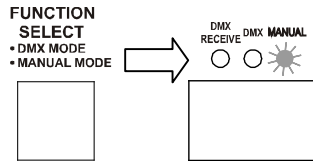


TFX-FS360

Followspot 400G

READ FIRST!

To start using as a Followspot, press the FUNCTION button until the Manual LED turns on.



Ask your dealer about the especially designed tripod stand with casters for the TFX-FS360.

Model Number
CH-W28

USER MANUAL



CHAUVET, 3000 N 29th Ct, Hollywood, FL 33020 U.S.A
(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

TABLE OF CONTENT

TABLE OF CONTENT	2
BEFORE YOU BEGIN	3
WHAT IS INCLUDED	3
UNPACKING INSTRUCTIONS	3
AC POWER.....	3
SAFETY INSTRUCTIONS	3
INTRODUCTION	4
FEATURES	4
DMX CHANNEL SUMMARY	4
PRODUCT OVERVIEW.....	4
SETUP	5
LAMP	5
<i>Lamp installation</i>	5
POWER	5
GOBO HOLDER	5
MOUNTING.....	6
<i>Orientation</i>	6
<i>Static Mount</i>	6
<i>Tripod Stand with Casters CH-W28 (optional)</i>	6
OPERATING INSTRUCTIONS	7
OPERATING MODES.....	7
<i>Followspot Mode</i>	7
<i>Master/Slave mode</i>	7
<i>Master/Slave Connection</i>	7
<i>Master Setting</i>	8
<i>Slave Setting</i>	8
<i>DMX Mode</i>	8
<i>Setting the starting address</i>	8
APPENDIX	9
DMX PRIMER	9
<i>Fixture Linking</i>	9
DMX CHANNEL VALUES	10
GOBOS.....	10
MAINTENANCE	10
RETURNS PROCEDURE	10
CLAIMS	11
GENERAL TROUBLESHOOTING	11
TECHNICAL SPECIFICATIONS	12

BEFORE YOU BEGIN

What is included

- TFX-FS360
- Single gobo-slot with 4 free gobos
- Power cord with plug
- ENX 360W 82V lamp
- Manual and Warranty Card

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specification. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

AC Voltage Switch



Warning!

Verify that the power select switch on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.

Safety Instructions



Please read these instructions 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 booklet.
- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- 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.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature is $T_a: 40^\circ$. Do not operate fixture at temperatures higher than this.
- 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.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to lamp while it is on.

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 CHAUVET.

INTRODUCTION

Features

- 2-channel DMX-512 followspot
- mechanical iris
- manual focus
- color wheel with 7 dichroic colors plus open
- single gobo slot
- includes 4 free gobos
- master/slave function
- digital display
- thermal switch
- DMX-512 Control
- reliable micro-stepper motor driven

DMX Channel Summary

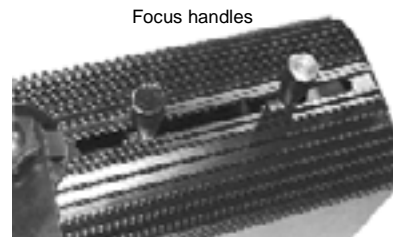
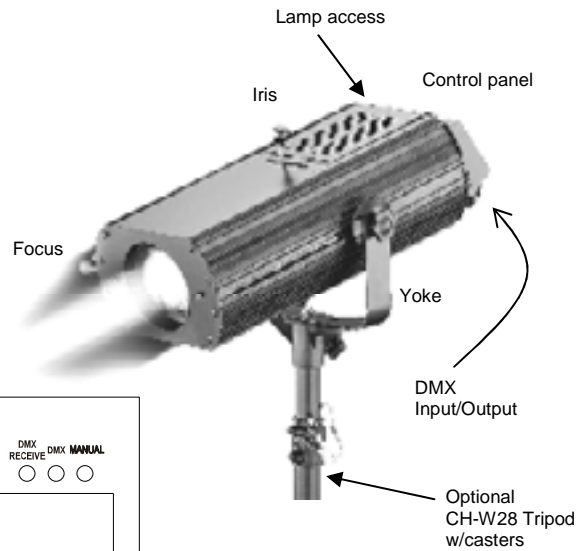
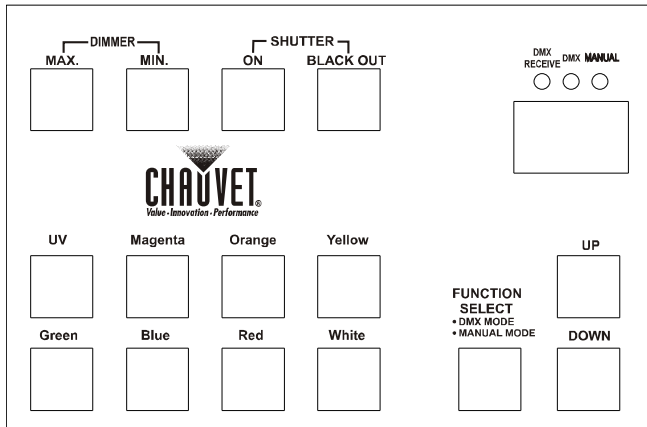
CHANNEL	FUNCTION
1	Color
2	Dimmer

