Edition Notes

The Followspot 1200 User Manual Rev. 03e covers the description, safety precautions, installation, programming, operation and maintenance of the Followspot 1200.

Trademarks
CHAUVET® is a registered trademark of CHAUVET & Sons Inc. (d/b/a CHAUVET® or Chauvet). The CHAUVET® logo in its entirety including the Chauvet name and the dotted triangle, and all other trademarks on this manual pertaining to services, products or marketing statements (example: It’s Green Thinking™) are owned or licensed by CHAUVET®. Any other product names, logos, brands, company names, and other trademarks featured or referred to within this document are the property of their respective trademark holders.

Copyright Notice
CHAUVET® owns the content of this user manual in its entirety, including but not limited to pictures, logos, trademarks and resources.

© Copyright 2010 CHAUVET®
All rights reserved
Electronically published by CHAUVET® in the United States of America

Manual Usage
CHAUVET® authorizes its customers to download and print this manual for professional information purposes only. CHAUVET® expressly prohibits the usage, copy, storage, distribution, modification or printing of this manual or its content for any other purpose without its written consent.

Document Printing
For better results, print this document in color, on letter size paper (8.5 x 11 inches), double sided. If using A4 paper (210 x 297 mm), configure your printer to scale the content of this document to A4 paper.

Intended Audience
Any person in charge of installing, operating and/or maintaining the Followspot 1200 should read the Quick Start Guide that shipped with the Followspot 1200 unit and this manual in their entirety before installing, operating or maintaining the Followspot 1200.

Disclaimer
CHAUVET® believes that the information contained in this manual is accurate in all respects. However, CHAUVET® assumes no responsibility for any error or omissions in this document. CHAUVET® reserves the right to revise this document and to make changes from time to time in the content hereof without obligation of CHAUVET® to notify any person or company of such revision or changes. This does not constitute in any way a commitment by CHAUVET® to make such changes. CHAUVET® may issue a revision of this manual or a new edition of it to incorporate such changes.

CHAUVET® Publications Hot Line
If you have any comments about the accuracy of this document or general suggestions regarding how we can improve it, please call us at (800) 762-1084 (US callers) or +1-954-929-1115 (international callers), ext. 43.

You can download the latest versions of all CHAUVET® products’ manuals from www.chauvetlighting.com.

Document Revision
The Followspot 1200 User Manual Rev. 03e supersedes all previous versions of this manual.
Please discard any older versions of this manual you may have, whether in printed or electronic format, and replace them with this version.

Fixture at a Glance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Use on Dimmer</th>
<th>Auto Programs</th>
<th>Outdoor Use</th>
<th>208/230 V, 50/60 Hz</th>
<th>Sound Activated</th>
<th>Replaceable Fuse</th>
<th>DMX</th>
<th>User Serviceable</th>
<th>Master/Slave</th>
<th>Duty Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use on Dimmer</td>
<td>❌</td>
<td></td>
<td>❌</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor Use</td>
<td></td>
<td></td>
<td>❌</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound Activated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master/Slave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Table of Contents

1. Before you Begin .............................................................................................................. 1
   - What is Included .................................................................................................................. 1
   - Unpacking Instructions ....................................................................................................... 1
   - Text Conventions .............................................................................................................. 1
   - Icons .................................................................................................................................. 1
   - Safety Notes ....................................................................................................................... 2

2. Introduction ......................................................................................................................... 3
   - System Description ............................................................................................................ 3
   - Features ............................................................................................................................. 3
     - Additional Features ......................................................................................................... 3
   - DMX Channel Summary ..................................................................................................... 3
     - 6-channel DMX mode ......................................................................................................... 3
   - Product Overview ............................................................................................................. 4
   - Product Dimensions ......................................................................................................... 5

3. Setup .................................................................................................................................... 6
   - AC Power .......................................................................................................................... 6
     - Power Requirements ........................................................................................................ 6
     - Power Cord ....................................................................................................................... 6
     - Fuse Replacement ............................................................................................................. 6
     - Voltage/Frequency Selection ........................................................................................... 7
   - Lamp ................................................................................................................................... 8
     - Lamp Removal .................................................................................................................. 8
     - Lamp Installation ............................................................................................................. 8
   - DMX Linking ...................................................................................................................... 9
     - DMX Connection ............................................................................................................. 10
   - Mounting ........................................................................................................................... 11
     - Orientation ...................................................................................................................... 11
     - Rigging ............................................................................................................................. 11

4. Operation .............................................................................................................................. 12
   - Control Panel Description ............................................................................................... 12
     - Programming Panel .......................................................................................................... 12
     - Navigation Functions ...................................................................................................... 12
   - Followspot 1200 Menu Options ....................................................................................... 13
     - Normal Mode ................................................................................................................... 13
     - Offset Mode ..................................................................................................................... 13
   - Programming Procedure ................................................................................................... 14
     - Normal Mode ................................................................................................................... 14
     - Normal Mode (Cont.) ....................................................................................................... 15
     - Offset Mode ..................................................................................................................... 15
   - External Console ................................................................................................................ 17
     - Controls ........................................................................................................................... 17
   - DMX Controller Operation ............................................................................................... 18
       - DMX Values .................................................................................................................... 18
         - 6-Channel DMX Mode ................................................................................................. 18

5. Technical Information ........................................................................................................ 19
   - Fixture Maintenance ......................................................................................................... 19
   - Photometrics ..................................................................................................................... 20
   - Followspot 1200 Troubleshooting Guide .......................................................................... 21
   - Exploded View .................................................................................................................. 22
   - Parts List .......................................................................................................................... 23
   - Returns Procedure ............................................................................................................ 24
# Table of Contents

Claims ........................................................................................................................................... 24  
Contact Us ..................................................................................................................................... 24  
Technical Specifications .................................................................................................................... 25  

6. Appendix .................................................................................................................................... 26  
DMX Primer .................................................................................................................................. 26  
   The Physical Medium .......................................................................................................................... 26  
   The Signals ......................................................................................................................................... 26  
   The Functions .................................................................................................................................... 26  
DMX Configuration ............................................................................................................................ 26  
   Starting Address ............................................................................................................................... 26  
   Personalities ...................................................................................................................................... 26  
   Assigning Addresses ......................................................................................................................... 27  
   DMX Universes ............................................................................................................................... 27  
DMX Connectivity ............................................................................................................................... 27  
   Fixture Location ............................................................................................................................... 27  
   Number of Fixtures ........................................................................................................................... 27  
   DMX Data Cabling ............................................................................................................................. 27  
   Making your Own DMX Cable ........................................................................................................... 27  
   DMX Cable Characteristics ............................................................................................................. 27  
   DMX Cable Connectors ..................................................................................................................... 28  
   3-Pin to 5-Pin Conversion Chart ........................................................................................................ 28  
   DMX Connection ............................................................................................................................. 28  
Master/Slave Linking .......................................................................................................................... 29  
   Master/Slave Connection .................................................................................................................. 29  
ID Addressing .................................................................................................................................. 30  
   Single Row Connection ..................................................................................................................... 30  
   Standard Block Connection ............................................................................................................. 30  
   Repeated Row Block Connection .................................................................................................... 30  
   Other Effects ................................................................................................................................... 30  
Sizing the Circuit Breakers ............................................................................................................... 31  
   Using the Spec Sticker ....................................................................................................................... 31  
   Using the Watts/Volts Method ......................................................................................................... 31  
   Considering the Power Factor ......................................................................................................... 31  
   Using the Volt Amps Method .......................................................................................................... 31  
   Selecting the Circuit Breaker .......................................................................................................... 31
1. Before you Begin

**What is Included**
- One Followspot 1200 fixture
- One external console
- One tripod
- One flight case
- Warranty card
- User manual

**Unpacking Instructions**

The Followspot 1200 ships in a flight case. Immediately upon receiving the fixture, carefully unpack the flight case. Check the flight case contents to ensure that all parts are present and that they are in good condition. If any part appears damaged from shipping, or if the flight case shows signs of mishandling, notify the shipper immediately. In addition, retain the flight case and all the packing material for inspection.

