



**THE SENSORY  
COMPANY**  
*refreshingly different*

# **DST TWIRLER**

**(Direct Mains Powered & Low Voltage Versions)**

# **USERS MANUAL**



**CE**



# 1. Getting started

**The following points are important for safety as well as for the smooth installation and performance of the unit**

*This unit is NOT a toy. It should only be used under the close supervision of a responsible adult*

- ✓ Ensure that no damage has occurred during shipping.
- ✓ If the unit is supplied without a fitted plug, it is important to ground the yellow/green conductor in order to meet regulations for safety.
- ✓ Do not connect the device to any dimmer pack.
- ✓ If electrical work is required for installation, qualified personnel must only do this. **RCD protection recommended.**
- ✓ The unit must be located in a place with adequate ventilation at least 15cm from the walls. Do not block any ventilation slots.
- ✓ Ensure that no liquid or other objects can enter the unit. Disconnect the unit from the mains supply should this happen.
- ✓ Ensure ALL safety regulations are met – especially in pools / bathrooms. Low voltage versions and isolation transformers (optional extra) are available where mains regulations cannot be met.
- ✓ If this version unit is Low Voltage (has an external (usually wall mountable) power supply) it must never be plugged directly into the mains supply.
- ✓ In the unlikely event of product malfunction, turn off the unit immediately. Never try to repair the unit yourself. Repairs carried out by non-approved personnel can lead to serious damage or malfunction and will void warranty. Please contact us for any technical assistance.
- ✓ Occasional breaks are necessary to prevent breakdowns. **The unit is not designed to be powered permanently. A method of isolation from mains when not in use is essential (i.e. Master Isolator / Switch).**

- ✓ Always remember to unplug the unit from the mains supply and allow unit to cool, before any service is done.
- ✓ This unit is heavy. Make sure it is securely mounted to a structurally sound surface

## 2-Main features

- Voltage: AC 230V 50Hz (110V North America)
- Lamp: A1/259 250W 24V (Low voltage version - 15V 150W )
- The unit is DST (Patent Pending) compatible. It features full DST control, 7 dichroic colours plus white, accurate focusable optics and is fan cooled.
- Beam Rotation: 3rpm approx. bi-directional
- Power Consumption: 300W approx.
- Electronics Fuse: T3.15A

## 3-Lamp

- Remove the two knurled screws at bottom of unit to gain access to the lamp.
- Bulb type: Note: The Twirler comes in two versions: A direct mains powered version and a low voltage version. The low voltage version has an external power supply. The lamp you must use is different dependant upon which version you have:
  - **Mains version Lamp - A1/259 250W 24V**
  - **Low Voltage Version Lamp - 15V 150W**
- Always switch off the mains supply and **allow unit to cool** before changing lamp.
- Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe with lint free cloth before installation.
- Average bulb life: 80Hrs (on high output level)
- Subjecting the unit to sudden shocks can cause premature bulb failure. Placing the unit on the low output setting (switch on back of unit) will greatly extend lamp life.

# 4-Controls & Connections

- DIP switches on rear of unit are reserved for future use and should be set **ALL Off**
- The 3 Pin XLR socket on the rear of the unit is for connecting an External Program Unit (Available Separately)
- **Low Voltage Version** – The 4 Pin XLR Plug on the rear of the unit is for connecting an external low voltage power supply. Under no circumstances should any non approved power supply be connected to this unit.
- Red DST Program button is located on rear of unit (see DST section below)
- Power on LED (red) is located on rear of unit and is lit to show the unit is powered up.
- DST Ready LED (green) is located on the rear of unit and flashes rapidly when unit is ready to respond to DST.
- BNC Connector at the back of the unit is for attaching the external antenna (included).

# 5-DST (Patent Pending)

The award winning DST system has brought an exciting new truly interactive dimension to multi-sensory.

In its basic form the DST system consists of two components, the DST *cause* and the DST *effect*. Any DST *cause* product can be used to control any number of DST *effects*.

This DST Twirler is a DST *effect* and will respond to any DST *cause* product it is linked to.

This creates a unique new dimension in which the user can interact with either a single item as with traditional technology or indeed every item in the room! The combinations are numerous.

**So how do I make the Twirler react to the DST Buttons?**

Simply press **and hold** the red program button (situated on the back of the Twirler or on external control unit - dependant upon version), while pressing any button on the DST buttons unit.

The Twirler now responds to the buttons!

### **Ok then, how do I make the Twirler react to the DST Colour Die?**

Again, press **and hold** the red program button (situated on the back of the Twirler or on external control unit - dependant upon version), now turn the die over on to any colour.

The Twirler now responds to the die! Easy eh?

The same method is used to program this unit or indeed any DST effect to any DST cause.

## 6-Initialisation

When the unit is powered up, it goes through an initialization routine where it moves all motors to their datum points. Bumping noises may be heard as the unit checks the limits of movement on the motors. This is perfectly normal and will last approx. 10secs. **The lamp will not light until it receives a command from a DST master it has been programmed to.**

## 7-Modes Of Operation

The unit will work in either DST interactive mode (reacting to whatever it has been 'linked' to) or Passive automatic colour changing mode. When first powered up, the unit automatically enters into DST mode, responding to the last item it was programmed to. To enter Passive mode, press and hold the red program button (situated either on the rear of the unit or on the external control unit – dependant upon version) down for approx. 6 secs. The unit will begin to scroll through all available colours. To re-enter DST mode, hold down the red program button while activating any DST cause product (see DST section), or power down the unit, then re-power up.

**Note: Ensure the external stub antenna is attached to the unit otherwise range of operation will be much decreased**

## 8-Fixture Cleaning

The fixture should be cleaned using a damp cloth. Do not use abrasive materials. Dry unit before operating

## 9-Troubleshooting

### *Shapes are out of focus*

The shapes can be focused by moving the focusing lens (situated at the front of the unit) forwards or backwards.

### *Range of operation is limited*

Ensure the stub antenna (included) is attached to the BNC connector at the rear of the unit.

### *No light from unit*

Check red 'Power on' LED is lit and fan is running. If not there is no mains supply. Check mains wiring and integral fuse in mains inlet connector on bottom of unit.

If Red LED is lit, check green 'DST Ready' LED is flashing rapidly. If not, contact Sensory Company Technical Support.

Ensure you have programmed the unit to a DST cause product (see DST section)

Try programming the unit to a different DST cause product. If this works, the problem could be with the previous DST cause product.

### **Check dipswitches on bottom of unit are ALL set to OFF**

Check lamp is alight. You should be able to see light escaping through the fan hole. If not, the lamp may need replacing.

For further requirements contact your local Sensory Company technical assistance centre.

We have many DST products and others planned for the future, which will all interact with your existing DST equipment, ensuring you of a sound investment. Please keep visiting our website at **[www.thesensorycompany.co.uk](http://www.thesensorycompany.co.uk)** to stay up to date with the latest innovations.

Manufactured in EC

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04/07