

SCENA LED 150



User's Manual rel. 1.0 **GB**

D.T.S. Illuminazione s.r.l. – ITALY
<http://www.dts-lighting.it/>



The Lighting Company

Made in Italy

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1- SYMBOLS

Graphic symbols used on this manual



THIS SYMBOL INDICATES A HOT SURFACE



THIS SYMBOL INDICATES ELECTRIC SHOCK RISK



THIS SYMBOL INDICATES GENERAL RISK



THIS SYMBOL MEANS “DO NOT PLACE THE UNIT ON INFLAMMABLE SURFACES”



THIS SYMBOL INDICATES THE MINIMUM DISTANCE TO BE KEPT BETWEEN THE DEVICE AND THE LIT OBJECT

2- GENERAL WARNING

Read the instruction contained in this user manual carefully, as they give important information regarding safety during installation , use and maintenance.

The device is not for domestic use and must be installed by a qualified electrician or experienced person.

Always disconnect the device from the mains before maintenance.

The device must always be equipped with an efficient ground connection.

3- GENERAL WARRANTY CONDITIONS

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.

4- TECHNICAL FEATURES

OVERVIEW

SCENA LED 150 is a compact, lightweight, DMX-controlled theatre projector featuring a single high-power White LED (3.000 °K), a Ø 120 mm PC or Fresnel lens, and a long wide excursion 8,2° - 70° (PC Version) or 12,8° - 62° (Fresnel Version) linear motorized zoom with high-efficiency optical system, enabling it to be used as a PC Beam or a very wide Wash. The unit is wireless ready.

SCENA LED 150 is a modern alternative to conventional theatre lights, improving light quality, flexibility of use and installation, energy savings and component duration.

In fact the fixture doesn't heat up, and the projection is always flicker free.

Also, the dimming curves are similar to those of halogen lamps.

The connectors are Powercon In & Out and 5 poles DMX In & Out.

SCENA LED 150 is contained in a strong housing with folded edges, designed to resist all the rigours of continuous use.

Also, the yoke has an exclusive round flange + clutch system which guarantees a perfect grip and safer operation.

PRODUCT CODES:

03.TS016.A	SCENA LED 150 *White 3.000 °K *PC BLACK
03.TS016.F	SCENA LED 150 *White 3.000 °K *FR BLACK
03.TS016.AWS	SCENA LED 150 *White 3.000 °K *With Wireless on Board *PC BLACK
03.TS016.FWS	SCENA LED 150 *White 3.000 °K *With Wireless on Board *FR BLACK
03.TS017.A	SCENA LED 150 *White 4.000 °K *PC BLACK
03.TS017.F	SCENA LED 150 *White 4.000 °K *FR BLACK
03.TS017.AWS	SCENA LED 150 *White 4.000 °K *With Wireless on Board *PC BLACK
03.TS017.FWS	SCENA LED 150 *White 4.000 °K *With Wireless on Board *FR BLACK
03.TS018.A	SCENA LED 150 *White 5.600 °K *PC BLACK
03.TS018.F	SCENA LED 150 *White 5.600 °K *FR BLACK
03.TS018.AWS	SCENA LED 150 *White 5.600 °K *With Wireless on Board *PC BLACK
03.TS018.FWS	SCENA LED 150 *White 5.600 °K *With Wireless on Board *FR BLACK

LED Technology

1 x White LED 3.000 °K, CRI>90, 7.000 Lumens

Also available as 4.000 °K and 5.600 °K LEDs

LED Max power: 150W

Optical group

Linear motorized zoom:

PC Version (Ø 120 mm PC lens) from min 8,2° (1.600 Lux at 5 mt)

to max 70° (185 Lux at 5 mt)

Fresnel Version (Ø 120 mm Fresnel lens) from min 12,8° (800 Lux at 5 mt)

to max 62° (250 Lux at 5 mt)