Product Overview



Gobos included

Control panel



SETUP

Lamp

You will need to install a lamp prior to the initial operation of the fixture. An ENX 360W halogen lamp is included.

Warning!

When replacing the lamp, please wait 15 minutes after powering down to allow the unit to cool down! Always disconnect from main power prior to lamp replacement.

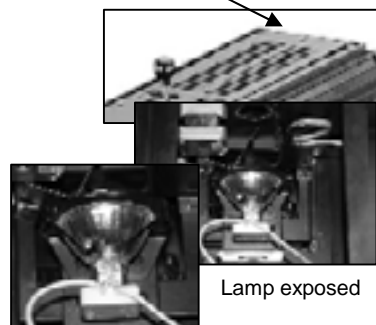
Do not touch the envelope (glass area) of the bulb with bare hands. If this happens, clean the lamp with alcohol and wipe it with a lint free cloth before installation.

LAMP INSTALLATION

- 1) Remove screw located on the top and to the rear of the followspot as pictured on the right.
- 2) Open lamp cover until lamp compartment is exposed.
- 3) If replacing the lamp, remove old lamp first.
- 4) Reach in and slide the lamp out of the retaining cage.
- 5) Detach the lamp from the lamp socket and replace.
- 6) Replace lamp cover, align the screw hole and fasten the screw.
- 7) No lamp alignment is necessary for this fixture since the lamp is already optimized inside the reflector.

Lamp Installation

Remove screw



Lamp exposed

Power

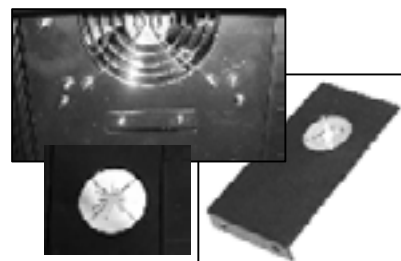
Warning!

Verify that the power on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.

- To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart.
- A fixture's listed current rating is its average current draw under normal conditions.
- All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.
- Before applying power to a fixture, check that the source voltage matches the fixture's requirement.
- All fixtures must be connected to circuits with a suitable Earth Ground.

Gobo Holder

The TFX-FS360 can project one gobo image. A gobo-holder is included and is located directly underneath the followspot next to the fan as pictured here on the right. Remove the two bottom screws from the gobo-holder and slide it out. You can remove the gobo by sliding it out the top and replacing it with a different one or replace gobo-holder without a gobo for followspot only use.



Mounting

ORIENTATION

This fixture may be mounted in any position provided there is adequate room for ventilation.

STATIC MOUNT

The TFX-FS360 comes equipped with a yoke for pipe clamp installations. The yoke will provide for a static mount or installation of the followspot for pre-focused use. It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

Hanging Clamp



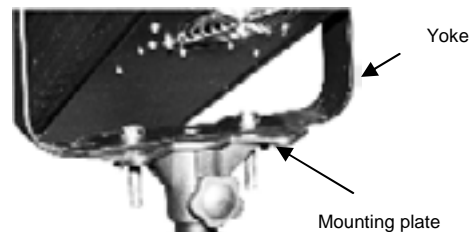
Note!
Clamp is sold separately.

- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables should always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

TRIPOD STAND WITH CASTERS CH-W28 (OPTIONAL)

The CH-W28 is a multipurpose followspot/speaker stand with casters. Assemble tripod for use with casters as indicated in the CH-W28 manual.

1. Mount yoke bracket so the bracket side runs across the bottom.
2. Mount the followspot bracket onto the tripod mounting plate
3. Align screw holes with mounting plate openings and fasten with supplied bolts.



Please visit your participating dealer and ask for the CH-W28 Tripod from CHAUVET. To locate a dealer near you contact CHAUVET at (954) 929-1115, Toll Free (800) 762-1084



OPERATING INSTRUCTIONS

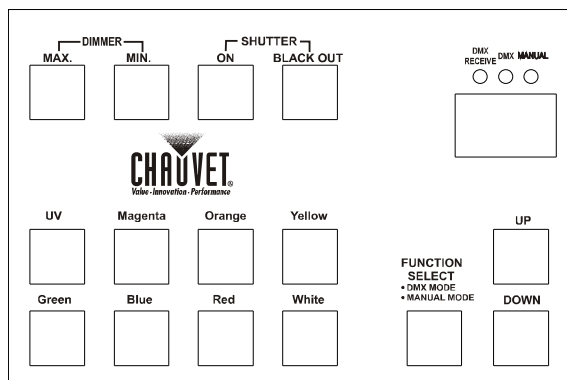
Operating Modes

The TFX-FS360 can be operated in the following ways;

- As a manual followspot using on-board manual controls or slaved to a DMX-512 controller for cue changes.
- As a static spot controlled by a DMX-512 controller.
- In a master/slave mode with the first in the chain as the master.

Followspot Mode

Enter **Manual Mode** by pressing the **FUNCTION SELECT** button until the **MANUAL LED** is turned on.



BUTTONS	FUNCTION
DIMMER	Min. and Max. buttons adjust the intensity of the light output respectively.
SHUTTER	The electronic shutter provides instant lights on or shuts all light output off for a blackout state.
Color Buttons	The following colors can be immediately selected by pressing each individual button: UV, Magenta, Orange, Yellow, Green, Blue, red and White
FUNCTION	Press FUNCTION button to switch between manual and DMX control modes.
UP/DOWN	The Up/Down buttons are available when in DMX mode. Press the UP and DOWN buttons to locate the DMX channel value desired.

Master/Slave mode

The Master/Slave mode will allow you to link up to as many units you want in a daisy chain fashion. In this mode, the first unit in the daisy chain will command all other units following. Simply connect each unit in a daisy like fashion using qualified 3 pin DMX cables as described below.

MASTER/SLAVE CONNECTION

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.

2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

MASTER SETTING

- 1) Press the **FUNCTION** button until the MANUAL LED light turns on.

SLAVE SETTING

- 1) Press the **FUNCTION** button until the DMX LED light turns on.
- 2) To set the slave units, press the **UP** or **DOWN** buttons until the digital display reads "001". More than one slave unit can be set to "001" for unison control of all slave fixtures.

DMX Mode

Operating in a DMX Control mode environment gives the user the greatest flexibility when it comes to customizing or creating a show. In this mode you will be able to control each individual trait of the fixture independently.

SETTING THE STARTING ADDRESS

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" from 1 to 511. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 6 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap and notate the start address selected for future reference.

If this is your first time addressing a fixture using the DMX-512 control protocol than I suggest jumping to the Appendix Section and read the heading "DMX Primer". It contains very useful information that will help you understand its use.

The TFX-FS360 utilizes 2 DMX control channels.

- 1) Press the **FUNCTION** button until the DMX Mode LED turns on.
- 2) Press the **UP** or **DOWN** buttons until the starting channel address you desire is located on the digital display.

