ACME®

Theatre Spot 150

TS-150 CW
TS-150 WW
TS-1504 CW
TS-1504 WW

User Manual

Please read the instruction carefully

CONTENTS

1. Safety Instructions

⚠️
WARNING

> Please read the instruction carefully which includes important information about the installation, usage and maintenance.

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

• Unpack and check carefully there is no transportation damage before using the unit.

• Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

• It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

• The unit is for indoor use only. Use only in a dry location.

• The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

• Disconnect main power before replacement or servicing.

• Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

• Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.

• Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperature is higher than this.

• Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

• In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

• DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning

• To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or

2D

moisture.

- DO NOT open the unit within five minutes after switching off.

- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2. Technical Specifications

◆ The best price-performance ratio LED theater spot, engineered to exceed conventional projectors in performance and power
◆ DMX, Master/Slave and manual control
◆ Motorized linear zoom for beam angle from 14~55°
◆ 0~100% smooth dimming
◆ Color frame for use of color filtersand barn doors included
◆ LCD display for easy navigation
◆ Knobs for manually control of zoom and dimming are available at rear side

> ◆ TS-150 WW/CW with Chinese Fresnel lens
>
> ◆ TS-1504 WW/CW with German Fresnel lens

- **Power supply:**   AC 100~240V, 50/60Hz

- **Power consumption:**   190W
- **Color Temperature:**   5600±100K (TS-150 CW)

      3150±100K (TS-150 WW)

- **Light Source:**   1 × 150W white LED
- **CRI:**

  WW: ≥ 92
  CW: ≥ 89

- **Weight:**   8.6Kgs

- **Dimension:**   406×417×238mm

Photometric Diagram:

Distance(m)		3	5	7	10
14° Lux	CW	6920	2300	1175	575
	WW	6240	2380	1215	595
55° Lux	CW	2240	820	420	205
	WW	2000	840	430	210
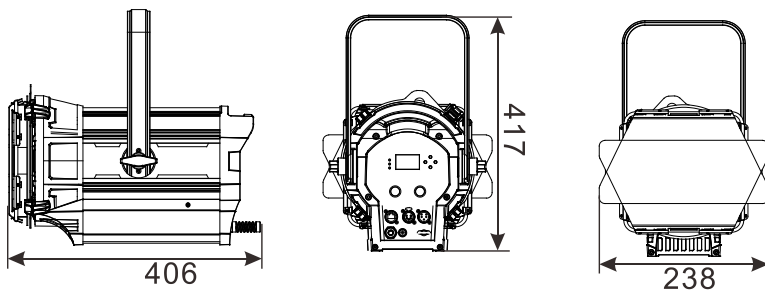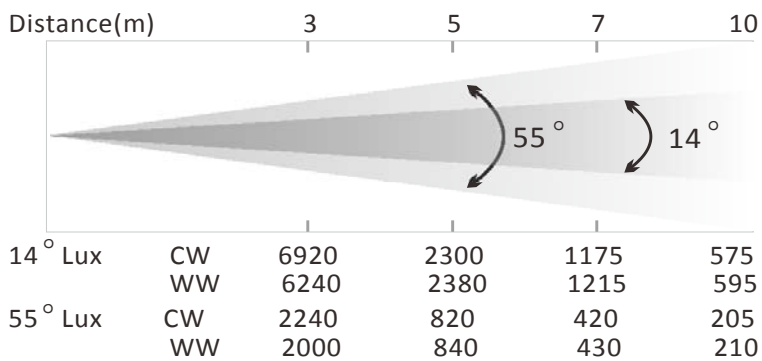
3. The Plate for Color Filter & Barn Door Installation
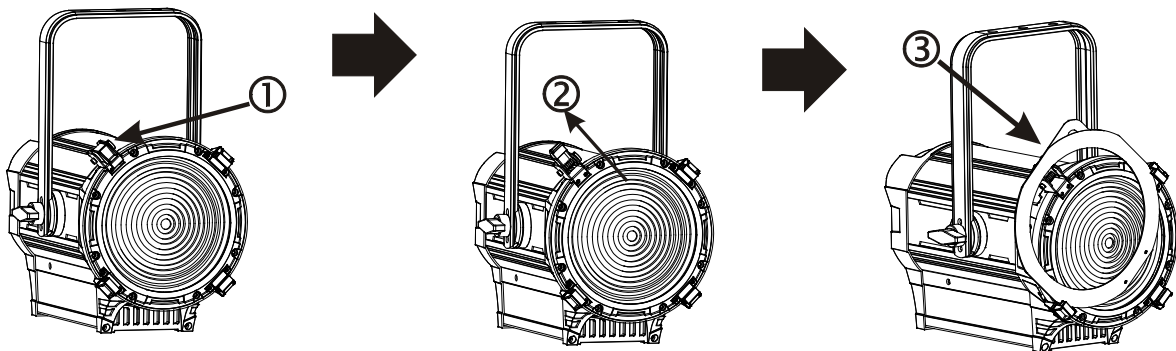
Fig. 1