Control

4 DMX channels

LED display + 4 soft keys

Wireless ready

Connectors

Power supply: POWERCON IN & OUT Connector

DMX: 5 poles In & Out Connector

Power supply

Electronic full-range AC 90-260 V 50 / 60 Hz

5- MAIN ELECTRICAL CHARACTERISTICS

Input Voltage Range : V_{in} 90 - 260 Vac

Frequency : 50 / 60 Hz

Power Consumption Range : 5 - 160 W

Power Factor (Pf) : 0.95 electronic PFC controller

Efficiency : 95% typical

Control Input:

Control Signal : DMX 512

Dimming System : Constant Current PWM

Address Range : DMX 512 channels addressable by display

6- ACCESSORIES

As standard

- 1 x User's Manual
- 1 x POWERCON male cable connector (D.T.S. Code: 0520P014)
- 1 x XLR 5 pins male cable connector (D.T.S. Code: 0508B028)
- 1 x XLR 5 pins female cable connector (D.T.S. Code: 0508B027)
- 1 x Filterframe for SCENA LED 150 *Black finish (D.T.S. Code: 02M00416.46)

Optional (on request)

- * "C" Clamp G60 (Max. Load. 50 Kg) *Black finish (D.T.S. Code: 0521A004)
- * "C" Clamp G60 (Max. Load. 50 Kg) *Chrome finish (D.T.S. Code: 0521A004.20)
- * Barndoor for SCENA LED 150 *Black finish (D.T.S. Code: 03.TBD01)
- * Ø 120 mm PC lens for SCENA LED 150 (D.T.S. Code: 0506P003)
- * Ø 120 mm Fresnel lens for SCENA LED 150 (D.T.S. Code: 0506P004)
- * Filterframe for SCENA LED 150 *Black finish (D.T.S. Code: 02M00416.46)

DIMENSIONS

Unit Dimensions

(LxWxH)

330 x 250 x 301 mm

Packing Dimensions

(LxWxH)

300 x 235 x 425 mm

Weight

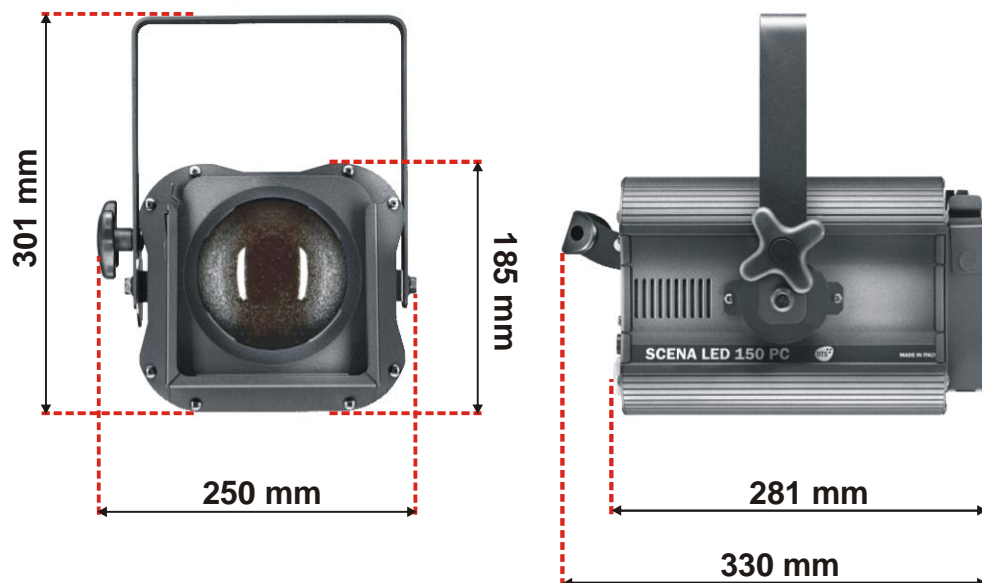
5,3 Kg (PC version)

5,1 Kg (Fresnel version)

Weight

6,3 Kg (PC version)

6,1 Kg (Fresnel version)




7- IMPORTANT SAFETY INFORMATION

7.1 Fire prevention:

Never locate the fixture on any flammable surface.