In any event, save the flight case and all packing material because, in case that you have to return the fixture to the factory, you will have to do so in its original flight case, with all its original packing. See the **Claims** section in the **Technical Information** chapter.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~512</td>
<td>A range of values</td>
</tr>
<tr>
<td>50/60</td>
<td>A set of mutually exclusive values in the text</td>
</tr>
<tr>
<td>[10]</td>
<td>A DIP switch to be configured</td>
</tr>
<tr>
<td>Claims</td>
<td>A fixture function, a new term, a section or a chapter</td>
</tr>
<tr>
<td>“COLORado™ UM”</td>
<td>The name of another publication or manual</td>
</tr>
<tr>
<td>&lt;SET&gt;</td>
<td>A key to be pressed on the fixture’s control panel</td>
</tr>
<tr>
<td>Settings</td>
<td>A menu option that can be selected but not modified</td>
</tr>
<tr>
<td>MENU &gt; Settings</td>
<td>A sequence of menu options to be followed</td>
</tr>
<tr>
<td>[1~10]</td>
<td>A range of menu values of which one can be selected</td>
</tr>
<tr>
<td>Yes/No</td>
<td>A set of mutually exclusive menu options to choose</td>
</tr>
<tr>
<td>ON</td>
<td>A value to be entered or selected</td>
</tr>
</tbody>
</table>

**Icons**

<table>
<thead>
<tr>
<th>Icons</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>This icon indicates critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, damage third-party equipment, or cause harm to the user.</td>
</tr>
<tr>
<td>i</td>
<td>This icon indicates important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.</td>
</tr>
<tr>
<td>✒</td>
<td>This icon indicates useful, although non-critical information.</td>
</tr>
</tbody>
</table>

The term “DMX” used throughout this document refers to the USITT DMX512-A transmission protocol.
Before you Begin

Safety Notes

Please read the following notes carefully because they include important safety information about the installation, usage and maintenance of this product. It is important to read all these notes before starting to work with this product.

There are no user serviceable parts inside the Followspot 1200. Any reference to servicing this unit you may find from now on in this User Manual will only apply to properly CHAUVET® certified technicians. Do not open the housing or attempt any repairs unless you are one of them.

Please refer to all applicable local codes and regulations for proper installation of the Followspot 1200.

Keep this manual for future consultation. If you sell the Followspot 1200 to another user, make sure that they also receive this manual.

Personal Safety

- The Followspot 1200 housing weighs 84 lbs (38 kg). Always ask for help when mounting this fixture to avoid personal injuries or damage to the unit.
- Always connect the Followspot 1200 to a grounded circuit to avoid the risk of electrocution.
- Avoid direct eye exposure to the light source while the Followspot 1200 is on.
- Lamp explosion hazard! Do not open the lamp cover within five minutes of having turned off the fixture.
- The bulb remains hot for a long time after turn off. Never touch the bulb barehanded and always hand it by its metallic contacts.
- Always disconnect the Followspot 1200 from its power source before servicing.
- Do not touch the Followspot 1200’s housing when operating because it may reach up to 85° C.

Mounting and Rigging

- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Make sure there are no flammable materials close to the fixture(s) while operating.
- When hanging this fixture, always secure it to a fastening device using a safety cable (not provided).
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate the fixture at a higher temperature.

Power and Wiring

- Always make sure that you are connecting the Followspot 1200 to the proper voltage, as per the specifications in this manual or on the product.
- Never connect the Followspot 1200 to a dimmer pack.
- Never disconnect the power to the fixture by pulling or tugging on the power cable.
- Make sure the power cord is not crimped or damaged.

Operation

- In case of a serious operating problem, stop using this product immediately!

In the unlikely event that your Followspot 1200 may require service, please contact CHAUVET® Technical Support.
2. Introduction

System Description

The Followspot 1200 is a DMX compatible follow spot fixture that uses a 1200 W metal halide lamp and features a high efficiency optical assembly, a high quality dichroic color wheel and an external console.

This fixture consists of a housing unit that contains the power supply, the control panel, the lamp and the optical assembly. The housing has a yoke for tripod mounting. The Followspot 1200 ships with an external console already mounted on its handle. In addition, the Followspot 1200 includes a stand-alone, adjustable height tripod.

The 5-pin DMX input and output sockets for DMX connectivity are on the control panel, while there is another 5-pin XLR socket dedicated to the external console. The Followspot 1200 features a bright 4-digit display and four buttons to perform all its programming functions.

The external console features four sliders and several buttons to control the fixture in a stand-alone fashion. However, the user can connect the Followspot 1200 to a DMX daisy chain data link to control it from a standard DMX controller, along with other DMX compatible fixtures.

Features

- Metal Halide 1200 W lamp
- 6-Channel DMX mode
  - Functions: shutter, iris, color, color temperature, dimmer and focus
- Color Wheel 1
  - 8 dichroic colors + white
  - Rainbow color spin at variable speeds
  - Split/Linear Colors
- Color Wheel 2
  - 2 dichroic colors + white
  - CTC filter: 3,200 K / Frost / Open
- Variable electronic iris (4–38°)
- Variable electronic dimmer (0–100%)
- Variable electronic focus
- Blackout shutter button

Additional Features

- External control console
- Tripod
- Flight case

DMX Channel Summary

<table>
<thead>
<tr>
<th>6-channel DMX mode</th>
<th>DMX Channel</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Shutter</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Iris</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Color</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Color temperature</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Dimmer</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Focus</td>
</tr>
</tbody>
</table>
Product Overview

For details about the Control Panel, refer to the Fuse Replacement and DMX Linking sections in the Setup chapter as well as the Operation chapter.

For details about the external console, refer to the External Console section of the Operation chapter.
Product Dimensions

19.9 in
430 mm

13.1 in
332 mm

9.0 in
230 mm

34.3 in
870 mm

45.2 in
1,147 mm
3. Setup

AC Power

The Followspot 1200 has two AC input voltage settings, 208 and 230 VAC, and two AC frequency settings, 50 and 60 Hz. The voltage and frequency settings require changing the connections on the corresponding terminal strip. See the Voltage and Frequency Selection section in this chapter.

Always connect the Followspot 1200 to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire.

Power Requirements

To determine the power requirements for the Followspot 1200 see the label affixed to the fixture. Alternatively, you may refer to the specifications chart in the Technical Information chapter of this manual.

The listed current rating indicates the maximum current draw during normal operation. Please refer to the Sizing the Circuit Breakers section in the Appendix chapter of this manual.

Power Cord

The fixture side of the Followspot 1200’s power cord enters the control panel through a strain relief boot. This side of the power cord is hard-wired to the fixture. Therefore, there is no removable power connector on the control panel.

The outlet side of the power cord is bare-ended. This way, the users will be able to equip it with the power plug that best matches the local standards and regulations.

<table>
<thead>
<tr>
<th>Power Cord Pin Out</th>
<th>Connection</th>
<th>Wire (US)</th>
<th>Wire (Europe)</th>
<th>IP-66 Pin</th>
<th>Screw Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Live</td>
<td>Black</td>
<td>Brown</td>
<td>1</td>
<td>Yellow or Brass</td>
<td></td>
</tr>
<tr>
<td>AC Neutral</td>
<td>White</td>
<td>Blue</td>
<td>2</td>
<td>Silver</td>
<td></td>
</tr>
<tr>
<td>AC Ground</td>
<td>Green/Yellow</td>
<td>Green/Yellow</td>
<td>3</td>
<td>Green</td>
<td></td>
</tr>
</tbody>
</table>

Never connect the Followspot 1200 to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

Fuse Replacement

1) With a Philips screwdriver, unscrew the fuse holder out of its housing and remove the blown fuse from its holder.
2) Replace the blown fuse with a fuse of the exact same type and rating.
3) Replace the fuse holder in its place, and reconnect power.

Make sure to disconnect the fixture’s power cord before replacing a blown fuse, and always replace it with a fuse of the same type and rating.

Fuse Holder Diagram

![Fuse Holder Diagram]
Setup

Voltage/Frequency Selection

The Followspot 1200 uses a single terminal strip to select the operating voltage and frequency. This operation only requires connecting two wires to a terminal strip, as indicated below.

Do not connect the fixture to the power outlet without having selected the voltage and frequency first. Make sure that the circuit’s voltage and frequency matches your selection to avoid unstable operation or damage to the fixture.

Make sure that there is no power applied to the fixture before opening the fixture’s housing.

Opening the Fixture

1) Unfasten the thumbscrew (T) and slide the front cover (FC) slightly forward.
2) Unscrew the two Allen screws (A) and remove the bracket (B).
3) Carefully pick up and slide the back cover (BC) backward, making sure not to pull the wires that run from its fans to the Fan Control PCB inside the housing.

Cover Removal Diagram

Two black wires arrive to the terminal strip (TS). One wire labeled “1” and the other labeled “2.”

1) Connect the black wires as needed per the table below, without reversing them.
2) Replace the covers.
3) Replace the bracket and secure it with the two Allen screws.

