TIR ControlFX Director Quickstart Guide

What is ControlFX Director?

ControlFX[™] Director is a hardware interface between a notebook computer running the ControlFX[™] Designer software and a network of luminaires from TIR Systems Ltd. (TIR®). The software for instructing the network is uploaded to the luminaires via the ControlFX[™] Director interface. ControlFX[™] Director and the ControlFX[™] Designer software ensure the luminaire clocks are synchronized to vary the color and intensity of light, typically for light shows.

Intended Use

ControlFXTM Director is to be installed in dry indoor locations only.

ControlFX Director Product Bundles

The following product bundles are available:

- ControlFXTM Director DMX Bundle For customers using a DMX network to communicate with the luminaires
- ControlFXTM Director Ethernet Bundle For customers using an Ethernet network to communicate with the luminaires

The ControlFX[™] Director DMX Bundle includes a ControlFX[™] Director device, a 10' (3.0 m) DMX cable whip with an XLR-5 connector at one end, and a 6' (1.8 m) Ethernet cross-over cable.

The ControlFX[™] Director Ethenet Bundle includes a ControlFX[™] Director device and a 10' (3 m) ethernet cable with RJ45 connectors for connection to a hub.

Both bundles ship with the ControlFX^{\rm TM} Designer CD-ROM



Always consult the relevant safety laws, practices or requirements that apply to you, and ensure you conduct yourself accordingly.

Related Documentation

TIR® may supply the following related documents:

- ControlFX Designer Quickstart Guide (Part No. 940-0150)
- ControlFX Designer User's Guide (Part No. 940-0149)

Understanding the Device

The ControlFX[™] Director device, made of ABS and aluminium, must be mounted in a dry indoor location.

See Figure 1 and accompanying table below.

Figure 1: ControlFX Director Device



Table 1: ControlFX Director Detail

ltem	Description
0	ControlFX [™] Director device: black cover decal 1.7 lbs (750 g), 8.9" (225 mm) x 3.1" (79 mm) x 4.1" (104 mm)
2	Mounting bracket
3	Power supply unit (PSU)
4	AC power cable
5	Ethernet cross-over cable

ltem	Description (Continued)
6	DMX cable
0	AC power cable plug in

Preparing for the Installation

Before proceeding with the ControlFX[™] Director installation, first complete the pre-installation steps.

To prepare for the installation:

- 1. Consult the site layout plan, available from the general contractor or architect.
- 2. Identify the nearest power supply source.
- 3. Obtain two fasteners (not supplied by TIR®) appropriate for the installation conditions.
- 4. Unpack the ControlFX[™] Director device.
- 5. Turn off and lock out all power sources before beginning the installation.

Installing ControlFX Director

ControlFX[™] Director can be wall, ceiling or floor mounted in a dry, indoor application. The mounting brackets are located at the back of the device.

To install a ControlFX Director device:

1. Position the ControlFX[™] Director device on the mounting surface and mark the position of the holes for each mounting bracket.

The two mounting points are indicated by arrows in Figure 2 below.

Figure 2: Mounting Points: Front View



The fastener hole diameters are 0.190" (4.8 mm) at the top and 0.375" (9.5 mm) at the bottom.

See Figure 3 below.

Figure 3: Mounting Points: Back View



- 2. Hang the bracket on the mounting surface using appropriate fasteners (not supplied by TIR®).
- 3. Connect the AC power cable.
- 4. Perform the following steps:
 - Plug in the DMX cable where indicated
 - Plug in the Ethernet cable where indicated



The data cable connection between the ControlFX[™] Director device and the luminaires must always remain connected.

- If you are connecting the power supply directly behind the ControlFX[™] Director device, drill the necessary hole and make the necessary connection in accordance with the local electrical codes.
- 6. Record the serial number from the underside of the ControlFX[™] Director device.

See Figure 4 below.





Testing the System

After installing ControlFX[™] Director, and before packing up your tools, run through the Testing Checklist.

See Table 2.

Table 2: Testing Checklist.		
Have you verified	Check	
That the device is receiving power? ■ Is the POWER LED illuminated?		
That the device responds to an Ethernet signal, if applicable? ■ Does the STATUS LED flash?		

Using ControlFX Director

The ControlFX[™] Director device is used to connect a notebook computer running the ControlFX[™] Designer software to the DMX network. The software for instructing the network is uploaded to the luminaires via the ControlFX[™] Director interface.

To use a ControlFX Director device:

- 1. Start your notebook computer (not supplied by TIR®).
- Connect the Ethernet cross-over cable from the ControlFX[™] Director device to your notebook computer.
- 3. Install the ControlFX[™] Designer, as per the ControlFX Designer Quickstart Guide and/or the ControlFX Designer User's Guide.
- 4. Refer to the ControlFX Designer User's Guide to assist you in performing the following steps:
 - Defining luminaire serial numbers
 - Setting up a show on the luminaires
- 5. When finished, disconnect your notebook computer from the ControlFX[™] Director device.



The data cable connection between the ControlFX[™] Director device and the luminaires must always remain connected.

Request for Service

Prior to calling TIR_®, obtain the following information from the white label affixed on the bottom of the ControlFX[™] Director device:

- Model number
- Serial number
- MAC address

For technical support or any service related to TIR® products, use the following contact information:

- Telephone: (1) (604) 294-8477
- Toll-Free North America: (1) (800) 663-2036
- Fax: (1) (604) 294-3733
- E-mail: technical@tirsys.com

Service coverage at TIR® is structured as follows:

- Standard coverage hours are 5:30 A.M. to 5:00
 P.M. Pacific time (GMT -8 Standard time), Monday-Friday
- If you are directed to a voicemail box during standard coverage hours, TIR® will respond to your call within 90 minutes
- For service outside regular hours, your call will be recorded by an answering service, forwarded to a TIR® representative and responded to the next business day

Regulatory Statement

ControlFX[™] Director has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules in the United States of America. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area would, in all likelihood, cause harmful interference in which case the user would be required to correct the interference at their own expense.

Troubleshooting ControlFX Director

For any additional questions you may have, refer to the checklist of potential symptoms and solutions.

See Table 3.

Table 3:	Troubleshooting	Checklist

The box isn't receiving powerCheck that the power cables are fully connectedDMX line fails to respond■ Disconnect the data line from the run, turn the power off, wait for one minute, plug the data line back in and send sample demands■ Repeat the above procedure if necessary■ Repeat the above procedure if necessaryCheck the Windows® XP network settings on your notebook computer to ensure that a static IP address is not being used:■ Check internet protocol (TCP/ IP) properties for the network connection you are using to connect to the ControlFXTM Director device■ If there is an IP address specified in Use the following IP Address:, record these values■ Click OK to accept the changes■ After you disconnect your notebook computer from the ControlFXTM Director device, change the IP settings back to the original values	Symptom	Solution
 DMX line fails to respond Disconnect the data line from the run, turn the power off, wait for one minute, plug the data line back in and send sample demands Repeat the above procedure if necessary Check the Windows® XP network settings on your notebook computer to ensure that a static IP address is not being used: Check internet protocol (TCP/IP) properties for the network connection you are using to connect to the ControlFXTM Director device If there is an IP address specified in Use the following IP Address:, record these values Click Obtain an IP address automatically Click OK to accept the changes After you disconnect your notebook computer from the ControlFXTM Director device, change the IP settings back to the original values 	The box isn't receiving power	 Check that the power cables are fully connected
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If ControlFX[™] Director does not detect the presence of a DHCP server when connected to your notebook computer, the device will assume a default IP address of 169.254.236.22 and subnet mask of 255.255.0.0.



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