# Flex Cine Wireless DMX Dimmer User Manual

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## Introduction

Thank you for purchasing a Westcott Flex Cine Wireless DMX Dimmer. The dimmer is able to operate all Flex Cine LED mats, including RGBW, bi-color, and daylight sizes 1' x 1' up to 2' x 2'. It's also backward compatible with most original Flex mats with an optional TE-9 pin adapter.

## Features

## Choose Between Wireless or Wired DMX

The dimmer is designed with DMX512 Input/Output 5-Pin Male/Female XLR and WiFi capability for controlling one or multiple dimmers via WiFi Host/Client Mode. When operating DMX over Art-Net, the dimmer is compatible with mobile apps including Luminair that offer advanced lighting effects and controls.

## **Dimmer Control Modes and Presets**

When utilizing the dimmer's onboard controls, users have access to a dynamic range of tools that control color and intensity, including 120+ pre-loaded color gel presets with daylight or tungsten backing, source presets, user-defined presets, CCT controls, and more.

## V-Mount AC and DC Power Options

The Flex Cine Wireless DMX Dimmer is designed with a built-in V-mount to accept AC or DC power. Pair with either the AC Adapter or 26V Lithium-Ion Battery to operate Flex LEDs easier than ever before. User's can also power a 1' x 1' Bi-Color or Daylight LED mat via any compatible 14.4-14.8V V-mount battery.

## Cutting-Edge Technology

This dimmer is equipped with Hybrid Pulse Width Modulation that allows Flex LED mats to be dimmed down to 1% while maintaining a flicker-free output up to 960 frames per second. Mat Sensing Technology detects which Flex LED mat is connected, specifies the required voltage, and customizes the available dimmer controls. A built-in USB port allows for future firmware updates.

## Durable Lightweight Enclosure

This dimmer is constructed with a heavy-duty, lightweight aluminum enclosure for secure use and travel. It can be mounted via the built-in 3/8"-16 and 1/4"-20 threads or hung from a stand with the removable D-ring lanyard. The dimmer also includes a user-replaceable WiFi antenna.

## **Included Components**

- Flex Cine DMX Dimmer
- Flex Cine DMX Dimmer Case
- Flex Cine DMX Dimmer Lanyard

## **Overview**



## Warnings

- Use only with the Westcott Flex Cine AC Adapter and compatible batteries
- Keep away from fire and water
- Do not submerge in water
- Do not attempt to open or modify
- Do not short AC Adapter terminals
- Do not alter or change V-Mount plate or pins
- Do not overtighten connections
- Do not overtighten mounting threads

# **Updating Firmware**

The Flex Cine Wireless DMX Dimmer is designed with a USB port (5V 1A) to allow for firmware updates. Future updates may result in modified menu options and layouts.

- 1. Visit <u>https://www.fjwestcott.com/7580</u> and scroll to the Support section. Find and download the latest firmware ZIP file.
- 2. Unzip the file. Open the extracted folder.
- 3. Read the Changelog file.
- 4. Save the .BIN file to the root directory of a USB flash drive that's been formatted using MS-DOS (FAT). This does not have to be the only file on the flash drive, but it cannot be in a folder.
- 5. Move the dimmer's power switch to the OFF position.
- 6. Plug the flash drive into the USB port located on the side of the dimmer.
- 7. Turn the power switch to the ON position.
- 8. After Westcott logo and version information appear, the unit will display "Updating" and a status bar will appear.
- 9. When the status bar completes, the new firmware version number will be displayed on the screen and the dimmer will return to the Main Menu.

## Important Firmware Notes

- It's recommended that the firmware update installation process be completed only when the dimmer is attached to the Flex Cine Wireless DMX Dimmer AC Adapter or a fully-charged battery. Loss of power during this process could render the dimmer inoperable and require professional repair.
- The USB flash drive MUST be formatted for MS-DOS (FAT) file system. The dimmer will not recognize the .BIN file on a USB drive formatted in Mac OS Extended or other file systems. See your computer's operating system external device formatting instructions for more details.
- Remove the USB flash drive before the next power cycle or unit will reload the firmware.

# Powering the Wireless DMX Dimmer

- Flex Cine Mats require a Flex Cine Dimmer and power source for operation.
- Flex Cine RGBW Mats require a Flex Cine Wireless DMX Dimmer.

#### DMX Dimmer AC Adapter or 26V V-Mount Battery

All Flex Mats

#### 14.4 or 14.8V V-Mount Battery

1' x 1' Daylight and 1' x 1' Bi-Color Mats

#### **Connecting V-Mount Power Source**

- 1. Ensure the dimmer is turned off.
- 2. Slide the power source toward the bottom of the dimmer until it clicks into the locked position.