Voltage/Frequency Terminal Strip

Voltage/Frequency Selection Table

<table>
<thead>
<tr>
<th>Voltage/Frequency</th>
<th>Wire #1</th>
<th>Wire #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>208 V, 50 Hz</td>
<td>Terminal #2</td>
<td>Terminal #4</td>
</tr>
<tr>
<td>208 V, 60 Hz</td>
<td>Terminal #2</td>
<td>Terminal #3</td>
</tr>
<tr>
<td>230 V, 50 Hz</td>
<td>Terminal #1</td>
<td>Terminal #6</td>
</tr>
<tr>
<td>230 V, 60 Hz</td>
<td>Terminal #1</td>
<td>Terminal #5</td>
</tr>
</tbody>
</table>
Setup

Lamp

The user may have to install the lamp before operating the Followspot 1200 for the first time.
The instructions below include the steps to remove an existing lamp as well as to install a new lamp.

Lamp Removal

Removing an already installed lamp requires caution. Follow the steps indicated below to complete the removal in a safe manner.

- Make sure that there is no power applied to the fixture before opening the fixture's housing.
- Lamp explosion hazard! Wait 15 minutes after having turned off the fixture to open the lamp cover.

Opening the Fixture

1) Unfasten the thumbscrew (T) and slide the front cover (FC) slightly forward.
2) Loosen the thumbscrew that hold the lamp cover (LC) and lift it to expose the lamp socket.

Lamp Removal Diagram

Always wear safety goggles and soft gloves when handling the lamp.

The bulb remains hot for a long time after turn off.
Never touch the bulb barehanded and always hand it by its metallic contacts.

Removing an Existing Lamp

1) Once you have access to the lamp, loosen both lamp end screws.
2) Grab the lamp by both lamp end screws, push it evenly against the clips and then slide it upwards until it is free.
3) Place the lamp in an appropriate container for disposal.

Always follow local regulations regarding the disposal of used metal halide lamps.
Lamp Installation

Installing a new lamp requires caution. Follow the steps indicated below to complete the lamp installation in a safe manner.

If you touched the lamp with your bare hands, make sure to clean it thoroughly (contacts, glass necks and glass globe) with isopropyl alcohol and wipe it with a lint-free cloth before installing it. Otherwise, the fingerprints on the lamp may shorten its life and even cause damage to the optical assembly.

Follow all the safety instructions indicated on page 8.

Installing a New Lamp

1) If installing a new lamp, open the Followspot 1200 as indicated on page 8.
2) Before installing the lamp, loosen its end screws.
3) Hold the lamp by its metallic contacts and slide it into the slots.
4) Ensure that the flat washers on the lamp shafts are on the thumbscrew side of the slot to ensure maximum contact.
5) Evenly push the clips backward to allow the lamp to go all the way into the slots.
6) Rotate the lamp until the nipple is on the top of the bulb.
7) Tighten the lamp end screws.
8) Once installed, the lamp should look as in the diagram below.

Closing the Fixture

1) Close the lamp cover and tighten the thumbscrew that holds it.
2) Slide the front cover backward until it touches the bracket.
3) Tighten the thumbscrew to secure the front cover.
DMX Linking

If you are using the Followspot 1200 with a DMX controller, you can link them using a regular DMX serial connection. Be aware that the Followspot 1200 uses 5-pin XLR connectors and that you will need a 5-pin to 3-pin adapter in most cases.

If you are not familiar with the DMX standard, please refer to the DMX Primer and DMX Connectivity sections in the Appendix chapter of this manual.

The Followspot 1200 does not support the Master/Slave mode.

DMX Connection

The Followspot 1200 uses the regular DMX data connection for its only 6-channel DMX mode. Refer to the Introduction chapter for a brief description of this mode and the Operation chapter to learn how to configure the Followspot 1200 to work in this mode.

The diagram below shows the Followspot 1200 DMX connectors.

DMX Connectors Diagram

1) Connect the DMX cable that comes from the DMX controller or from the other DMX fixtures to the DMX Input socket.

2) Connect the DMX cable that goes to the other DMX fixtures to the DMX Output socket.

When using the Followspot 1200’s external console, DO NOT connect the Followspot 1200 to the DMX link.

The diagram below illustrates a typical DMX link connection.

DMX Link Diagram

Pins 4 and 5 of the External Console Only socket carry power for the external console. Therefore, DO NOT connect the DMX cable to this socket. Otherwise, you could damage the DMX controller or the fixtures connected to the DMX link.
Mounting

Orientation

Always mount this fixture in any safe position while making sure that there is adequate room around it for ventilation. Make sure to mount this fixture away from any flammable material as indicated in the Safety Notes.

Rigging

The Followspot 1200 consists of a housing unit and a tripod (included). CHAUVET recommends following the general guidelines below when mounting the Followspot 1200 and its tripod on top of a suitable platform.

- When selecting an installation location, consider ease of access to the fixture for operation, programming adjustments and routine maintenance.
- Never mount the fixture in places where rain, high humidity, extreme temperature changes or restricted ventilation may affect it.
- Make sure that the location where you are mounting the fixture can support its weight (84 lbs / 38 kg) as well as the operator’s weight.

Product Mounting Diagram

As an extra measure to reduce vibrations and to prevent the fixture from tipping over, weight down the tripod arms or anchor them to the mounting platform.
4. Operation

Control Panel Description

The Followspot 1200's control panel includes the Programming Panel, the Power Panel and the DMX Panel. Refer to page 6 for a description of the Power Panel, and to page 10 for a description of the DMX Panel.

The Programming Panel allows the user to configure the Followspot 1200's functions with a 4-digit blue LED display and four buttons located directly under the LED display.

The table below explains the functions of those buttons.

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;MENU&gt;</td>
<td>Used to scroll to a function or to return to a previous menu option</td>
</tr>
<tr>
<td>&lt;ENTER&gt;</td>
<td>Selects a menu option</td>
</tr>
<tr>
<td>&lt;UP&gt;</td>
<td>Scrolls through the menu options in ascending (forward) order</td>
</tr>
<tr>
<td>&lt;DOWN&gt;</td>
<td>Scrolls through the menu options in descending (backward) order</td>
</tr>
</tbody>
</table>

Navigation Functions

The Followspot 1200’s navigation functions allow the user to setup all the fixture’s parameters, as described in the Menu Map and the programming procedures.

Display

The Followspot 1200’s display has four 7-segment, blue LED modules.

Function Change

To select a function, press <MENU> repeatedly until the desired function shows on the display.

Alternatively, if the display shows a function name, you could press <UP> or <DOWN> to look for another function.

Function Selection

To select a function, press <ENTER>. The display will start blinking.

To exit the current function without making any change, press <MENU>.

Function Value

Press <UP> or <DOWN> to select a value for the current function while the display is blinking.

Saving a Value

While the display is blinking, press <ENTER> to save the selected value for the current function.

Function Timer

After selecting a function value, you have eight seconds to press <ENTER> to save the value on the display. Otherwise, the display will exit the current function without saving the new value.

Programming Modes

The Followspot 1200 has two programming modes, Normal and Offset. The Normal mode is for regular operation, while the Offset mode is for home adjustments.
## Followspot 1200 Menu Options

### Normal Mode

<table>
<thead>
<tr>
<th>Function</th>
<th>1st Level</th>
<th>2nd Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMX Address</td>
<td>Addr</td>
<td>1~255</td>
<td>Selects the fixture’s DMX address</td>
</tr>
<tr>
<td>Color Black Out</td>
<td>b</td>
<td>co</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Self-test</td>
<td>test</td>
<td>N/A</td>
<td>Runs the built-in self-test program</td>
</tr>
<tr>
<td>Fixture Hours</td>
<td>f</td>
<td>hs</td>
<td>N/A</td>
</tr>
<tr>
<td>Lamp On/Off</td>
<td>lamp</td>
<td>On/Off</td>
<td>Turns the lamp on or off</td>
</tr>
<tr>
<td>Reset</td>
<td>r</td>
<td>set</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Offset Mode

<table>
<thead>
<tr>
<th>Function</th>
<th>1st Level</th>
<th>2nd Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Offset</td>
<td>c</td>
<td>al</td>
<td>-127~127</td>
</tr>
<tr>
<td>Effect Offset</td>
<td>e</td>
<td>ft</td>
<td>-127~127</td>
</tr>
<tr>
<td>Dimmer Offset</td>
<td>d</td>
<td>im</td>
<td>-127~127</td>
</tr>
</tbody>
</table>
Programming Procedure

The Followspot 1200 programming requires only three menu levels and it uses two programming modes, Normal and Offset.