Minimum distance from flammable materials: 10 cm.

Minimum distance from the closest illuminable surface: 30 cm. (30cm) 

Replace any blown or damaged fuses only with those of identical value (3,15 AT).

7.2 Prevention from electric shock:



High voltage is present inside the unit.

Unplug the unit prior to performing any operation which involves touching the inside of the unit.

This equipment must be grounded, do not connect to non-grounded supplies.

The use of a thermal magnetic circuit breaker is recommended for each SCENA LED 150 unit.

Use only AC supplies 90-260V, 50 / 60 Hz.

SCENA LED 150 should never be located in position exposed to rain or in areas of extreme humidity.

A good air ventilation is essential for proper equipment work.

7.3 Safety:



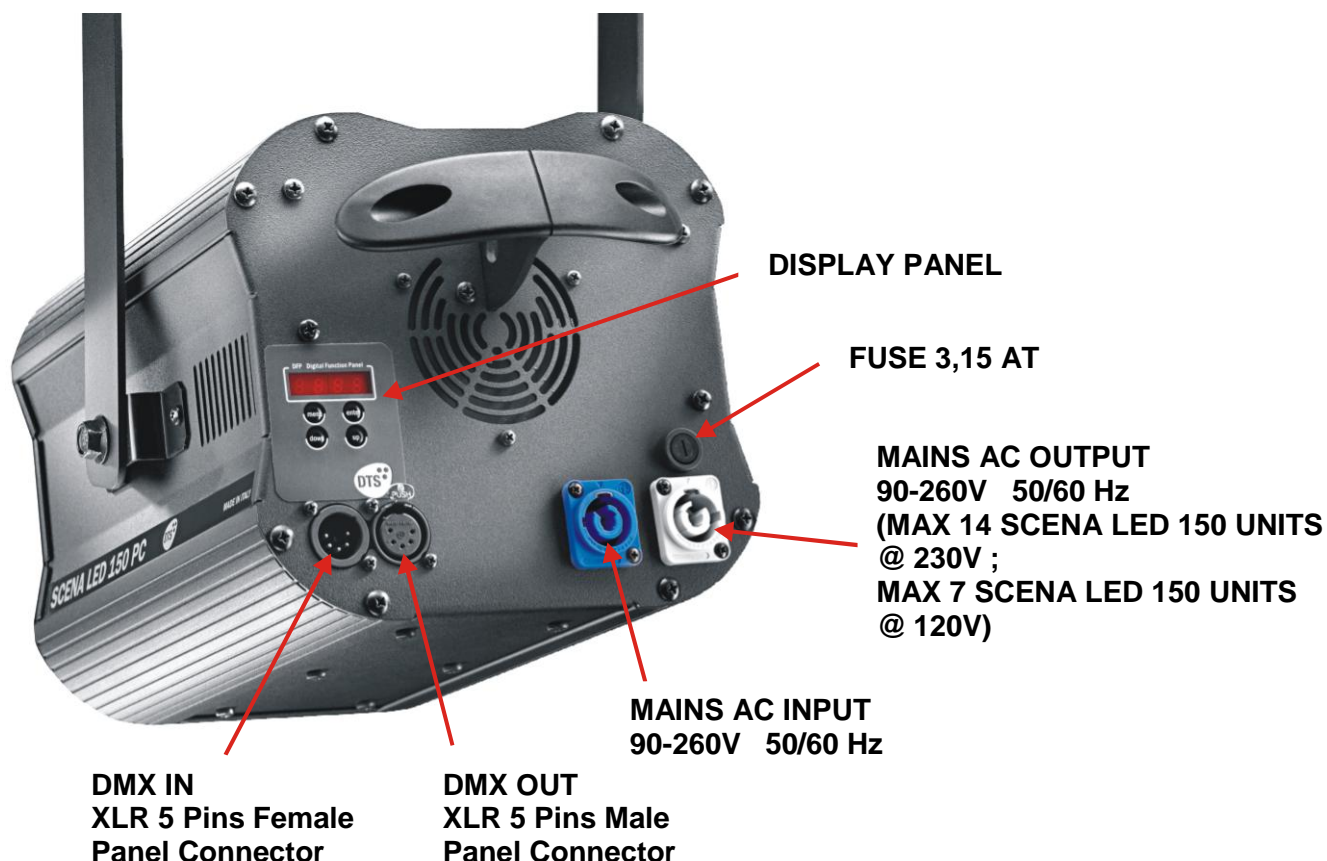
The external surface of the unit may exceed 50°C; never handle the unit until at least 5 minutes have elapsed since the unit was turned off.