#### **Disconnecting V-Mount Power Source**

1. Ensure the dimmer is turned off.

2. Push the V-Mount release button inwards and slide the power source towards the top of the dimmer until it releases.

# **Connecting Flex Mats**

#### **Connecting a Flex Cine LED Mat**

- 1. Ensure the dimmer is turned OFF.
- 2. Plug the Flex Cine mat's TE-9 Pin connector into the TE-9 Pin receiver located on the top of the Flex Cine Dimmer. The proper connection may require the connector to be turned until the pins align and it easily inserts into the dimmer's receiver.
- 3. Once connected, rotate the coupling ring <sup>3</sup>/<sub>4</sub> clockwise on the cable connector to secure.
- 4. Connect the dimmer to a compatible power source. See the Power section in this guide for compatibility and connecting details.

#### Connecting a Flex LED Legacy Mat

Original Flex mat owners can operate their original Flex LED mats with the Cine Wireless DMX Dimmer when paired with a Legacy Adapter (sold separately). IMPORTANT: Legacy Adapters are mat specific. Do not attempt to use the same legacy adapter for various Flex mat styles.

- 1. Ensure the dimmer is turned **OFF**.
- 2. Connect the adapters TE-9 Pin connector into the TE-9 Pin receiver on the dimmer, rotate the coupling ring <sup>3</sup>/<sub>4</sub> clockwise on the cable connector to secure.
- 3. Connect the Flex mat connector to the adapter.
- 4. Rotate the connector's coupling ring clockwise to secure the connection.
- 5. Connect the dimmer to a compatible power source. See the Power section in this guide for compatibility and connecting details.

#### Disconnecting a Flex Cine LED Mat

- 1. Ensure the dimmer is turned **OFF**.
- 2. Grasp the coupling ring and rotate counterclockwise <sup>3</sup>/<sub>4</sub> turn.
- 3. Gently pull the cable connector straight out and away from the dimmer.

#### **Disconnecting a Flex LED Legacy Mat**

- 1. Ensure the dimmer is turned **OFF**.
- 2. Rotate the adapter's coupling ring counterclockwise <sup>3</sup>/<sub>4</sub> turn.
- 3. Gently pull the adapter straight out and away from the dimmer.
- 4. Disconnect the mat from the adapter.

Note: Never force entry or removal of the connectors.

# **Basic Operation, Switches & Controls**

- 1. Once the preferred power supply is connected, locate the **ONIOFF** Power Switch located on the rear top right of the dimmer. Turn the switch to the **ON** position.
- 2. The DMX Dimmer screen will display the Westcott logo and current firmware version before displaying the dimmer user interface (UI) for controlling the attached Flex mat.
- Once the main menu is visible on the screen, use the ▲ (Up) and ▼ (Down) buttons on the d-pad to scroll through all menu options (additional menu options might be located off-screen). Menu options may vary depending on the type of connected Flex mat and firmware version. Note: The dimmer will restart to the screen last used
- Once the desired menu option has the ">" symbol located next to it on the dimmer screen, press the center **OK** button on the d-pad to confirm the menu selection, which will move to the next screen.
- 5. Repeat Step 4 until the desired control screen is displayed.
- 6. At any time, return to previous dimmer control screen by holding the **OK** button on the d-pad for 2 seconds.

#### **On/Off Switch**

Use this switch to power the dimmer on and off. When using the Flex Cine Wireless DMX Dimmer AC Adapter, switching the dimmer to the OFF position will not turn off the AC adapter.

#### D-Pad Controls: Menu Screen

- The  $\blacktriangle$  (Up) and  $\checkmark$  (Down) buttons move the ">" symbol to the desired menu selection.
- The ► (Right) and ◄ (Left) buttons currently do not change the menu screen selections.
- The center OK button has 2 functions. Quick pressing the OK button confirms the selection. Holding the OK button for 2 seconds goes to the previous screen.

#### D-Pad Controls: Mat Control Screen

- The  $\blacktriangle$  (Up) and  $\checkmark$  (Down) buttons move the ">" symbol to the attribute to change.
- The ► (Right) and < (Left) buttons can be used to adjust the color temperature and/or intensity (where applicable).
- The center OK button has 2 functions. Quick pressing the OK button confirms the selection. Holding the OK button for 2 seconds goes to the previous screen.

• **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds, or until the screen reads Preset (Saved), to save the output settings.