The Offset mode is for home adjustments of the color, the dimmer and the effects.

When not in program mode, the display shows the current DMX address.

Normal Mode

The Normal mode controls the DMX address, the control activation, the lamp on/off status, the running of the self-test and the fixture reset. In addition, it shows the number of hours the fixture has been in service.

DMX Address

Defines the fixture’s starting address

1) Press <MENU> repeatedly until the display shows the DMX address (1~255).
2) Press <ENTER> to show the current DMX address.
   The display will start blinking.
3) To exit without changing the value, press <MENU>.
4) To change the address value, press <UP> or <DOWN>.
5) To save the new value, press <ENTER>.
   The display will show the next function name.

Color Wheel Blackout

Enables/disables the blackout fixture while changing colors

1) Press <MENU> repeatedly until the display shows the color wheel blackout.
2) Press <ENTER> to show the current setting (Yes/No).
   The display will start blinking.
3) To exit without changing the value, press <MENU>.
4) To change the setting, press <UP> or <DOWN>.
5) To save the new value, press <ENTER>.
   The display will show the next function name.

Self-test

Runs the built-in self-tests

1) Press <MENU> repeatedly until the display shows the self-test.
   The display will start blinking.
3) Press <ENTER> to start the tests.
   The display will stop blinking and the tests will start to run continuously.
5) To suspend the tests for 30 seconds, press <ENTER>.
6) To terminate the tests, press <MENU>.
   The display will show the next function name.

Fixture Hours

Shows the number of hours the fixture has been in service

1) Press <MENU> repeatedly until the display shows the fixture hours.
   The display will start blinking.
2) Press <ENTER> to see the number of hours.
3) To exit, press <MENU>.
   The display will show the next function name.
### Normal Mode (Cont.)

**Lamp**

Turns the lamp on or off

1. Press `<MENU>` repeatedly until the display shows `Lamp`.
   The display will start blinking.
2. Press `<ENTER>`.
   The display will show the current lamp status (On/Off).

**Lamp Off**

3. To turn the lamp off, press `<UP>` or `<DOWN>` until the display shows off.
4. Press `<ENTER>` to save the change.
   The display will stop blinking and the lamp will turn off immediately.
   In eight seconds, the display will start showing the current DMX address.

**Lamp On**

5. To turn the lamp on, press `<UP>` or `<DOWN>` until the display shows on.
6. Press `<ENTER>` to save the change.
   The display will stop blinking and the lamp will start to turn on immediately.
   In eight seconds, the display will start showing the current DMX address.

**Reset**

Resets all the settings to their factory defaults

1. Press `<MENU>` repeatedly until the display shows `Reset`.
   The display will start blinking.
2. Press `<ENTER>` to start the defaulting process.
   The display will stop blinking and it will show `1200`.
   All DMX channels will return to their default settings.

The reset function does not affect the Fixture Hours total.

### Offset Mode

The Offset mode provides fine position adjustment for the color wheel, the effects (color temperature) wheel and the dimmer. These fine adjustments allow the operator to position the wheels so the light goes through the center of the color or effect aperture, thus preventing any filter border from showing. In the case of the dimmer, the fine adjustment ensures that at 0% dimmer (maximum light), the dimmer is not affecting the light beam.

**Entering Offset Mode**

1. Press `<MENU>` for five seconds.
   The display will show the first offset mode function.

**Color Offset**

Performs the fine position adjustment for the color wheel

1. Press `<UP>` or `<DOWN>` repeatedly until the display shows `Color`.
2. Press `<ENTER>`.
   The display will start blinking, showing the current value (-127~127).
3. Press `<UP>` or `<DOWN>` to set the new value.
4. Press `<ENTER>` to save the new value or `<MENU>` to exit without saving.

**Effect Offset**

Performs the fine position adjustment for the effects wheel

1. Press `<UP>` or `<DOWN>` repeatedly until the display shows `Effect`.
2. Press `<ENTER>`.
   The display will start blinking, showing the current value (-127~127).
3. Press `<UP>` or `<DOWN>` to set the new value.
4. Press `<ENTER>` to save the new value or `<MENU>` to exit without saving.
**Offset Mode (Cont.)**

**Dimmer Offset**
Performs the fine position adjustment for the dimmer

1) Press `<UP>` or `<DOWN>` repeatedly until the display shows the current value (-127~127).
2) Press `<ENTER>`. The display will start blinking, showing the current value (-127~127).
3) Press `<UP>` or `<DOWN>` to set the new value.
4) Press `<ENTER>` to save the new value or `<MENU>` to exit without saving.

**Exiting Offset Mode**
1) After you are done, wait eight seconds for the display timer to activate.
   The display will show the current DMX address.
External Console

The external console ships already installed on the Followspot 1200 handle. This console has dedicated sliders and buttons to control only the associated fixture.

In addition, the external console connects to the Followspot 1200 using a dedicated 5-pin XLR connector on the control panel.

**Warning:**

Pins 4 and 5 of the External Console Only socket carry power for the external console. Therefore, DO NOT connect the DMX cable to this socket. Otherwise, you could damage the DMX controller or the fixtures connected to the DMX link.

Controls

The external console controls have pre-assigned functions and labels. This simplifies the fixture’s operation.

**Note:**

When the Followspot 1200 is in any of its programming modes, the external console is not operational.

---

### External Console Diagram

- **Dimmer**: The dimmer has a Blackout and an Open button. This allows the operator to keep the slider at a fixed position when closing the dimmer to 0% or opening it to 100%.
  - When the dimmer is open after having pressed the Open button, the operator can resume the slider control by gently touching the slider. Resuming slider control after blacking out the dimmer is not possible, however.

- **Shutter**: The shutter has no fixed position buttons to operate along with the slider. This slider has a closed and an open position on the left side, while the right side has another open position.
  - The shutter frequency changes from short yet separated openings to a fast strobe-like action as the slider moves from left to right.

- **Iris**: The iris has a Closed and an Open button. As with the dimmer, this allows the operator to keep the slider at a fixed position when closing the iris to its minimum or opening it to its maximum.
  - The slider operation can resume by slightly touching the slider after having set the iris to either its maximum or minimum aperture by using the corresponding button.

- **Focus**: The focus control has no fixed buttons to operate along the slider, either. The focus changes from near to far as the slider moves from left to right.

- **Color Control**: The button on the left lower corner of the console determines the way the color changes. If it is in the Fixed Color position, buttons 1 to 9 determine the color. If it is in the Color Scroll position, buttons 1 to 9 determine the scrolling speed (slow to fast).

- **Color Temperature**: The color temperature control is independent from the color control mode. It has three positions, 6000° K, Frost and 3200° K.
To operate the Followspot 1200 with a standard DMX controller you will have to assign a starting DMX address on the Followspot 1200. Please refer to the Programming Procedure section of this chapter for instructions.

After that, you will have to connect the Followspot 1200 to the DMX link as indicated on page 10 of this manual.

Always disconnect the external control console when operating this fixture with a third party DMX controller.

### DMX Values

#### 6-Channel DMX Mode

<table>
<thead>
<tr>
<th>Channel</th>
<th>Function</th>
<th>Value</th>
<th>Percent/Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shutter</td>
<td>000 Ú 007 008 Ú 015 016 Ú 247 248 Ú 255</td>
<td>Blackout Open Strobe (1–12 Hz) Open</td>
</tr>
<tr>
<td>2</td>
<td>Iris</td>
<td>000 Ú 254 255</td>
<td>0–100% Closed</td>
</tr>
<tr>
<td>3</td>
<td>Color</td>
<td>000 Ú 014 015 Ú 028 029 Ú 042 043 Ú 056 057 Ú 070 071 Ú 084</td>
<td>White Red Green Blue UV Purple Golden Amber</td>
</tr>
<tr>
<td></td>
<td></td>
<td>085 Ú 098 099 Ú 112 113 Ú 127 128 Ú 191 192 Ú 255</td>
<td>2,900 K 4,800 K 3,800 K CW Rotation (Fast–Slow) CCW Rotation (Slow–Fast)</td>
</tr>
<tr>
<td>4</td>
<td>Color Temperature</td>
<td>000 Ú 085 086 Ú 170 171 Ú 255</td>
<td>6,000 K 5,600 K 3,200 K</td>
</tr>
<tr>
<td>5</td>
<td>Dimmer</td>
<td>000 Ú 255</td>
<td>0–100%</td>
</tr>
<tr>
<td>6</td>
<td>Focus</td>
<td>000 Ú 255</td>
<td>Close–Far</td>
</tr>
</tbody>
</table>
5. Technical Information

**Fixture Maintenance**

To maintain optimum performance and minimize wear, the user should clean the Followspot 1200 frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a rule, the user should clean the fixture at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced light source life and increased mechanical wear.

