

TL-F500 Fresnel Operators Manual

Test Key and Test LED behaviour

Pressing the Test key:

- Flashes the intensity or rate of the current effect to Full, and cancels held DMX levels
- If held for more than 3 sec on Wireless DMX F500s, unlinks the receiver from its transmitter

The Test key has an internal blue LED which:

- Mimics the intensity of the F500 light output in non-Wireless DMX versions
- Acts as a Link indicator in F500s fitted with Wireless DMX (see Wireless DMX Operation)

Excepting over-temperature states, the Test and Status indicators are set off 5 minutes after power up, or a change to the back panel controls.

Hiding the Instructions

A short form copy of the F500 instructions is printed as a reminder on one side of the top lid of the F500. To hide or show the instructions:

- Depress the lid latch, slide the top lid out, turn it upside down, then slide it back in

Focus Knob Lock adjustment

If required the focus knob locking tension may be adjusted:

- Set the the focus knob in the lock position by turning it so it points either forward or back
- Turn the screw in the centre of the focus knob slightly to adjust the locking tension

Focus Slide Friction adjustment

If required the focus slide action may be adjusted:

- Depress the lid latch and slide the top lid back
- Turn the cam at the base of the lens tray with a flat blade screwdriver to adjust the slide action
- Slide the top lid back into place

Tilt Friction adjustment

If required, the permanent tilt friction (with the tilt lock loose) may be adjusted:

- Turn the tilt knob anticlockwise half a turn, then pull the cap off the left yoke nut
- With an M8 spanner, adjust the left yoke nut to the required friction, then replace the cap

Yoke Position adjustment

The F500 is initially supplied with the yoke centred so it can move around both ends of the F500. If required the yoke may be positioned closer to the front or back:

- Turn the tilt knob anticlockwise one turn, then pull the cap off the left yoke nut
- Use an M8 spanner to undo the left yoke nut so the yoke can slide forwards or backwards
- When in position, adjust the left yoke nut to the required friction, then replace the cap

Changing Lenses

To remove the F500 Fresnel lens for cleaning or changing:

- Set the lens to the front using the focus knob, depress the lid latch and slide the top lid back
- Turn the top lens clips clear of the lens, push the lens top back, lift the lens near horizontal, then slide it out
- Reverse the process to install a lens. *The grooved side must be at the front.*

Changing between Theatre and Display versions

The F500 is supplied fitted with colour runners, or their blanking parts. To swap these:

- With power disconnected, undo the four screws fixing the front molding and remove it
- Swap the side and bottom colour runners with their blanking parts
- Replace the front molding and its four screws

Cleaning the F500

For maximum optical and electrical efficiency and long life, the F500 must be kept free of dust:

- Blow any dust out of the interior of the F500, fan blades, and heatsink fins
- Clean the Fresnel lens and the LED module lens with a damp lint-free cloth

Don'ts

- **Do not connect the F500 to a dimmed mains supply**
- Do not use any solvent other than water to clean the lens
- Do not subject the F500 to excessive force or shock
- Do not operate the F500 in wet conditions
- Do not attempt to repair the F500 in case of faults - return it to your sales agent

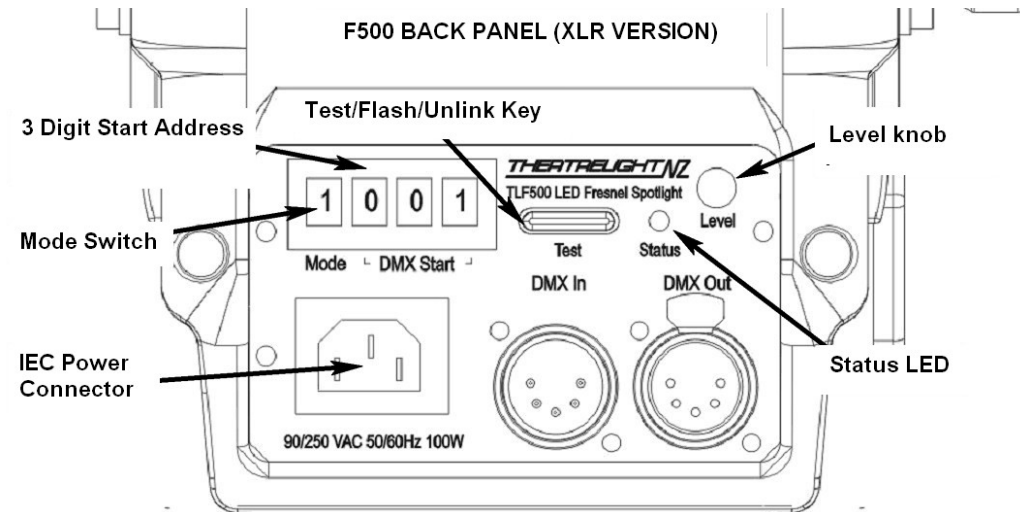
This product is not for domestic use

Contact Details

Theatrelight New Zealand
6 Rowe St, Onehunga, NZ
phone ++64 9 622-1187
info@theatrelight.co.nz

Theatrelight Asia
QianLong Industrial District, SanXiang, ZhongShan, PRC
phone ++86 7608 632-0516
info@tl-asia.com

The TL-F500 is a white LED Fresnel spotlight suitable for general lighting in small theatres and TV studios, and for exhibition and display in 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 display use. The model can be changed by the user as the parts are included for both Theatre and Display types.