## Main Menu Screen

#### **Selectable Menu Options**

- DMX(001)(Local)
- Mode
- Config
- Stored Preset

#### Main Menu Options Details

- DMX(001)(Local)
  - Manual DMX Channel Selection [See <u>DMX Operation: Addressing and Operation</u> for Setup & Operation Detail]
  - Range: 001-512
  - Factory Default: DMX(001)(Local)
- Mode
  - Mat Control Modes [See <u>Mode Menu Screen | Mat Selection</u> for Operation Detail]
  - Factory Default:
    - Source Presets
    - Gels
    - RGWB+I (5Ch)
    - Bi-Color (2Ch)
    - Daylight (1Ch)
- Config
  - Wireless(Off) [See <u>WiFi Host/Client Operation</u> for Operation Detail]
  - Screen Brightness
    - 1-15 (Brightest)
    - Press  $\blacktriangle$  (Up) and  $\blacktriangledown$  (Down) to adjust brightness
    - Factory Default: 15
  - DMX Display
    - DMX Display(d): 0-255
    - DMX Display(%): 0-100
    - Factory Default: DMX Display(d)
  - Clear/Set Defaults
    - Press **OK** to clear settings and return to factory default settings
- Stored Preset
  - Location of saved user defined presets
  - Factory Default: No Presets

Note: Menu items, order, and functionality may change with future firmware updates.

# Mode Menu Screen | Mat Selection

#### **Abbreviation Key**

CCT - Correlated Color Temperature	I - Intensity
Ch - Channel	K - Kelvin
B - Blue	R - Red
D - Daylight	T - Tungsten
G - Green	W - White

#### Selectable Menu Options

- Source Presets
- Gels
- RGWB+I (5Ch)
- Bi-Color (2Ch)
- Daylight (1Ch)

#### Mode Menu Options Details

- Source Presets
  - Display
    - Non-selectable information located on the screen:
      - Mode Selection: Source Presets
      - Color Temperature
      - Remaining Battery Status (estimated)
    - Adjustable Tuning Indicator for Intensity
      - INT: 0-255
  - Menu & Mat Controls
    - ▲ (Up) and ▼ (Down) Arrows scroll thru Source Presets colors
    - (Right) and (Left) Arrows control intensity (0-255)
    - **PRESS** and **HOLD** the **▼** (Down) arrow for 3 seconds to adjust the preset settings.

- **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a custom preset.
- Gels
  - Lee Technicals
    - Display
      - Non-selectable information located on the screen:
        - Mode Selection: Lee Technicals
        - Gel Code#
        - Gel Name
        - Remaining Battery Status (estimated)
      - Adjustable Tuning Indicator for Intensity
        - INT: 0-255
    - Menu & Mat Controls
      - ▲ (Up) and ▼ (Down) Arrows scroll thru Lee Technicals
      - • (Right) and < (Left) Arrows control intensity (0-255)
      - **PRESS** and **HOLD** the ▼ (Down) arrow for 3 seconds to enter the RGBW screen to adjust the gel settings.
      - **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a Stored Preset.
  - Lee Colors
    - Display
      - Non-selectable information located on the screen:
        - Mode Selection: Lee Colors
        - Gel Code#
        - Gel Name
        - Remaining Battery Status (estimated)
      - Adjustable Tuning Indicator for Intensity
        - INT: 0-255
    - Menu & Mat Controls
      - $\blacktriangle$  (Up) and  $\blacktriangledown$  (Down) Arrows scroll thru Lee Colors
      - • (Right) and < (Left) Arrows control intensity (0-255)
      - PRESS and HOLD the ▼ (Down) arrow for 3 seconds to adjust the gel settings.
      - **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a custom preset.
- RGWB+I (5Ch)
  - Display
    - Non-selectable information located on the screen:
      - Mode Selection: RGWB+I
      - Dimmer DMX Channel
      - Flex Mat Size

- Flex Mat Type
- Remaining Battery Status (estimated)
- Adjustable Tuning Indicators for Color & Intensity
  - R: 0-255
  - G: 0-255
  - B: 0-255
  - W: 0-255
  - I: 0-255
- Menu & Mat Controls
  - ▲ (Up) and ▼ (Down) Arrows to select **R**, **G**, **B**, **W**, and **I**.
  - ► (Right) and ◄ (Left) Arrows control color mixing and intensity
  - **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a custom preset.
- Bi-Color (2Ch)
  - Display
    - Non-selectable information located on the screen:
      - Mode Selection: Bi-Color (I+CCT)
      - Dimmer DMX Channel
      - Flex Mat Size
      - Flex Mat Type
      - Remaining Battery Status (estimated)
    - Adjustable Tuning Indicators for Color & Intensity
      - I: 0-255
      - K: 0-255
    - Visual CCT Output Indicator: 2800°-6000°
  - Menu & Mat Controls
    - ▲ (Up) and ▼ (Down) Arrows to select I or K.

    - **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a custom preset.

## • Daylight (1Ch)

- Display
  - Non-selectable information located on the screen:
    - Mode Selection: Daylight
    - Dimmer DMX Channel
    - Flex Mat Size
    - Flex Mat Type
    - Remaining Battery Status (estimated)
  - Adjustable Tuning Indicators for Intensity
    - I: 0-255
- Menu & Mat Controls

- (Right) and (Left) Arrows control intensity (0-255)
- Note: Daylight Mode does not allow users to save defined presets

Note: Menu items, order, and functionality may change with future firmware updates.