The 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. Even in the cleanest type of surroundings, the user should clean the external optics at least once every 30 days. CHAUVET® recommends cleaning the fixture’s external optics with a soft cloth using normal glass cleaning fluid.

**Procedure**

To clean the Followspot 1200, follow the below recommendations:

- Unplug the fixture from power.
- Wait until the fixture is cold (15 minutes minimum).
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external vents and reachable internal components.
- Clean all optics and glass surfaces with a mild solution of glass cleaner or isopropyl alcohol, and a soft, lint free cotton cloth or a lens cleaning tissue.
- Apply the solution directly to the cloth or tissue and drag any dirt and grime to the outside of the lens.
- Gently polish the glass surfaces until they are free of haze and lint.
- When cleaning movable mirrors, to avoid scratching or damaging their surface, minimize the contact with the mirror surface to a minimum.

Always dry the optics and glass surfaces carefully after cleaning them.

If the fixture has fans, never spin them using compressed air.
Photometrics

Diagram showing the photometric characteristics of the Followspot 1200.

- Lux levels at different distances (1.12m, 0.56m, 0.56m, 0.56m, 1.12m).
- Distance range from 0 to 10 meters.
- Angle of coverage marked as 13°.
## Followspot 1200 Troubleshooting Guide

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause(s)</th>
<th>Action(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low light intensity</td>
<td>• Dirty external lens&lt;br&gt;</td>
<td>• Clean lens&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Dirty optical assembly&lt;br&gt;</td>
<td>• Clean internal lenses and reflector&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Misaligned lamp&lt;br&gt;</td>
<td>• Realign the lamp&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Lamp nipple not in the upper position</td>
<td>• Rotate the lamp&lt;br&gt;</td>
</tr>
<tr>
<td>Color or temperature not changing</td>
<td>• Wrong DMX configuration&lt;br&gt;</td>
<td>• Review DMX address and channels&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty stepper motor&lt;br&gt;</td>
<td>• Replace stepper motor&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>Focus or Iris not changing</td>
<td>• Wrong DMX configuration&lt;br&gt;</td>
<td>• Review DMX address and channels&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty stepper motor&lt;br&gt;</td>
<td>• Replace stepper motor&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>Shutter or dimmer not working</td>
<td>• Wrong DMX configuration&lt;br&gt;</td>
<td>• Review DMX address and channels&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty shutter assembly&lt;br&gt;</td>
<td>• Replace shutter assembly&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>•故障 Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>External breaker/fuse keeps blowing</td>
<td>• Excessive circuit load&lt;br&gt;</td>
<td>• Check total load placed on the electrical circuit&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Short circuit along the power wires&lt;br&gt;</td>
<td>• Check for a short in the electrical wiring&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Defective power cord</td>
<td>• Repair power cord&lt;br&gt;</td>
</tr>
<tr>
<td>Followspot 1200 does not power up</td>
<td>• Blown fixture fuse&lt;br&gt;</td>
<td>• Replace blown fuse&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• No power&lt;br&gt;</td>
<td>• Check for power on outlet&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty or lose power cord&lt;br&gt;</td>
<td>• Check power cord&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Noise Filter PCB&lt;br&gt;</td>
<td>• Replace Noise Filter PCB&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>Followspot 1200 turns on, but lamp does not come up</td>
<td>• Shutter closed&lt;br&gt;</td>
<td>• Open shutter&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Dimmer set to 0%&lt;br&gt;</td>
<td>• Set dimmer to 100%&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty lamp&lt;br&gt;</td>
<td>• Replace lamp&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty igniter&lt;br&gt;</td>
<td>• Replace igniter&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty ballast&lt;br&gt;</td>
<td>• Replace ballast&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>Followspot 1200 does not respond to DMX</td>
<td>• DMX cable connected to the External Console Only connector&lt;br&gt;</td>
<td>• Connect DMX cable to the DMX Input connector&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Wrong DMX addressing&lt;br&gt;</td>
<td>• Action 2&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Wrong polarity settings on the DMX controller&lt;br&gt;</td>
<td>• Check polarity switch settings on the DMX controller&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Lose or damaged DMX cables&lt;br&gt;</td>
<td>• Check DMX cables&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Interference or signal problems&lt;br&gt;</td>
<td>• See next problem (Interference)&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Faulty Main PCB</td>
<td>• Replace Main PCB&lt;br&gt;</td>
</tr>
<tr>
<td>Interference or DMX signal problems</td>
<td>• Non compatible DMX cables&lt;br&gt;</td>
<td>• Use only compatible DMX cables&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Bouncing signals&lt;br&gt;</td>
<td>• Install terminator as suggested&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Long cable / Low level signal&lt;br&gt;</td>
<td>• Do not exceed maximum recommended length&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Too many fixtures&lt;br&gt;</td>
<td>• Install an optically-coupled DMX repeater&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Interference from AC wires&lt;br&gt;</td>
<td>• Install an optically coupled DMX splitter after unit #32.&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Keep DMX cables separated from power cables or black lights&lt;br&gt;</td>
</tr>
</tbody>
</table>

If you still experience technical problems after trying the above solutions, contact CHAUVET® Technical Support.
### Technical Information