APPENDIX

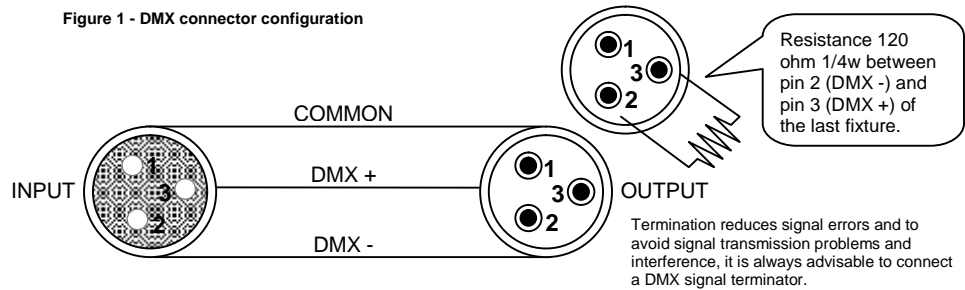
DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

FIXTURE LINKING

Figure 1 - DMX connector configuration



Note!

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. CHAUVET Model No: DMX5M. The chart below details a proper cable conversion:

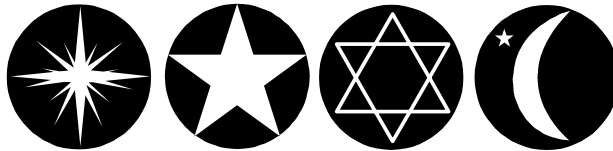
3 PIN TO 5 PIN CONVERSION CHART

CONDUCTOR	3 Pin Female (output)	5 Pin Male (Input)
GROUND/SHIELD	Pin 1	Pin 1
DATA (-) SIGNAL	Pin 2	Pin 2
DATA (+) SIGNAL	Pin 3	Pin 3
DO NOT USE		Do not use
DO NOT USE		Do not use

DMX Channel Values

Channel	Value	Function
1	000 ⇔ 031	Color Wheel
	032 ⇔ 063	Open
	064 ⇔ 095	Red
	096 ⇔ 127	Blue
	128 ⇔ 159	Green
	160 ⇔ 191	Yellow
	191 ⇔ 223	Orange
	224 ⇔ 255	Magenta UV (Purple)
2	000 ⇔ 004	Dimmer
	005 ⇔ 249	No Output Closed > Open
	250 ⇔ 255	Full Output (100%)

Gobos



Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint. Do not to touch the lamp glass when cleaning fixture. Oil and dirt can cause damage and premature aging of the lamp. In the event that the lamp is touched or becomes dirty, clean the lamps with an alcohol wipe.

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.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Motor movements are jerky or jumpy	Possible bad motor driver or sensors Check polarity switch on controller	✓		✓	
No flash	Re-install bulb, may have shifted in shipping	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			

Technical Specifications

WEIGHT & DIMENSIONS

Length.....	572 mm (22.5 in)
Width.....	292 mm (11.5 in)
Height.....	162 mm (6.38 in)
Weight.....	9.34 Kgs (20.6 lbs)

POWER

US.....	120V 60 Hz
European Version.....	230V 50 Hz
AC input.....	3-prong IEC 60320 C14 male socket

LAMPS

ENX.....	75 hr, 360W 82V
----------	-----------------

THERMAL

Maximum ambient temperature.....	40° (104° F)
----------------------------------	--------------

CIRCUIT BREAKER

Main (120V).....	7A
Main (230V).....	5A

CONTROL & PROGRAMMING

Data input.....	locking 3-pin XLR male socket
Data output.....	locking 3-pin XLR female socket
Data pin configuration.....	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols.....	DMX-512 USITT
DMX Channels.....	2

ORDERING INFORMATION

Followspot 400G.....	TFX-FS360
Tripod Stand with Casters (Optional).....	CH-W28

OPTICAL

Beam Angle.....	2.3° <-> 12.2°
-----------------	----------------

GOBO

Outside diameter.....	36.0 mm
Image diameter.....	28.0 mm
Thickness.....	0.2 mm