

TL-Z1000 Zoom Profile Spotlight 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
- Holding for more than 3 sec on Wireless DMX Z1000s, unlinks the receiver from its transmitter

The Test key has an internal blue LED which:

- Mimics the intensity of the Z1000 light output in non-Wireless DMX versions
- Acts as a Link indicator in Z1000s 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 Z1000 instructions is printed as a reminder on one side of the top lid of the Z1000. 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 locking tension of the focus knobs 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 friction may be adjusted:

- Slide the top lid back to access the condensor lens, or slide the zoom lens lids
- 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:

- Slacken the tilt knob, 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

If required the yoke may be moved:

- Slacken the tilt knob, then pull the cap off the left yoke nut
- With an M8 spanner, 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 any of the three Z1000 lenses for cleaning or changing:

- Slide the top lid back to access the condensor lens, or slide the zoom lens lids
- Turn the top lens clips clear of the lens, push the lens top back, then remove it
- Reverse the process to install a lens. *The grooved side of every lens must be to the front.*

Cleaning the Z1000

For maximum optical and electrical efficiency and long life, the Z1000 must be kept free of dust:

- Blow any dust out of the interior of the Z1000, fan blades, and heatsink fins
- Clean all lenses and the LED module lens with a damp lint-free cloth

Don'ts

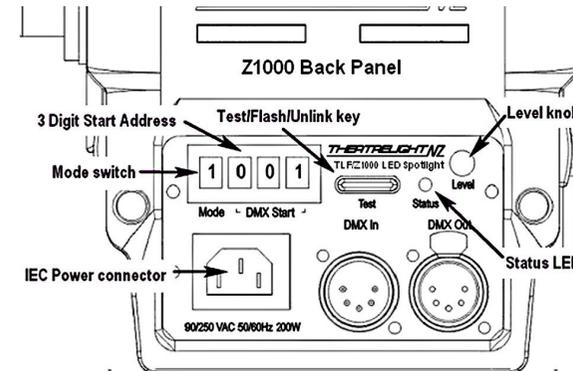
- **Do not connect the Z1000 to a dimmed mains supply**
 - Do not use any solvent other than water to clean the lenses
 - Do not subject the Z1000 to excessive force or shock
 - Do not operate the Z1000 in wet conditions
 - Do not attempt to repair the Z1000 in case of faults - return it to your sales agent
- This product is not for domestic use*

Contact Details

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The TL-Z1000 is an LED Zoom Profile spotlight suitable for general lighting in theatres and TV studios, and for exhibition and display in art galleries and museums. This manual applies to the Z1000 one colour model, the Z1000 2C two colour tuneable white model, and the four colour RGBW model.

Back Panel View



Power Connection

The Z1000 requires a **non-dimmed power supply** of rated voltage marked on the back panel.

- **Operating the Z1000 on a dimmed power supply will void your warranty**
- Plug the supplied power cable between the Z1000 IEC socket and a power supply
- Ensure the power supply is rated within the limits on the Z1000 back panel
- Ensure the power supply has an effective Earth connection

Standalone Operation all models

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 matches 250 w tungsten bulbs	2: Fade matches 500 w tungsten bulbs
3: Fade matches 1 Kw tungsten bulbs	4: Fade matches 2 Kw tungsten bulbs
5: Fade matches 5 Kw tungsten bulbs	6: Fire fade/flicker effect: Off, slow/dim to fast/bright
7: Ramp cycle 10 minutes to 0.5 sec	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

RGBW Standalone Operation

The Z1000 RGBW model has built-in colour selections for operation in stand-alone mode (ie without a DMX control panel). For details see the leaflet "TL Luminaires 4 Colour RGBW Standalone Modes".

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 Z1000s using the 'DMX Out' connector if required
- Set the DMX Start Address switch to the required DMX address
- Set the Mode Switch for the following effects:
 - 1: Fade matches 250 w tungsten bulbs
 - 2: Fade matches 500 w tungsten bulbs
 - 3: Fade matches 1 Kw tungsten bulbs
 - 4: Fade matches 2 Kw tungsten bulbs
 - 5: Fade matches 5 Kw tungsten bulbs
 - 6: Fire fade/flicker effect: Off, slow/dim to fast/bright
 - 7: Ramp cycle 10 minutes to 0.5 sec
 - 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 Remote Operation

If DMX is connected and the Mode Switch is set to 0, the DMX panel can control the intensity and the effects mode, and in two colour and RGBW models the individual colour levels as well:

Z1000: DMX1 Master; DMX2 Effects mode

Z10002C: DMX1 Master; DMX2 Warm; DMX3 Cool; DMX4 Effects mode

Z10004C: DMX1 Master; DMX2 Red; DMX3 Green; DMX4 Blue; DMX5 White; DMX6 Effects mode

