# KRAMER





# FC-18 Quick Start Guide

This guide helps you install and use your FC-18 for the first time.

Go to <u>www.kramerav.com/downloads/FC-18</u> to download the latest user manual and check if firmware upgrades are available.

#### Step 1: Check what's in the box

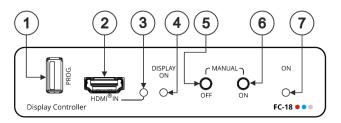
▼ FC-18 Display Controller

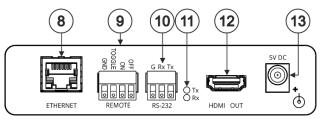
1 Power adapter and cord

✓ 1 Bracket set

✓ 1 Quick start guide

## Step 2: Get to know your FC-18





#	Feature	Function
1	PROG USB Connector	Connect to update the firmware.
2	HDMI® IN Connector	Connect to an HDMI source.
3	HDMI® IN LED	Lights green when a valid HDMI signal is detected. The detection is based on the presence of 5V and a clock signal on the HDMI input.
4	DISPLAY ON LED	Lights green when the HDMI acceptor on the output is on.
5	MANUAL OFF Button	Press to instruct <b>FC-18</b> to send a CEC or RS-232 OFF command to the display.  The display remains off (and the DISPLAY ON LED is off) even if the input conditions dictate to turn the display on. Only after detecting no input signal for a period of over 5 minutes will the trigger-defined input conditions be able to turn the display on once again. Press and hold for 3 seconds for full factory reset
6	MANUAL ON Button	Press to instruct <b>FC-18</b> to send a CEC or RS-232 ON command to the display.  The display remains on (and the DISPLAY ON LED is on) for an interval of a minimum of 5 minutes. After that time-period, the trigger-defined input conditions will dictate to shut the display down. Press and hold for 3 seconds to enter firmware upgrade mode via USB port.

Press both ON and OFF buttons simultaneously to show the current device IP address on the display.

7	ON LED	Lights green when power is connected.	
8	Ethernet RJ-45 Port	Connect to a PC via a LAN to control the device or to tunnel RS-232 data to the display.  Also use for firmware upgrade.	
9	REMOTE 4-pin Terminal Block Connector	Connect to contact closure switches (by momentary contact between the desired pin and GND pin).  TOGGLE – one button toggles between display ON and display OFF (instead of using two separate buttons for ON and OFF).  ON – turns the display on.  OFF – turns the display off.	
10	RS-232 3-pin Terminal Block Connectors (G, Rx, Tx)	Set the function of the RS-232 port via the web pages: Connect to the display to send RS-232 commands to the display (default) via web pages, for example. OR, Connect to the PC or the remote controller to control <b>FC-18</b> (for example, instructing it to send a CEC command to send turn the display on or off).	
11	Tx LED	Lights red when RS-232 port transmits data.	
	Rx LED	Lights green when RS-232 Port receives data.	
12	HDMI® OUT Connector	Connect to an CEC enabled HDMI acceptor.	
13	5V DC Power Connector	Connect to the supplied power adapter.	
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The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.





#### Step 3: Mount FC-18

Install FC-18 using one of the following methods:

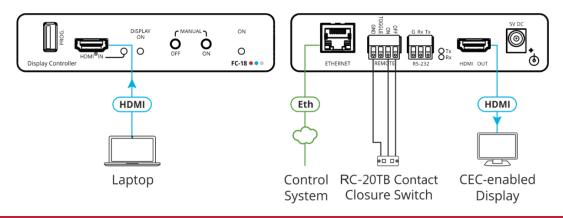
- Attach the rubber feet and place the unit on a flat surface.
- Fasten a bracket (included) on each side of the unit and attach it to a flat surface (see <a href="www.kramerav.com/downloads/FC-18">www.kramerav.com/downloads/FC-18</a>).
- Mount the unit in a rack using the recommended rack adapter (see www.kramerav.com/product/FC-18).



- Ensure that the environment (e.g., maximum ambient temperature & air flow) is compatible for the device.
- Avoid uneven mechanical loading.
- Appropriate consideration of equipment nameplate ratings should be used for avoiding overloading of the circuits.
- Reliable earthing of rack-mounted equipment should be maintained.
- Maximum mounting height for the device is 2 meters.

### Step 4: Connect the input and output

Always switch OFF the power on each device before connecting it to your **FC-18**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to **FC-18**.



## Step 5: Connect the power

Connect the power cord to FC-18 and plug it into the mains electricity.

Safety Instructions (See <a href="https://www.kramerav.com">www.kramerav.com</a> for updated safety information)



For products with relay terminals and GPI\O ports, please refer to the permitted rating for an external connection, located next to the terminal or in the User Manual.
 There are no operator serviceable parts inside the unit.

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Warning:

Use only the power cord that is supplied with the unit.

Disconnect the power and unplug the unit from the wall before installing.

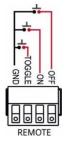
# Step 6: Control and Operate FC-18

#### **Contact Closure Remote Control**

Turn the display ON or OFF (or TOGGLE between ON and OFF) via the contact closure remote control (also known as push-to-make momentary contact).

For example, to select ON, momentarily connect the ON pin to the GND pin.

Use the MANUAL front panel buttons and/or remote contact closure switch to turn the display ON or OFF.



#### Setup and Control Using the Embedded Web Pages



Press the ON and OFF buttons on the front panel simultaneously to show the current IP address of FC-18 on the display.

- Set the RS-232 communication parameters and codes. These will typically be configured according to the RS-232
  protocol of the display that the device controls when RS-232 is set as an "output" port, or configured according to the
  controller's codes when RS-232 is set as an "input" port.
- Select of the trigger mechanisms (5V, clock and sync signals in the HDMI input) which fire the RS-232 commands.
- Set the delay times before the RS-232 codes are sent.
- Set up the unit to send codes via Ethernet instead of RS-232 (for example to support applications where the projector control is via Ethernet, not RS-232).
- Configure tunneling parameters.
- Enable / disable any of the control mechanisms (for example, disabling the front-panel buttons, or the automatic control).