At first, please push the Lock Cap button by hand as the arrow ①, and move away the Lock as the arrow ②; Then insert the Plate for Color Filter into the inside slot from topside③;
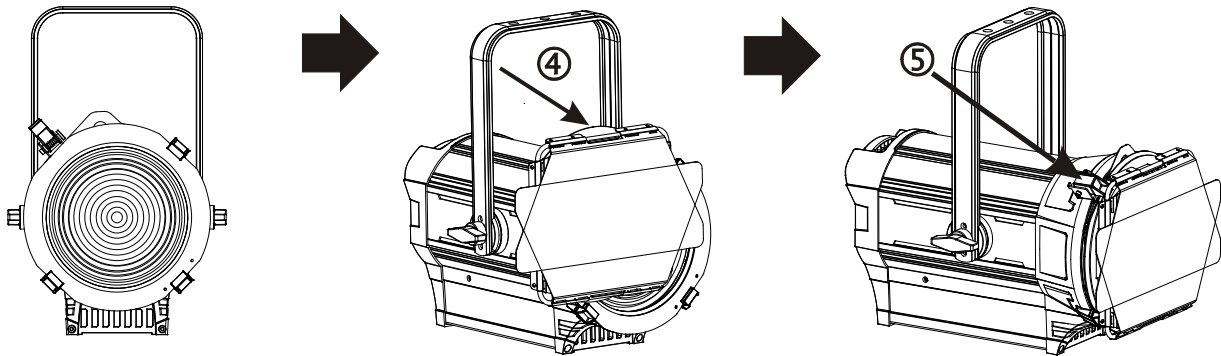
Fig. 2

Secondly, please insert the Barn Door into the outside slot from topside as arrow ④, and fasten the lock (**Note**: the Barn Door must be fastened into the inside of the lock's hook); then flip down the lock cap again as arrow⑤.

4. How To Set The Unit

4.1 Control panel

1. Display: Show the various menus and the selected functions.

2. LED:

MASTER	On	Master Mode
SLAVE	On	Slave Mode
DMX	On	DMX input present

3. Button:

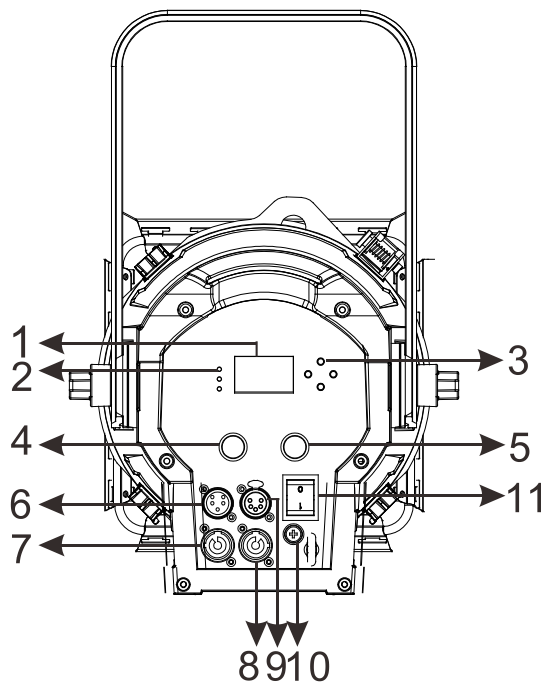| MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

4. Dimmer: Manual adjust the dimmer value.

5 Zoom: Manual adjust the zoom value.

6. DMX input: For DMX512 link, use 5-pin XLR cable to link the unit together.

7. POWER IN: Connects to mains supply power.

8. POWER OUT: Connects to the next unit.

9. DMX output: For DMX512 link, use 5-pin XLR cable to link the unit together.

10. Fuse(T5A**):** Used to protect the unit from damage of the over current.

11. Power Switch: Used to turn On/Off the fixture.

4.2 Main Functions

To select any functions, press the **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press the **ENTER** button to setup or it will automatically return to the main functions without any change after idling one minute. Back to the functions without any change press the **MENU** button.