In each model the *last* DMX: channel sets the Effects mode:

- Plug a DMX cable from a control panel into the XLR connector labelled 'DMX In'
- Link the DMX signal to other Z1000s using the 'DMX Out' connector if required
- Set the DMX Start Address switch to the required DMX address
- Set the Mode Switch to 0 for remote operation
- On the control panel, set the Effects DMX level (DMX 2, 4 or 6) to select the following effects:
 - 0-10%: Fade matches 250 watt tungsten bulbs
 - 20%: Fade matches 500 watt tungsten bulbs
 - 30%: Fade matches 1 Kw tungsten bulbs
 - 40%: Fade matches 2 Kw tungsten bulbs
 - 50%: Fade matches 5 Kw tungsten bulbs
 - 60%: Fire fade/flicker effect: Off, slow/dim to fast/bright
 - 70%: Ramp cycle 10 minutes to 0.5 sec
 - 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 Master DMX 1 level to control the intensity or rate of the effect
- For 2 colour models adjust DMX 2 and 3 to set the individual Warm/Cool levels
- For RGBW models adjust DMX 2, 3, 4 and 5 to set the individual RGBW levels
- Set the Level knob above zero if a minimum Master intensity/rate is required
- Press the Test key to test at Full the intensity or rate of the effect

Wireless DMX Operation

The Z1000 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 Z1000 reverts to the cable DMX signal if present.

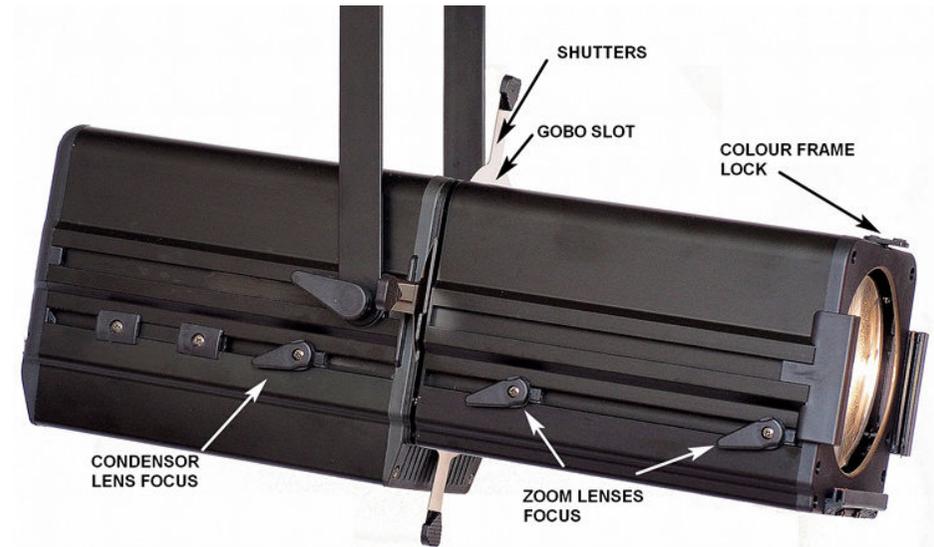
- To link currently powered On but unlinked Z1000s to the transmitter, follow the instructions provided with the transmitter (usually a short press of the transmitter link key)
- To unlink an Z1000 from its transmitter, press the Test key for 3 seconds: the Z1000 reverts to the cable DMX signal (if any) within 1 second

In Z1000s 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 and Shutters adjustment

The Z1000 has two focus knobs at the right front of the body. To focus the lenses:

- Unlock the focus knobs by turning them to point down
- Set the lenses close together for a wide beam, set them apart for a narrow beam
- Move either or both lenses to focus on the shutters
- Adjust the four shutters to shape the beam
- Lock the focus knobs by setting them horizontal

Condenser Lens adjustment

The Z1000 has an adjustable condenser lens behind the shutters:

- Adjust the condenser focus knob for maximum even lighting, or a hotspot as required

Gobo fitting

The Z1000 has a slot for a standard "B" sized Gobo, sited just in front of the shutters:

- Slide forward the top lid in front of the shutters, fit the Gobo into its runners
- Close the lid, then focus as required

Tilt adjustment

The Z1000 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 Z1000 is supplied with an M10 bolt, wing-nut, flat washer, split washer, and friction washer:

- Fit the composition friction washer between the Z1000 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 Z1000 is supplied with a colour frame which accepts standard colour filter sheet:

- Fit the colour frame in the inner slot of the Z1000 colour runners
- Set the colour frame latch forward to prevent the colour frame falling out

DMX Fail behaviour

If the Wireless DMX signal fails, the Z1000 reverts to the cable DMX signal. If the cable DMX signal fails, the Z1000 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 Z1000 is above 65°C, the LED level is faded down slowly, and faded back in when cooler.