or as a Two Channel DMX controlled light (mode 0). In Two Channel mode, DMX 1 sets the level or rate, while DMX 2 selects the mode from 1-9 - ie sets the fade time or special effect:

**Mode 0:** Sets remote mode where DMX 1 controls level/rate, DMX 2 sets modes 1-9 as below

**Mode 1:** (or DMX 2 = 10% if in Mode 0) Fade time matches 250 watt tungsten bulbs

**Mode 2:** (or DMX 2 = 20% if in Mode 0) Fade time matches 500 watt tungsten bulbs

**Mode 3:** (or DMX 2 = 30% if in Mode 0) Fade time matches 1 kw tungsten bulbs

**Mode 4:** (or DMX 2 = 40% if in Mode 0) Fade time matches 2 kw tungsten bulbs

**Mode 5:** (or DMX 2 = 50% if in Mode 0) Fade time matches 5 kw tungsten bulbs

**Mode 6:** (or DMX 2 = 60% if in Mode 0) Fire fade/flicker effect: Off, slow/dim to fast/bright

**Mode 7:** (or DMX 2 = 70% if in Mode 0) Ramp cycle up/dn 0-100% effect: Off, 10 minutes to 0.5 sec fade cycle

**Mode 8:** (or DMX 2 = 80% if in Mode 0) Random flash effect: Off, slow/dim to fast/bright

**Mode 9:** (or DMX 2 = 90% if Mode in 0) Strobe flash effect: Off, 1 to 25 flashes per sec

*For full specifications, options, and operators manual see*

TL-F500 Fresnel Specifications.pdf

TL-F500 Fresnel Operators Manual.pdf

at <http://theatrelight.co.nz/luminaires/>

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