#### Parts List

<table>
<thead>
<tr>
<th>No</th>
<th>Part code</th>
<th>Description</th>
<th>No</th>
<th>Part code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P100-FS12RC</td>
<td>Rear cover</td>
<td>55</td>
<td>P100-FS12LPLFO</td>
<td>Left plate for optic</td>
</tr>
<tr>
<td>2</td>
<td>P100-FS12BA</td>
<td>Bar A</td>
<td>56</td>
<td>P100-FS12SWA</td>
<td>Steel wire A</td>
</tr>
<tr>
<td>3</td>
<td>P100-FSXLRF</td>
<td>XLR Female Socket</td>
<td>57</td>
<td>P100-FS12REF</td>
<td>Reflector</td>
</tr>
<tr>
<td>4</td>
<td>P100-FSXLRM</td>
<td>XLR male Socket</td>
<td>58</td>
<td>P100-FS12BPFO</td>
<td>Back plate for optic</td>
</tr>
<tr>
<td>5</td>
<td>P100-FSUSEHOL</td>
<td>Fuse holder</td>
<td>59</td>
<td>P100-FS12MPFO</td>
<td>Mid plate for optic</td>
</tr>
<tr>
<td>6</td>
<td>P100-FS12ONOF</td>
<td>On/off Switch</td>
<td>60</td>
<td>P100-FS12LENA</td>
<td>Lens A</td>
</tr>
<tr>
<td>7</td>
<td>P100-FS12DCO</td>
<td>Display Cover</td>
<td>61</td>
<td>P100-FS12SFL</td>
<td>Sleeve for Lens</td>
</tr>
<tr>
<td>8</td>
<td>P100-FS12FAN1</td>
<td>DC Fan</td>
<td>62</td>
<td>P100-FS12LNC</td>
<td>Lens clip</td>
</tr>
<tr>
<td>9</td>
<td>P100-FS12FSC</td>
<td>Fan Screen</td>
<td>63</td>
<td>P100-FS12BFUC</td>
<td>Upper cover bracket</td>
</tr>
<tr>
<td>10</td>
<td>P100-FS12LSC</td>
<td>Left Side Cover</td>
<td>64</td>
<td>P100-FS12LSS</td>
<td>Lens sleeve</td>
</tr>
<tr>
<td>11</td>
<td>P100-FS12FL</td>
<td>Filter (15 A)</td>
<td>65</td>
<td>P100-FS12LENB</td>
<td>Lens B</td>
</tr>
<tr>
<td>12</td>
<td>P100-FS12ACP</td>
<td>AC Capacitor</td>
<td>66</td>
<td>P100-FS12COV</td>
<td>Cover</td>
</tr>
<tr>
<td>13</td>
<td>P100-FS12FJP</td>
<td>Fan Joint Plate</td>
<td>67</td>
<td>P100-FS12FPFO</td>
<td>Front Plate for optic</td>
</tr>
<tr>
<td>14</td>
<td>P100-FS12LCP</td>
<td>Lamp Control Plate</td>
<td>68</td>
<td>P100-FS12RPFO</td>
<td>Right plate for optic</td>
</tr>
<tr>
<td>15</td>
<td>P140-FS12 BALL</td>
<td>Ballast (1200 W)</td>
<td>69</td>
<td>P130-FS12FAN2</td>
<td>DC fan</td>
</tr>
<tr>
<td>16</td>
<td>P100-FS12IGN</td>
<td>Igniter (5-7 KV)</td>
<td>70</td>
<td>P100-FS12CFTS</td>
<td>Thermal switch clip</td>
</tr>
<tr>
<td>17</td>
<td>P100-FS12BRKT</td>
<td>Bracket</td>
<td>71</td>
<td>P100-FS12THER</td>
<td>Thermal switch</td>
</tr>
<tr>
<td>18</td>
<td>P100-FS12MTS</td>
<td>Multi-Tap Socket</td>
<td>72</td>
<td>P100-FS12BRKT</td>
<td>Base Bracket</td>
</tr>
<tr>
<td>19</td>
<td>P140-FS12ELTR</td>
<td>Transformer</td>
<td>73</td>
<td>P100-FS12PPST</td>
<td>Plastic post</td>
</tr>
<tr>
<td>20</td>
<td>P170-FS12NOIS</td>
<td>Noise filter PCB</td>
<td>74</td>
<td>P100-FS12LPBK</td>
<td>Lamp bracket</td>
</tr>
<tr>
<td>21</td>
<td>P100-FS12DFF</td>
<td>Diffuser</td>
<td>75</td>
<td>P100-FS12LSSA</td>
<td>Lamp shelves A</td>
</tr>
<tr>
<td>22</td>
<td>P100-FS12BAFF</td>
<td>Baffle</td>
<td>76</td>
<td>P100-FS12LSSB</td>
<td>Lamp shelves B</td>
</tr>
<tr>
<td>23</td>
<td>P100-FS12ISC</td>
<td>Iris steel cable</td>
<td>77</td>
<td>P100-FS12LSC</td>
<td>Left side cover</td>
</tr>
<tr>
<td>24</td>
<td>P100-FS12BFAI</td>
<td>Bar for adjusting Iris</td>
<td>78</td>
<td>P100-FS12PLHN</td>
<td>Plastic handle</td>
</tr>
<tr>
<td>25</td>
<td>P100-FS12MP1</td>
<td>Motor Plate 1</td>
<td>79</td>
<td>P100-FS12DCP</td>
<td>Die cast part</td>
</tr>
<tr>
<td>26</td>
<td>P100-FS12POST</td>
<td>Post</td>
<td>80</td>
<td>P100-FS12PFM</td>
<td>10 mm post</td>
</tr>
<tr>
<td>27</td>
<td>P100-FS12GAS</td>
<td>Gasket</td>
<td>81</td>
<td>P170-FS12ISCW</td>
<td>iSC-1200D PCB</td>
</tr>
<tr>
<td>28</td>
<td>P100-FS12TCFH</td>
<td>Top cover</td>
<td>82</td>
<td>P100-FS12DCPB</td>
<td>Bracket die cast part</td>
</tr>
<tr>
<td>29</td>
<td>P100-FS12MP2</td>
<td>Motor plate 2</td>
<td>83</td>
<td>P100-FS12HAND</td>
<td>Handle</td>
</tr>
<tr>
<td>30</td>
<td>P100-FS12BER</td>
<td>Bearing</td>
<td>84</td>
<td>P100-FS12LOOP</td>
<td>Loop</td>
</tr>
<tr>
<td>31</td>
<td>P100-FS12BELT</td>
<td>Belt</td>
<td>85</td>
<td>P100-FS12PPFM</td>
<td>10 mm post</td>
</tr>
<tr>
<td>32</td>
<td>P100-FS12TCJ</td>
<td>Top covers' jointer</td>
<td>86</td>
<td>P100-FS12FFCW</td>
<td>Flange for color wheel</td>
</tr>
<tr>
<td>33</td>
<td>P100-FS12PLS</td>
<td>Plastic slider</td>
<td>87</td>
<td>P100-FS12TBKRT</td>
<td>Bottom bracket</td>
</tr>
<tr>
<td>34</td>
<td>P100-FS12BEW</td>
<td>Bearing wheel</td>
<td>88</td>
<td>P100-FS12XNUT</td>
<td>Hex nut</td>
</tr>
<tr>
<td>35</td>
<td>P100-FS12LNHOL</td>
<td>Lens holder</td>
<td>89</td>
<td>P100-FS12BGAS</td>
<td>Bracket gasket</td>
</tr>
<tr>
<td>36</td>
<td>P100-FS1288MB</td>
<td>88 mm Bar</td>
<td>90</td>
<td>P100-FS12BNIP</td>
<td>Bracket</td>
</tr>
<tr>
<td>37</td>
<td>P100-FS12TPCR</td>
<td>Top cover</td>
<td>91</td>
<td>P100-FS12PCF</td>
<td>Plastic flange</td>
</tr>
<tr>
<td>38</td>
<td>P100-FS12WNP</td>
<td>Warming Plate</td>
<td>92</td>
<td>P100-FS12PSM</td>
<td>56.5 mm Post</td>
</tr>
<tr>
<td>39</td>
<td>P100-FS12NUT</td>
<td>Nut</td>
<td>93</td>
<td>P100-FS12COW2</td>
<td>Color wheel</td>
</tr>
<tr>
<td>40</td>
<td>P100-FS1255ODL</td>
<td>550’ Lens</td>
<td>94</td>
<td>P100-FS12UBKRT</td>
<td>Upper bracket</td>
</tr>
<tr>
<td>41</td>
<td>P100-FS12FOCF</td>
<td>Focus Frame</td>
<td>95</td>
<td>P100-FS12TCO</td>
<td>Bottom cover</td>
</tr>
<tr>
<td>42</td>
<td>P100-FS12CMP</td>
<td>Color Motor plate</td>
<td>96</td>
<td>P100-FS12CTB</td>
<td>Controller base</td>
</tr>
<tr>
<td>43</td>
<td>P100-FS12COW1</td>
<td>Temperature wheel</td>
<td>97</td>
<td>P100-FS12BDB</td>
<td>Body baffle</td>
</tr>
<tr>
<td>44</td>
<td>P100-FS12BARB</td>
<td>Bar B</td>
<td>98</td>
<td>P170-FS12DRV</td>
<td>Control board</td>
</tr>
<tr>
<td>45</td>
<td>P100-FS12CFL</td>
<td>Color Flange</td>
<td>99</td>
<td>P100-FS123TS</td>
<td>3-tap switch</td>
</tr>
<tr>
<td>46</td>
<td>P100-FS1298MP</td>
<td>98.5 mm Post</td>
<td>100</td>
<td>P100-FS122TS</td>
<td>2-tap switch</td>
</tr>
<tr>
<td>47</td>
<td>P100-FS12FFCW</td>
<td>Plate for color wheel motor</td>
<td>101</td>
<td>P100-FS12CTC</td>
<td>Controller cover</td>
</tr>
<tr>
<td>48</td>
<td>P100-FS12SWT</td>
<td>15 A switch</td>
<td>102</td>
<td>P100-FS12LGAS</td>
<td>Leather washer</td>
</tr>
<tr>
<td>49</td>
<td>P100-FS12SHUT</td>
<td>Shutter</td>
<td>103</td>
<td>P100-FS12ANUT</td>
<td>Allen nut</td>
</tr>
<tr>
<td>50</td>
<td>P100-FS12FFSC</td>
<td>Flange for shutter/color wheel</td>
<td>104</td>
<td>P100-FS12CHAN</td>
<td>Controller handle</td>
</tr>
<tr>
<td>51</td>
<td>P100-FS12PTMT</td>
<td>20 mm Post</td>
<td>105</td>
<td>P170-FS12MAS</td>
<td>Master board</td>
</tr>
<tr>
<td>52</td>
<td>P100-FS12MOT</td>
<td>1.8” step motor</td>
<td>106</td>
<td>P100-FS12BRCN</td>
<td>Bracket for controller</td>
</tr>
<tr>
<td>53</td>
<td>P100-FS12PLT</td>
<td>Plate</td>
<td>107</td>
<td>P100-FS12GLAS</td>
<td>Glass</td>
</tr>
<tr>
<td>54</td>
<td>P100-FS12HEX</td>
<td>Hex</td>
<td>108</td>
<td>P100-FS12HOOK</td>
<td>Safety hook</td>
</tr>
</tbody>
</table>
Returns Procedure

The user must send the merchandise prepaid and in the original box with its original packing and accessories. CHAUVET® will not issue call tags.