Never install the unit in an enclosed area lacking sufficient air flow.

The ambient temperature should not exceed 40°C and should not be lower than -10°C.



8- INPUT / OUTPUT CONNECTIONS



9- DMX SIGNAL CONNECTION:

The unit operates using a digital DMX 512 signal.

Connection between the controller and the unit or between units must be carried out using a two pair screened \varnothing 0.5 mm.

Ensure that the conductors do not touch each other.

Do not connect the cable ground to the DMX connector chassis.

The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first unit to the DMX IN plug of the second one.

In this way, all the projectors are cascade connected.



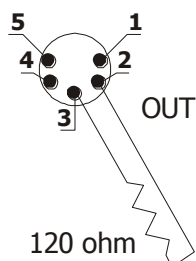
If the display showing the DMX address flashes, then one of the following errors has occurred:

- DMX signal not present
- DMX reception problem

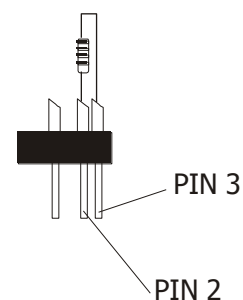
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor Between pin 2 and 3.

The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XLR CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



9.1 DMX addresses

SCENA LED 150 can be controlled with 4 DMX channels.
In order to use the unit in 4 channels, set the following addresses on the mixer:

Projector 1	A001	
Projector 2	A005	If you want to select the next projector, just add "4"
Projector 3	A009	
.....	A.....	
projector 6	A021	

9.2 Selecting the DMX address

- 1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
- 2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

TIPS: if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.

- 2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

10- FIRMWARE UPDATING

Warning:

This procedure require a base knowledge of Windows computer applications.
Please refer to an authorised D.T.S. service centre.



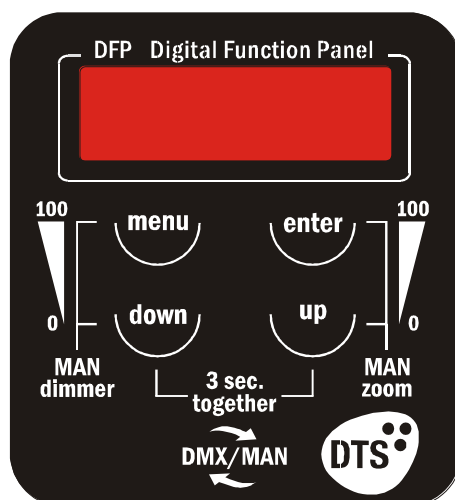
To update the software version of the SCENA LED 150 you need:
D.T.S. RED BOX interface (D.T.S. Code: 03.LA.008).
USB-DMX Driver for the D.T.S. RED BOX interface.
D.T.S. Firmware upgrade utility program.
(The driver and the installation procedure are available in our web site
www.dts-lighting.it)

Updating the software version.

Please follow the procedure below to perform the update:


1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Download the new software version into the unit by using D.T.S. Firmware upgrade utility program.

11- DISPLAY FUNCTIONS



DISPLAY FUNCTIONS

The SCENA LED 150 display panel shows all the available functions. Using these functions, it is possible to change some of the parameters and add some functions. Changing the D.T.S. setting can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.

NOTE: the symbol  shows which key has to be pushed to obtain the desired function.

