



A division of **ROSCO**  
www.gamonline.com



GAM Product #TS6111  
Rosco Product #206 36200 0120

### CAUTION

When using a DMX device with a discharge lamp such as CDM or an HMI, it's suggested that you separate the power circuit for the discharge lamp from the DMX control device. When using DMX controlled units such as an Indexing TwinSpin™ or SX4® Gobo Changer or DMX Loop Tray, the "noise" from the discharge lamp ballast may cause some interference and or damage the electronics. We recommend providing separate line voltage to the DMX devices and the discharge light fixture.

## PRODUCT INSTRUCTIONS

### SX4® DMX Loop Tray

1. Loosen the Captive Retaining Screws (These captive screws will loosen but not come out).
2. While pulling on the Effects Drawer, release the Safety Latch and pull out drawer from the SX4® Housing.
3. Push the Tension Roller towards the Drive Roller until it engages the Tension Roller Catch and holds it in the loading position.
4. Slide the Fixable FX/Loop over the rollers. (Due to the small space between the roller assembly and the inside of the housing, the loading is easier if the housing is sitting on the edge - not resting flat). Some of the more open loops, such as fire and clouds, tend to catch on the shoulder of the roller. Sometimes it is easier to advance the loop around the rollers as you are loading to clear the inevitable snagging of the loop.
5. Be sure the FX/Loop rests between the brass shoulders of the drive roller.
6. Release the Tension Roller Catch slowly and allow the Tension Roller to extend fully. (Don't allow the roller to snap out - this could damage the loop). Confirm that the loop is making square contact with the rollers.
7. Connect the unit to DMX Power Supply. For operation, see details below.
8. Slide the Effects Drawer into the SX4® Housing - The drawer will have a positive snap when the safety catch is engaged.
9. Tighten the Retaining Screws. Make sure the screws are fully seated.

**NOTE: It is important that the screws be tightened completely, DO NOT depend on the safety latch to hold the Effects Drawer securely.**

### USING THE SX4®

The unit can be oriented with the FX/Loop running horizontally, vertically or any direction in between. Loosen the retaining screw and knob. The barrel can be adjusted about 25° on either side of vertical. To adjust beyond 25° requires further loosening the barrel screw and knob. **BE CAREFUL NOT TO LET THE BARREL FALL OUT!**

The FX/Loop runs in two planes separated by about 1.25 inches. The lens can be adjusted (by sliding the lens tube in and out of the barrel) to focus on one plane or the other or somewhere between the two. Focus on one plane will leave the other plane very much out of focus and gives an unambiguous direction to the effect.

Focus between the two planes leaves both out of focus. Many effects, (even the most realistic) benefit from being a bit out of focus. Other effects yield surprising results when very out of focus. It's worth the time to experiment. Also worthy of experimentation is to use another moving effect (the GAM TwinSpin™ or the GAM Film/FX™) in the iris/FX slot. This too is on a different focal plane than the film loop, but as you will see, it can offer some unusual effects.

### SAFETY LOOP

Attach a safety cable to the safety loop on the bottom of the Effects Drawer and to the yoke or light pipe.

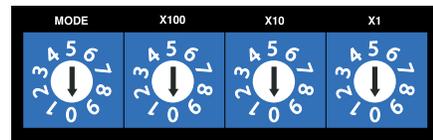
### TIPS

- For longest life and for the most effective image, be sure to adjust the centering and flatness of field of the lamp - **NO HOT SPOT IN THE CENTER**
- Hot spots will cause uneven heating and wear on the FX/Loop and shorten their useful life.
- Always have the FX/Loop in motion before the light comes on. Don't allow the FX/Loop to be still in the gate with the lamp on as this will allow one section to heat up and will shorten the life of the loop (especially if concentrated on the seam).
- Shipping and Storage: To prevent damage to the screws or to the mechanism, be sure the drawer Retaining Screws are tightened securely.

## DMX CONTROL MODES

The following instructions will refer to the direction of loop travel as "forward" (right to left) when viewing the image on the wall from behind the instrument.

The Loop that is being projected should be installed upside down. Power is applied through the 4-pin XLR connector using the TSPS-20 power supply or TSPS-80 power supply or appropriate power supply.



### MODE 1 - ONE CHANNEL OPERATION

For use with DMX control; select 1 on Mode Switch. Set DMX address on Loop Tray to desired control channel.

Channel	Loop Speed and Motion
0	No Motion
1	Full speed rotation in forward direction
2 – 39	Decreasing rotation speed in forward direction
40	Forward motion stopped
41 – 59	No Motion
60	Slowest motion in backward direction
61-99	Increasing rotation speed in backward direction
100	Full speed rotation in backward direction

### MODE 2 - TWO CHANNEL OPERATION

For use with DMX control; loop speed and direction.

Channel	Controls
1	Loop Speed: 0 = No movement 100 = Full motor speed
2	Loop Direction: 0 – 35 = Forward loop direction 36 – 64 = No movement 65 – 100 = Backward loop direction

### STAND ALONE OPERATION

For use of Loop Tray without DMX or desk control, set mode switch to 0,5,6,7,8 or 9. There is no fan speed control in any stand alone operation mode.

Direction		Speed		Operation
Mode	X100	X10	X1	
0, 5, 6, 7, 8, 9	Any even number	2	0	Slow speed Loop rotation, forward direction
0, 5, 6, 7, 8, 9	Any even number	5	0	Half speed Loop rotation, forward direction
0, 5, 6, 7, 8, 9	Any even number	9	9	Full speed Loop rotation, forward direction
0, 5, 6, 7, 8, 9	Any odd number	2	0	Slow speed Loop rotation, backward direction
0, 5, 6, 7, 8, 9	Any odd number	5	0	Half speed Loop rotation, backward direction
0, 5, 6, 7, 8, 9	Any odd number	9	9	Full speed Loop rotation, backward direction

→ X10 Switch = Coarse loop speed rotation adjustment

→ X1 Switch = Fine loop speed rotation adjustment

### MODE 3 - TWO CHANNEL OPERATION (with fan ctrl.)

For use with DMX control; one channel each for speed, direction and fan speed control.

Channel	Controls
1	Loop Speed: 0-40 = Forward direction, full to slow speed 41-59 = No loop motion 60-100 = Backward direction, slow to full speed
2	Fan speed control

### MODE 4 - THREE CHANNEL OPERATION (with fan ctrl.)

For use with DMX control; one channel each for speed, direction and fan speed control.

Channel	Controls
1	Loop Speed: 0 = No loop speed 100 = Full speed loop motion
2	Loop Direction: 0-35 = Forward loop direction 36-64 = No loop direction 65-100 = Backward loop direction
3	Fan Speed