Call CHAUVET® and request a Return Merchandise Authorization Number (RMA #) before shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return.

The user must clearly label the package with a Return Merchandise Authorization Number (RMA #). CHAUVET® will refuse any product returned without an RMA #.

DO NOT write the RMA # directly on the box. Instead, write it on a properly affixed label.

Once you are given an RMA #, please include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- The RMA #
- A brief description of the symptoms

Be sure to pack the fixture properly. Any shipping damage resulting from inadequate packaging is the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

CHAUVET® reserves the right to use its own discretion to repair or replace returned product(s).

Claims

The carrier is responsible for any damage incurred during shipping. Therefore, if the received merchandise appears to have damages caused during shipping, the customer must submit the damage report and any related claims with the carrier, not CHAUVET®. The customer must submit the report upon reception of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to CHAUVET® within seven (7) days of receiving the merchandise.

Contact Us

World Wide

General Information

CHAUVET®
3000 North 29th Court
Hollywood, FL 33020
Voice: (954) 929-1115
Fax: (954) 929-5560
Toll free: (800) 762-1084

Technical Support

Voice: (954) 929-1115 (Press 4)
Fax: (954) 929-5560 (Attention: Service)

World Wide Web

www.chauvetlighting.com

It’s Green Thinking
### Technical Specifications

#### Weight & Dimensions

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>45.1 in (1,147 mm)</td>
</tr>
<tr>
<td>Width</td>
<td>16.9 in (430 mm)</td>
</tr>
<tr>
<td>Height</td>
<td>9.0 in (230 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>84 lbs (38 kg)</td>
</tr>
</tbody>
</table>

#### Power

- **Selectable Input Voltage and Frequency**: 208/230 V, 50/60 Hz
- **Current draw**: Operating: 8.61 A; Inrush 9.2 A
- **Power**: 1,264 W
- **Power Factor**: PF 0.71

#### Fuse

- **External Fuse**: 6 x 30 mm, glass, 15 A, 250 V

#### Light Source

- **Metal Halide Lamp**: Osram HTI 1200 W/D/7/60, 6,500 K, 2,000 hrs

#### Photo Optic

- **Luminance (4º angle)**: 202,000 lux @ 1 m
- **Luminance (13º angle)**: 7,000 lux @ 5 m; 3650 lux @ 7 meter, 1800 lux @ 10 m
- **Beam angle range**: 4~38°

#### 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**: 6

#### Ordering Information

- **Followspot 1200**: FOLLOWSPOT1200
6. Appendix

DMX Primer

The DMX protocol (USITT DMX512-A) is a networking protocol that enables a universal DMX controller device to control the features of multiple DMX compatible fixtures, whether par cans, wash lights, moving heads, followspots, foggers, proprietary fixture controllers, etc.

As any other networking protocol, the USITT DMX512-A describes the physical medium, the signals and the functions they control.

The Physical Medium

The DMX controller connects to its associated DMX compatible fixtures using a DMX connection. This connection consists of a series of jumps between the DMX controller and the various DMX compatible fixtures, also known as a daisy chain connection. In this type of connection, the DATA OUT of one fixture or the DMX controller connects to the DATA IN of the next fixture, and so on.

Each DMX fixture links to the previous and next DMX fixture or controller using a DMX cable. This type of cable consists of a section of shielded, two-conductor twisted pair cable with one 3-pin XLR male connector on one end and a 3-pin XLR female connector on the other end. The XLR connectors pin-out is as follows: pin 1 is the Common (shield), pin 2 is Signal Negative (S-) and pin 3 is Signal Positive (S+).

The Signals

The DMX signal stream is unidirectional, from the DMX controller to the DMX compatible fixtures. These signals conform to the EIA-485 standard.

The stream of DMX signals consists of 512 individual, sequential channels that form a frame. The DMX controller constantly sends frames of DMX signals to the DMX connection, even if not all of the 512 channels are in use. Because of this constant transmission method, there can be only one DMX controller in a DMX connection. Otherwise, the DMX signals sent by one controller would interfere with the signals sent by the other controller(s).

The Functions

Each DMX channel can have any unitary value in the 000~255 range. Each DMX compatible fixture uses as many consecutive DMX channels as features the user can control. The sequential numbers assigned to each DMX channel (1~512) are also known as DMX addresses.

The function each DMX channel has and the results of its values (000~255) depend on each controlled fixture. Some fixtures only use a single DMX channel, while others may require 15 or more DMX channels to control all their functions.

DMX Configuration

The DMX fixture configuration consists in determining how many channels each fixture will need as well as assigning the corresponding DMX channels to each fixture in order to size correctly the DMX controller.

Starting Address

For the DMX controller to control each DMX fixture, the user must configure them to receive only the channel(s) required to must know on which channel(s) they will receive the control signal(s). Therefore, it is necessary to configure on each fixture which DMX channel will be its Channel 1. This is the fixture’s starting address.

Once this assignment is complete, and based on the number of channels it uses, the fixture will respond to the DMX signals sent to the range of DMX channels that begins with the starting address.

For example, a fixture that uses six DMX channels and whose starting address is 100, will accept DMX data sent by the DMX controller to channels 100, 101, 102, 103, 104, and 105.

Personalities

Most DMX fixtures use multiple personalities, each of them requiring a different number of channels, depending on the number of features it enables. The number of DMX channels used by a fixture may vary from only one (usually the general dimmer control) to 15 or more.

When the job does not require using all the fixture’s capabilities, the user can select a more basic personality (less channels), thus allowing the DMX controller to accommodate more DMX fixtures.
DMX Configuration (Cont.)

Assigning Addresses
Because of the different number of DMX channels used by each fixture, assigning their respective starting addresses may become a difficult task.

The user must carefully assign the starting addresses for each individual fixture to avoid DMX channel overlapping. If the DMX channels do overlap, the affected fixtures could operate erratically.

DMX Universes
A DMX universe is the set of DMX compatible fixtures connected to the same DMX daisy chain, which are receiving DMX data from the same DMX controller using the same set of 512 DMX channels.

Usually, a regular size installation will have only one DMX universe. In some cases, however, it might be necessary to define two or more universes due to distance or number of features constrains.

Most DMX controllers support only one universe, although some DMX controllers may support two or more universes. Each universe will have its own separated DMX daisy chain.

A DMX compatible fixture can only be part of a single DMX universe.

DMX Connectivity
Connecting the DMX fixtures to a DMX controller in small to medium installations is usually a rather simple operation that requires a minimum of tools and some planning (not including the actual fixture rigging and configuration).

However, in large installations it may be necessary to plan carefully the position and cabling of each fixture to avoid unexpected problems.

Fixture Location
The order in which the fixtures connect to the DMX controller is not important and it has no effect on how a controller communicates to each fixture. However, the user should always define a physical location for the fixtures that provides for the easiest and most direct cabling.

Number of Fixtures
When using a DMX controller, the combined number of channels required by all the fixtures on the serial data link determines the number of fixtures the DMX controller has to support. Conversely, the number of onboard sliders, page buttons and fixture buttons limits the number of discrete DMX channels a DMX controller can support.

To comply with the EIA-485 standard, which is the base for the USITT DMX512-A protocol, do not connect more than 32 fixtures without using a DMX optically-isolated splitter. Doing otherwise may result in deterioration of the digital DMX signal.

DMX Data Cabling
You must use DMX compliant data cables to link two or more DMX compatible fixtures. You may purchase CHAUVET® certified DMX cables directly from a dealer/distributor or construct your own cable.

USITT recommends limiting the total length of the DMX cable (from the first fixture/controller to the last fixture) to 300~455 m (985~1,500 ft).

Making your Own DMX Cable
If you choose to create your own DMX cable, make sure to use data-grade cables that can carry a high frequency signal and are less prone to electromagnetic interference. Use a Belden© 9841 or equivalent cable, which meets the specifications for EIA RS-485 applications.

Do not use standard microphone cables for DMX applications because they cannot transmit DMX data reliably over long distances.

DMX Cable Characteristics
The DMX data cable must have the following characteristics:

- **Type:** shielded, 2-conductor twisted pair
- **Maximum capacitance between conductors:** 30 pF/ft
- **Maximum capacitance between conductor and shield:** 55 pF/ft
- **Maximum resistance:** 20 ohms/1000 ft
- **Nominal impedance:** 100~140 ohms
DMX Connectivity (Cont.)