Power Connection

The F500 requires a **non-dimmed power supply** of rated voltage marked on the back panel.

- **Operating the F500 on a dimmed power supply will void your warranty**
- Plug the supplied power cable between the F500 IEC socket and a power supply
- Ensure the power supply is rated within the limits on the F500 back panel
- Ensure the power supply has an effective Earth connection

Standalone Operation

When DMX is not connected, the finger settable Level knob controls the intensity/rate of the fade/effects function set by the Mode switch. Standalone operation is useful for permanent lighting or effects, or for local On/Off control when focussing:

- Set the Mode Switch for the following effects:
 - 1: Fade time matches 250 watt tungsten bulbs
 - 2: Fade time matches 500 watt tungsten bulbs
 - 3: Fade time matches 1 kw tungsten bulbs
 - 4: Fade time matches 2 kw tungsten bulbs
 - 5: Fade time matches 5 kw tungsten bulbs
 - 6: Fire fade/flicker effect: Off, slow/dim to fast/bright
 - 7: Ramp cycle up/dn 0-100%: Off, 10 minutes to 0.5 sec fade cycle
 - 8: Random flash effect: Off, slow/dim to fast/bright
 - 9: Strobe flash effect: Off, 1 to 25 flashes per sec
- Adjust the Level knob to set the intensity or rate of the effect
- Press the Test key to test at Full the intensity or rate of the effect

DMX Single Channel Operation

If DMX is connected, then the highest of the DMX Start Channel (DMX 1) and the Level knob controls the intensity/rate of the fade/, effects function set by the Mode switch:

- Plug a DMX cable from a control panel into the XLR (or RJ45) connector labelled 'DMX In'
- Link the DMX signal to other F500s using the 'DMX Out' connector
- Set the DMX Start Address switch to the required address (eg set 001 to respond to DMX Chn 1, set 511 to respond to DMX channel 511 etc)
- Set the Mode Switch for the following effects:
 - 1: Fade time matches 250 watt tungsten bulbs
 - 2: Fade time matches 500 watt tungsten bulbs
 - 3: Fade time matches 1 kw tungsten bulbs
 - 4: Fade time matches 2 kw tungsten bulbs
 - 5: Fade time matches 5 kw tungsten bulbs
 - 6: Fire fade/flicker effect: Off, slow/dim to fast/bright
 - 7: Ramp cycle up/dn 0-100%: Off, 10 minutes to 0.5 sec fade cycle
 - 8: Random flash effect: Off, slow/dim to fast/bright
 - 9: Strobe flash effect: Off, 1 to 25 flashes per sec
- On the control panel, adjust the DMX level to control the intensity or rate of the effect
- Set the Level knob above zero if a permanent minimum intensity/rate is required
- Press the Test key to test at Full the intensity or rate of the effect

DMX Two Channel Operation

If DMX is connected and the Mode Switch set to 0, the highest of the DMX Start Channel (DMX 1) and the Level knob controls the intensity/rate of the fade/effects function which is set by *the DMX channel following the Start Channel* (DMX 2):

- Plug a DMX cable from a control panel into the XLR (or RJ45) connector labelled 'DMX In'
- Link the DMX signal to other F500s using the 'DMX Out' connector
- Set the DMX Start Address switch to the required DMX address (eg set 001 to respond to DMX Channels 1 *and* 2, set 511 to respond to DMX Channels 511 *and* 512 etc)
- Set the Mode Switch to 0 for Two Channel operation
- On the control panel, set the DMX 2 level to select the following effects:

0-10%:	Fade time matches 250 watt tungsten bulbs
20%:	Fade time matches 500 watt tungsten bulbs
30%:	Fade time matches 1 kw tungsten bulbs
40%:	Fade time matches 2 kw tungsten bulbs
50%:	Fade time matches 5 kw tungsten bulbs
60%:	Fire fade/flicker effect: Off, slow/dim to fast/bright
70%:	Ramp cycle up/dn 0-100%: Off, 10 minutes to 0.5 sec fade cycle
80%:	Random flash effect: Off, slow/dim to fast/bright
90-100%:	Strobe flash effect: Off, 1 to 25 flashes per sec
- On the control panel, adjust the DMX 1 level to control the intensity or rate of the effect
- Set the Level knob above zero if a minimum intensity/rate is required
- Press the Test key to test at Full the intensity or rate of the effect

Wireless DMX Operation

The F500 can be supplied fitted with a Wireless DMX receiver able to receive either Lumen Radio or Wireless Solutions (WDMX) transmissions. A wireless DMX signal takes instant priority over any cable DMX signal. If the Wireless DMX fails, the F500 reverts to the cable DMX signal if present.