Software version 1.13





REVERSE DISPLAY


Reverses display's reading depending on the mounting position (on the ground or suspended).



Floor Position 

Suspended Position 

Display Off 

Display Always on 

DISPLAY STAND BY

To turn off the display (after 5 seconds)
Or leave it always on.



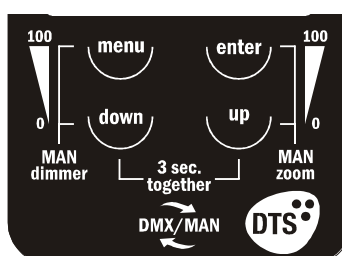
Default DMX Mode
4 Channels

 Manual Mode

DMX MODE

To select DMX mode : 4 DMX channels mode (default) or Manual mode.

Manual mode can also be activated by pressing at the same time the "UP" + "DOWN" buttons on unit display for 3 seconds ("A001").





LED



Min

Default = 0



LED

Led Min/Max, Smooth, Compression, Sync and Boost level values settings



MAX

Default = 100



LED MINIMUM VALUE

This menu allow to select the minimum levels for white



SMTH



4

Range = Off-20
Default = 4



LED MAXIMUM VALUE

This menu allow to select the maximum levels for white



COMP



QUAD

Quadratic =
Linear light
output



LINE

Linear = Linear
Current output



These settings have priority
on Master Dimmer channel



Sync



610

Range = 610 Hz - 10
KHz
Default = 610 Hz



bst



on

Boost mode
activated



off

Boost mode
deactivated



SMOOTH VALUE

This menu allow to select the value of
the delay (in milliseconds) for Dimmer
channel reaction to DMX or Program
variation.

Off = 25 ms. Instant response to DMX
variation.

20 = 250 ms. Smooth response to DMX
variation.

With BOOST active, the LED'S
current is set to Max value.
(30% more gain compared to
BOOST Off)
Default = Enabled

COMPRESSION

This menu allow to select between
Linear current output or Quadratic
current output for LEDs
Default = Quadratic

SYNC

This menu allow to adjust the PWM
frequency value (Hz) in order to reduce
flickering in the process of your camera
recordings

BOOST DRIVING

This menu allow to increase the LED's
current from Min to Max



Ir



off



on



Note:

External infrared remote
sensor needed (D.T.S. Code:
03.LA.016)

INFRARED MODE

Infrared remote control.

By activating Ir Mode, it will be
possible to navigate through the unit
functions by using the D.T.S.
infrared remote control

(D.T.S. Code: 0514L008)

NOT IMPLEMENTED ON SCENA LED 150



UdNH



SEL



off

Wireless
Enabled

WIRELESS DMX

on

Wireless
Disabled

Wireless DMX enabled / disabled.

By activating WDMX MODE, it will be possible to control SCENA LED 150 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271).

Active only on SCENA LED 150 with Wireless on board

UnLH



UNLINK = LOG OUT

Logging on SCENA LED 150 (WIRELESS DMX must be enabled on SCENA LED 150 unit)



To log on the SCENA LED 150 in the WIRELESS system simply press and quickly release the function button on the transmitter.

The transmitter will start flashing rapidly red/green scanning for new free receivers / SCENA LED 150 units.


When a SCENA LED 150 logs on to the transmitter the LINK green light on transmitter starts to flash rapidly.

After approximately 10 seconds the transmitter will jump back to normal mode and continue transmitting data.

The SCENA LED 150 now try to synchronize to the transmitter.

When synchronized to the transmitter, 2 different modes are possible:

1. Antenna transmitter has detected and transmits a DMX signal, in this mode a solid green light is seen on the transmitter and solid display is seen on SCENA LED 150.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on SCENA LED 150.

To log SCENA LED 150 off from a transmitter simply select UNLINK function  under

WIRELESS DMX MENU  and press ENTER.

When SCENA LED 150 is logged off, the display is blinking, meaning its available for log in on a new transmitter.