The main functions are shown below:

```
                                              ┌─────────────┐
                                              │      1      │
                          ┌──────────────┐    ├─────────────┤
                          │ DMX Address  │────┤      ⋮      │
                          └──────────────┘    ├─────────────┤
                                              │     512     │
                                              └─────────────┘
                                              ┌─────────────┐
                          ┌──────────────┐    │   Smooth    │
                          │ Dimmer Speed │────├─────────────┤
                          └──────────────┘    │    Fast     │
                                              └─────────────┘
                                              ┌─────────────┐
                                              │   Mode 1    │
                                              ├─────────────┤
                          ┌──────────────┐    │   Mode 2    │
                          │ Dimmer Curve │────├─────────────┤
                          └──────────────┘    │   Mode 3    │
                                              ├─────────────┤
                                              │   Mode 4    │
                                              └─────────────┘
                                              ┌─────────────┐
                          ┌──────────────┐    │   Master    │
                          │  Slave Mode  │────├─────────────┤
                          └──────────────┘    │    Slave    │
                                              └─────────────┘
                                              ┌──────────────┐
                          ┌──────────────┐    │ Master Slave │
                          │  DMX State   │────├──────────────┤
                          └──────────────┘    │   BlackOut   │
                                              ├──────────────┤
                                              │  Last State  │
                                              └──────────────┘
```

Display Setting

Backlight Intensity	→	1 / 10
Contrast Ratio	→	1 / 30
Backlight Auto Off	→	Yes / No
Display Inverse	→	No / Yes
Language	→	English / Chinese

MENU

Manual Test

| Zoom Position | → | 0 ⋮ 255 |
| Dimmer Value | | |

Fixture Information

- LED Temp.
- Fixture Time
- Firmware Version

Factory Setting

- No
- Yes

Reset

DMX Address

Select **DMX Address**, press the **ENTER** button to confirm, the present address will blink on the display. Use the **UP** and **DOWN** button to adjust the DMX address from **1** to **512**. Once the address has been selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.
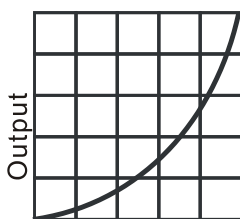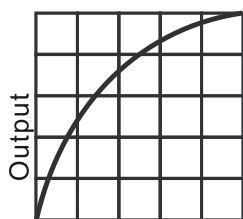
Dimmer Speed

Select **Dimmer Speed**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Smooth** (dimmer speed smooth) or **Fast**(dimmer speed fast) mode. Once the mode has been selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to show the **DIMMER CURVE** on the display, use the **UP/DOWN** button to select **Mode 1**,**Mode 2,Mode 3** or **Mode 4**. Once selected, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.
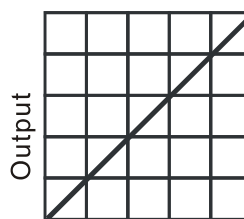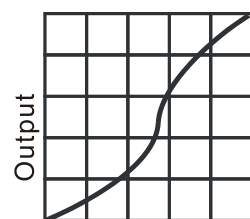
Dimmer Modes:

Output — DMX% (Square Law)

Output — DMX% (Inverse Square Law)

Output — DMX% (Optically Linear)

Output — DMX% （S-Curve）

Square Law: Light intensity control is finer at low levels and coarser at high levels.

Inverse Square Law: Light intensity control is coarser at low levels and finger at high levels.

Linear: The increase in light intensity appears to be linear as DMX value is increased.

S-cure: Light intensity control is finger at low levels and high levels and coarser at medium levels.

Slave Mode

Select **Slave Mode**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Master** or **Slave** mode. Once the mode has been selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

DMX State

Select **DMX State**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Master Slave, Blackout** or **Last State** mode. Once the mode has been selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Display Settings

Enter menu mode, select **Display Settings**, press **ENTER** button to confirm, use **UP/DOWN** button to select **Backlight Intensity, Contrast Ratio, Backlight Auto Off, Display Inverse** or **Language**.

Backlight Intensity

Select **Backlight Intensity**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to adjust backlight intensity from 1 (dark) to 10 (bright), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Contrast Ratio

Select **Contrast Ratio**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to adjust value from 1 to 30, press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

Select **Backlight Auto Off**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select **Yes** (display goes off one minute after exiting

menu mode) or **No** (display always on), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Display Inverse

Select **Display Inverse**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select the **No** (normal display) or **Yes** (inverse display), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Language

Select **Language,** press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select the **English** or **Chinese**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Manual Test

Select **Manual Test**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** button to select the **Zoom Position** or **Dimmer Value** mode. Once selected, use the **DOWN** and **UP** button to adjust the value (0~255), and press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Information

Enter menu mode, select **Fixture Information**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select the **LED Temp.**, **Fixture Time** or **Firmware Version**.

LED Temp.

Select **LED Temp.,** press the **ENTER** button to confirm, the current running temperature of the fixture will show on the display. Press the **MENU** button back to exit.

Fixture Time

Select **Fixture Time**, press the **ENTER** button to confirm, and running time of the fixture will

show on the display. Press the **MENU** button back to exit.