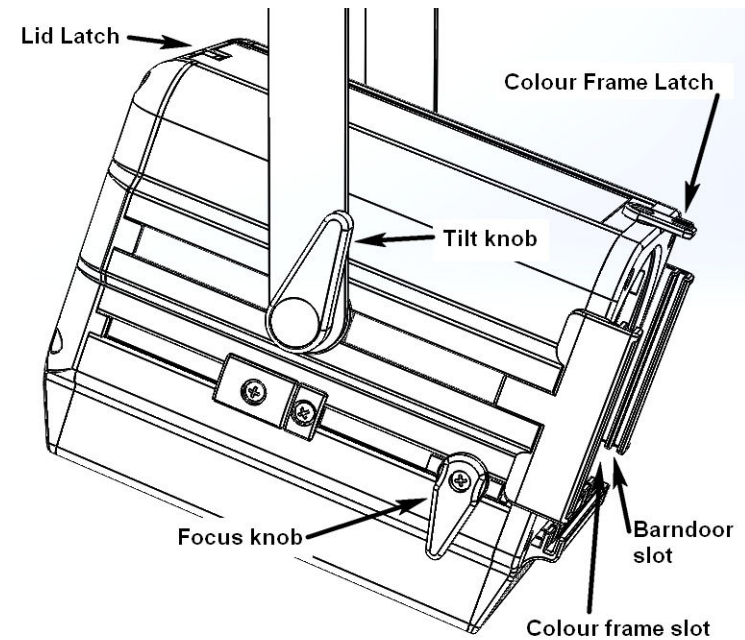
- To link currently powered On but unlinked F500s to the transmitter, follow the instructions provided with the transmitter (usually a short press of the transmitter link key)
- To unlink an F500 from its transmitter, press the Test key for 3 seconds: the F500 reverts to the cable DMX signal (if any) within 1 second

In F500s fitted with Wireless DMX, the Blue LED in the Test key indicates:

- Blue LED Off: Not linked
- Blue LED 100ms On/Off: Linked, Transmitter Off
- Blue LED 1000ms On/100ms Off: Linked, Transmitter On, DMX Off
- Blue LED On: Linked, Transmitter On, DMX On

The Blue LED is set off 5 minutes after power up or a change to the back panel controls.

The selected DMX Start Address is valid for both Wireless and Cable DMX.



Focus adjustment

The F500 has a quick acting focus knob at the right front of the body. To focus the lens:

- Unlock the focus knob by turning it so it points down
- Move the focus knob forward to narrow the beam, or back to widen the beam
- Lock the focus knob by turning it so it points either forward or back

Tilt adjustment

The F500 is fitted with a tilt lock knob on the right side of the yoke:

- Turn the tilt knob anticlockwise half a turn, then adjust the tilt position
- Turn the tilt knob clockwise to lock the tilt position

Pan adjustment

The F500 is supplied with an M10 bolt, wing-nut, flat washer, split washer, and friction washer:

- Fit the composition friction washer between the F500 yoke and its hook clamp
- Fit the flat washer on top of the hook clamp, then the split washer and wingnut
- Set the pan position, then tighten the wingnut to the required tension

Colour Frame fitting

Each F500 is supplied with colour frame which accepts standard colour filter sheet:

- Fit the colour frame in the inner slot of the F500 colour runners
- Set the colour frame latch forward to prevent the colour frame falling out

Barndoors fitting

The F500 can be fitted with an optional 4 leaf rotating set of barn-doors:

- Fit the barndoors in the outer colour runner slot, with the safety cable at the top right corner
- Pass the safety cable clip around the right side of the yoke and clip it back on its own wire
- Set the colour frame latch forward to prevent the barndoors falling out

DMX Fail behaviour

If the Wireless DMX signal fails, the F500 reverts to the cable DMX signal. If the cable DMX signal fails, the F500 maintains the previous DMX levels for 10 minutes before fading out over 5 minutes for Modes 1-5, or instant off for Modes 6-9.

Status LED indications

The Status LED shows the status of the DMX signal (Green) and the internal Temperature (Red):

- DMX (Green): On = DMX OK; Flash = DMX errors; Off = No DMX (for 5 mins after power on)
- Temperature (Red): Blink = >60°C; On = >65°C; Flash = >70°C; Off = Normal temperature

If the F500 is above 70°C, the LED is faded out over 5 seconds, and faded back in when cooled.