Logging out a SCENA LED 150

Select UNLINK function  under WIRELESS DMX MENU  and press ENTER.

When SCENA LED 150 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all SCENA LED 150units linked to a transmitter

Press and hold the function button of the transmitter for about 3 seconds. When the display is blinking on SCENA LED 150, it mean that the units are logged out.

Transmitter, Status LED

Flashing red/green, no dmx connected.

Solid green, dmx signal detected and transmitted.

Fast flashing red/green, log in mode (every free SCENA LED 150 unit, not logged in to any other transmitter, will be logged on)

SCENA LED 150 Status

Display blinking = not logged on to a transmitter (free).

Solid display = logged on to a transmitter and receiving dmx data.



ENER



SEL



off



Default = OFF

EMERGENCY

Emergency operating mode.

By setting Emergency mode, it will be possible to select Dimmer intensity level that will then ran if DMX signal is missing or not available.

Usefull for Emergency EXIT

dimm



Default = 255



on



DFSE



SURE



DEFAULT SETTING

To restore default settings



TEMP



0250

Internal unit temperature
(° Celsius)

TEMPERATURE

Internal unit temperature visualisation



LIFE



LED



LIFE TIME

This menu show the total unit life time and the LED life time

Unit



Soft



U.1.13

SOFTWARE

Software version

12- SERVICE MENU

For technical personnel only

To operate this menu:

-Connect the unit to the main

-While reset is running, press the MENU and ENTER keys at the same time.

LEnS   **Pc** 

LENS
PC or Fresnel
lens selection

FrES 

cUrr   **3000** 

CURRENT
From min 20 mA to max 600 mA
Default = 300 mA

ZEro   **0050** 

ZERO OFFSET
From min 1 mm to max 50 mm
Default = 5 mm

rAnG   **1030** 

RANGE
From min 30 mm to max 150 mm
Default = 103 mm

SPd   **0200** 

SPEED
Maximum speed
From min 1 mm/s to max 400 mm/s
Default = 20 mm/s

Acc   **0 100** 


ACCELERATION
Maximum Acceleration/Deceleration
From min 1 mm/s² to max 400 mm/s²
Default = 10 mm/s²

rAt   **058.2** 

RATIO
Transmission ratio.
From min 10 mm/turn to max 200 mm/turn
Default = 58.2 mm/turn

rESM  **SUrE** 

RESM
To restore service and user default
settings

ESc  **EXIT**
Exit from service menu

13- DMX PROTOCOL**4 CHANNELS MODE**

- 1 SHUTTER / STROBE
- 2 DIMMER
- 3 ZOOM
- 4 RESET

DMX CHANNEL	1	Parameter: SHUTTER / STROBE
-------------	---	------------------------------------

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-009					Black-out
010-019					Open
020-029					Black-out
030-119					Strobe (from 3.27 s to 30 ms)
120-149					Pulse up (from 42.6 s to 120 ms)
150-179					Pulse down (from 42.6 s to 120 ms)
180-204					Random strobe (Dimmer channel active)
205-229					Full independent Random Strobe (Dimmer channel disabled)
230-255					Open

DMX CHANNEL	2	Parameter: DIMMER
-------------	---	--------------------------

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Proportional dimmer

DMX CHANNEL	3	Parameter: ZOOM
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Linear ZOOM from Narrow to Wide (8,2° - 70° PC lens ; 12,8° - 62° FRESNEL lens)

DMX CHANNEL	4	Parameter: RESET
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-015					No Effect
016-255					Zoom Motor Reset (active after 3 sec.)

NOTES

NOTES

NOTES

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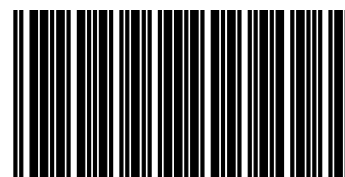
The Lighting Company

ISO 9001:2008

D.T.S. quality system
is certified to the
ISO 9001:2008 standard



D.T.S. products are designed
and manufactured at the D.T.S.
plants in Italy



05171197

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