DMX Cable Connectors

Each DMX cable must have a male, 3-pin XLR connector on one end and a female, 3-pin XLR connector on the other end.

DMX Connector Configuration

To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator, as seen below.

3-Pin to 5-Pin Conversion Chart

If you use a DMX controller or fixture with a 5-pin DMX connector, you will need to use a 5-pin to 3-pin adapter. The chart below details a proper cable conversion.

3-Pin to 5-Pin Conversion Chart

<table>
<thead>
<tr>
<th>Conductor</th>
<th>3-Pin Female (Output)</th>
<th>5-Pin Male (Input)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground/Shield</td>
<td>Pin 1</td>
<td>Pin 1</td>
</tr>
<tr>
<td>Negative (-) signal</td>
<td>Pin 2</td>
<td>Pin 2</td>
</tr>
<tr>
<td>Positive (+) signal</td>
<td>Pin 3</td>
<td>Pin 3</td>
</tr>
<tr>
<td>Not Used</td>
<td>Pin 4</td>
<td></td>
</tr>
<tr>
<td>Not Used</td>
<td>Pin 5</td>
<td></td>
</tr>
</tbody>
</table>

DMX Connection

Make sure that the fixtures with which you are working can operate in DMX mode, not in a proprietary connection mode. Refer to the fixtures’ manual to learn how to enable their respective DMX modes.

The procedure below illustrates a possible DMX connection method.

1) Connect the 3-pin, male connector of the first DMX cable to the DMX Output connector (3-pin, female) of the DMX controller.

2) Connect the 3-pin, female connector of the first DMX cable coming from the controller to the DMX Input connector (3-pin, male) of the first DMX fixture.

3) Connect the 3-pin, male connector of the second DMX cable to the DMX Output connector (3-pin, female) of the first DMX fixture.

4) Connect the 3-pin, female connector of the second DMX cable coming from the first DMX fixture to the DMX Input connector of the second DMX compatible fixture.

5) Continue linking the other DMX fixtures in the same way.

Test all DMX cables with an ohmmeter to verify their correct polarity and to make sure that there are no short-circuits between any of the pins, or between any pin and ground.

If the Common wire (shield) touched the chassis ground, a ground loop could form, which may cause the fixture to perform erratically.

120 ohm, ¼ W resistor between pin 2 (DMX -) and pin 3 (DMX +) on the output of the last fixture.
DMX Connectivity (Cont.)

Master/Slave Linking
(Not supported by the Followspot 1200)

Master/Slave Connection

The Master/Slave mode allows one fixture (the master) to run a preconfigured program to control several other fixtures of the same model (the slaves) without requiring a DMX controller. In this mode, all the slave fixtures will operate in unison with the master fixture.

If a fixture supports the Master/Slave mode, it will have some sort of programming function to configure it as master or slave. Those fixtures that only support DMX mode cannot operate in Master/Slave mode.

Make sure the fixtures with which you are working are capable of operating in Master/Slave mode. When working in Master/Slave mode, most fixtures use the DMX data connection as well. The difference in this case is that there is no DMX controller involved. Refer to the fixtures’ manual to learn how to configure them to work in Master/Slave mode.

The procedure below illustrates a possible connection method.

1) Connect the 3-pin, male connector of the first DMX cable to the DMX Output connector (3-pin, female) of the master fixture.
2) Connect the 3-pin, female connector of the first DMX cable coming from the master fixture to the DMX Input connector (3-pin, male) of the first slave fixture.
3) Connect the 3-pin, male connector of the second DMX cable to the DMX Output connector (3-pin, female) of the first slave fixture.
4) Connect the 3-pin, female connector of the second DMX cable coming from the first slave fixture to the DMX Input connector (3-pin, male) of the second slave fixture.
5) Continue linking the other slave fixtures in the same way.
6) Follow the steps in fixtures’ manual to configure the fixtures as master and slaves.
ID Addressing is a sub-addressing method by which each fixture, apart from its starting address, can also have an "ID" address in the 1~66 range. This allows users to multiply the number of fixtures they can control with a single DMX controller. Many fixtures have at least one DMX personality or mode that enables ID addressing. In this case, one of the channels of such DMX mode is in charge of selecting an ID address. When using ID addressing, setting the value of the ID addressing channel to “0” allows for the simultaneous control of all the fixtures with the same starting address, regardless of their particular ID address.

ID addressing is also a tool for creating special lighting effects by having several fixtures sharing the same starting DMX address and ID address, as indicated below.

---

**Single Row Connection**

The figure below shows a simple DMX layout that uses four fixtures, all with the same DMX address and a unique ID address for each fixture. This allows the user to control simultaneously the whole group of units at that DMX address by setting the ID Addressing channel to “0”. Similarly, the user can control each fixture at that DMX address independently by first selecting the DMX address and then using the ID Addressing channel to locate the target ID address.

---

**Standard Block Connection**

In the Standard Block connection, the fixtures appear in repeated rows of the same length to form a block. For instance, three rows of fixtures with three fixtures per row to form a 3 x 3 block. Each of the fixtures has unique, sequential ascending ID addresses for the controller to control each fixture individually.

---

**Repeated Row Block Connection**

In this type of connection, the fixtures appear in repeated rows or columns of the same length to form a block. For instance, there may be three columns of fixtures with three fixtures per column to form a 3 x 3 block. In this case, the fixtures form groups, each with its own sequential ascending ID addresses. This way, the controller will control each group of fixtures individually.

---

**Other Effects**

For other types of effects, you may group the fixtures in diagonal lines or place them in random positions within a single block.
Calculating the total current drawn by the fixtures connected to a particular circuit is not complicated if the installer has the right information at hand and knows how to interpret it.

With the fixture’s current draw information, the installer can calculate and select the right circuit breaker size (rating) to which they can connect a group of fixtures.

**Using the Spec Sticker**

CHAUVET® fixtures come with a sticker that indicates the current they consume in a circuit at the specified voltage. This greatly simplifies calculating the total current drawn.

For instance, if the sticker on the fixture indicates, “0.1 A @ 115 VAC, 60 Hz” and the installer is connecting 12 of them on the same 115 VAC circuit, to determine the total current required by the fixtures it would be enough to do this simple calculation:

\[ 0.1 \text{ A} \times 12 = 1.2 \text{ A} \]

**Using the Watts/Volts Method**

Some installers may prefer to determine the current drawn by the fixture by dividing its power consumption, indicated in watts (W), by the voltage (V) on the circuit. As an example, assuming that a certain fixture consumes 240 W and it is connected to a 120 VAC circuit, the current it draws would be:

\[ \frac{240 \text{ W}}{120 \text{ V}} = 2 \text{ A} \]

**Considering the Power Factor**

The above method is accurate only with fixtures whose power factor (PF) is equal, or very close, to “1.” Otherwise, the calculated current may be too low with respect to the actual current drawn by the fixture.

In fact, as the PF decreases, the difference between the current calculated using the watts/volts method and the actual current increases.

Therefore, for fixtures with a PF below “0.9,” the installer must always consider the fixture’s PF when using the watts figure to calculate the current it draws.

For the above example, if the published fixture’s PF were “0.7,” the resulting drawn current would be as follows:

\[ \frac{2 \text{ A}}{0.7} = 2.8571 \text{ A} \]

This is approximately equal to 2.86 A, 2.9 A, or even 3 A, depending on the installer’s desire for accuracy. In other words, the actual current ended up being close to 50% higher than originally calculated.

**Using the Volt Amps Method**

If the fixture’s sticker indicates the power consumption in “volt amps” (VA), the calculation of the drawn current is simply the result of dividing the amount in VA by the voltage on the circuit (V). For a fixture with a consumption of 360 VA, the calculation would be as follows:

\[ \frac{360 \text{ VA}}{120 \text{ V}} = 3 \text{ A} \]

Note that when the power consumption is in VA, the fixture’s PF is never part of the current draw calculation.

**Selecting the Circuit Breaker**

The National Electric Code (NEC) determines that circuit breakers should handle 80% of their rated capacity for continuous loads (those being on for three or more hours) and 100% for intermittent loads. For safety reasons, CHAUVET® recommends assuming that all loads are continuous.

After calculating the total current the fixtures connected to a particular circuit will draw, the installer must consider the 80% rule indicated above. For a total current of 22 A, the calculation is as follows:

\[ 22 \text{ A} \times 1.25 = 27.5 \text{ A} \]

The installer should use a 30 A CB because the immediately lower CB rating, 25 A, would not be enough for this load.