Firmware Version

Select **Firmware Version**, press the **ENTER** button to confirm, the software version will show on the display. Press the **MENU** button back to exit.

Factory Setting

Select **Factory Setting,** press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **No** or **Yes** (Switch back to default settings). Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Reset

Select **Reset**, press the **ENTER** button and the fixture will now reset.

5. How to Control the Unit

You can operate the unit in two ways:

1. Master/slave built-in preprogram functions

2. Universal DMX controller

5.1 Master/Slave Built In Preprogrammed Function

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, synchronized light show. This function is good when you want an instant show.

5.2 DMX Controller

Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channels so that the units can receive DMX signal.

Press the **MENU** button, and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to

when the display stops blinking or storing automatically one minute later. To go back to the functions without any change press the **MENU** button again. If you use please refer to the following diagram to address your DMX512 channel for the first 4 units.
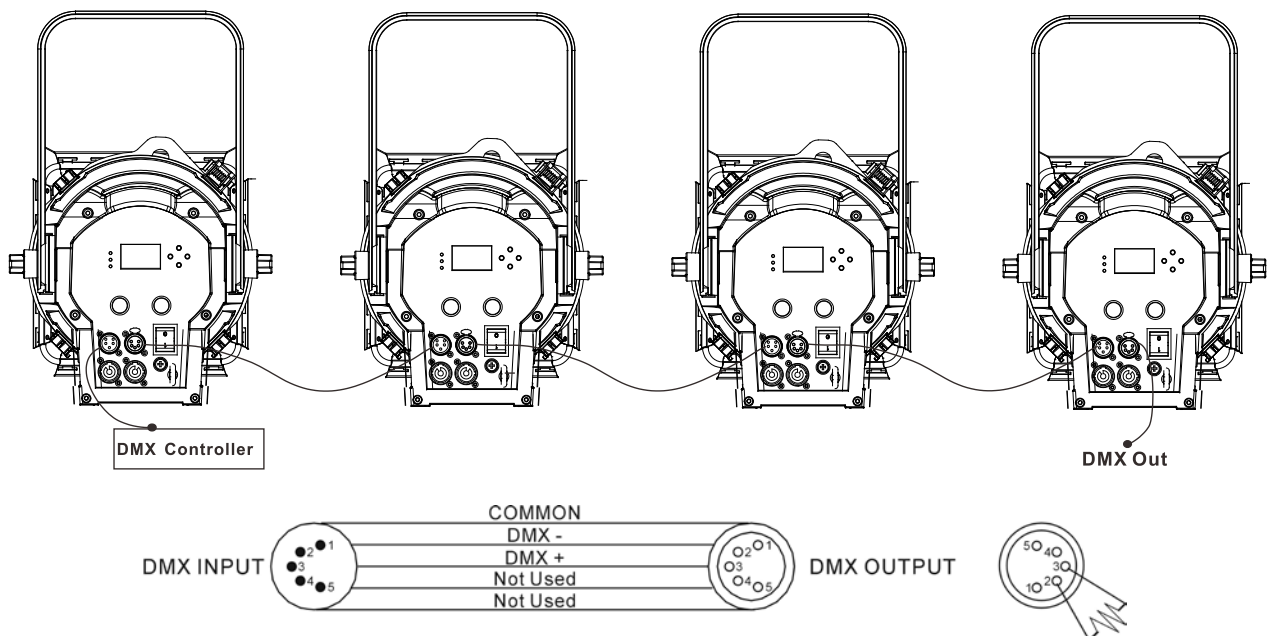
2 channels： `1` `3` `5` `7`

5.3 DMX 512 Configurations

2 Channels Mode:

1		DIMMER
	0～255	0→100%
2	0～255	**ZOOM**

6. DMX 512 Connections

The DMX512 is widely used in intelligent lighting control, with a maximum of 512 channels.

1. Connect the fixture together in a "daisy chain" by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a "Y" cable.

Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system

2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units' power is disconnected.

3. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

4. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).

5. 3 pin XLR connectors are more popular than 5 pins XLR.

   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+),

             Pin4/5: not used

7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.

2. Measure the mains voltage on the main connector.

3. Check the power on Lamp.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.

3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.

4. Try to use another DMX controller.

5. Check if the DMX cables run near or run alongside to high voltage cables that may cause

damage or interference to DMX interface circuit.

C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.

2. The motor's drive IC on the PCB might be out of condition

8. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

• Clean with soft cloth using normal glass cleaning fluid.

• Always dry the parts carefully.

• Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

&

Harmonized Standard

EN 60598-1:2008 + All:2009; EN 60598-2-17:1989 + A2:1991; EN 62471:2008; EN 62493: 2010

Safety of household and similar electrical appliances

Part 1: General requirements

Innovation, Quality, Performance