## Source Presets, Gels & User Saved Presets

The Westcott Flex Cine Wireless DMX Dimmer arrives pre-loaded with over 100 predefined gels and presets that are available when a Flex Cine RGBW mat is connected to the DMX Dimmer. Accessing, tuning, adjusting and saving these presets is simple and easy.

#### Source Presets

The Wireless DMX Dimmer has been preloaded with 10 source presets\* for use when a compatible Flex Cine RGBW mat is attached. This mode is used to match environmental or non-Westcott light sources to a designated Kelvin Temperature. These are based upon the most common types of light sources utilized in architecture, industry and photo/film. These sources are as follows:

#### Accessing & Adjusting

- 1. From the main menu select the Mode menu option by pressing the center **OK** button.
- 2. Once in the Mode menu, press the ▲ (Up) and ▼ (Down) arrows to locate the *Source Presets* option and press **OK**.
- 3. Press the  $\blacktriangle$  (Up) and  $\blacktriangledown$  (Down) Arrows to locate the desired preset.
- 4. Once the desired preset is displayed on the screen use the ► (Right) and < (Left) Arrows to control the intensity.
- 5. To adjust the preset, **PRESS** and **HOLD** the ▼ (Down) arrow for 3 seconds to adjust the preset settings.
- 6. Once the preset is fine-tuned, **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds, or until the screen reads *Preset (Saved)*, to save the desired settings as a custom preset.
- 7. Return to previous menu screens by holding down the OK button.

\*Note: The *Source Presets* menu option is ONLY selectable when a compatible Flex Cine RGBW mat is connected to the DMX Dimmer. If a Flex Cine RGBW mat is attached and the option is not selectable, press the dimmer POWER SWITCH to the **OFF** position. Power the dimmer back on by pressing the POWER SWITCH to the **ON** position.

#### Source Presets Explained

- **2800K** Common household fixtures utilize tungsten bulbs operate at 2800K. Household fixtures include lamps, floodlights, accent lights, outdoor lights, and holiday lights.
- **3200K** Common color temperature used for photo and film light sources.
- **4700K** Very close to a warm fluorescent fixture and used when the green spectrum is not available in other fixtures besides the RGBW.
- **5600K** Commonly referred to as "daylight balanced" in the Kelvin Temperature scale.
- **6200K** Various HDMI and other light sources produce this color temperature which is slightly cooler white than the standard 5600K fixture.
- **Cool White Fluorescent** Most common in office buildings and household lighting. Manufacturer's exact colors may vary, so this is an average that has become an industry standard.
- Metal Halide Commonly used in showrooms, factories, and large arenas as a lower cost to tungsten.
- **Mercury Vapor** Commonly used for similar applications to Metal Halide, but Mercury Vapor is also found in street lamps and factories.
- Sodium Vapor A very orange/red light commonly used in factories, warehouses and streetlights.

Note: Menu items, order, and functionality may change with future firmware updates.

#### Gel Presets

The Wireless DMX Dimmer has been preloaded with over 100 presets\* for use when a compatible Flex Cine RGBW mat is attached.

#### Accessing & Adjusting

- 1. From the main menu select the Mode menu option by pressing the center **OK** button.
- Once in the Mode menu, press the ▲ (Up) and ▼ (Down) arrows to locate the Gels option and press OK and the next menu screen will display two selectable options; Lee Technicals and Lee Colors.
- 3. Once the desired preset option, Lee Technicals or Lee Colors, has been selected you will be able to scroll through color gel presets by using the ▲ (Up) and ▼ (Down) Arrows.
- 4. Use the ► (Right) and ◄ (Left) Arrows to control the intensity.
- 5. **PRESS** and **HOLD** the ▼ (Down) arrow for 3 seconds to adjust the current gel settings.
- 6. **PRESS** and **HOLD** the ▲ (Up) arrow for 3 seconds to save the desired settings as a custom preset.
- 7. Return to previous menu screens by holding down the **OK** button.

\*Note: The *Gels* menu option is ONLY selectable when a compatible Flex Cine RGBW mat is connected to the DMX Dimmer. If a Flex Cine RGBW mat is attached and the option is not selectable, press the dimmer POWER SWITCH to the **OFF** position. Power the dimmer back on by pressing the POWER SWITCH to the **ON** position.

Note: Menu items, order, and functionality may change with future firmware updates.

#### User Defined Stored Presets

The Wireless DMX Dimmer allows users to save fine-tuned settings as *Stored Presets* for future use.

#### Accessing & Adjusting

- 1. From the Main Menu select the Stored Preset option by pressing the center **OK** button.
- 2. Locate the desired preset by pressing the  $\blacktriangle$  (Up) and  $\blacktriangledown$  (Down) Arrows.
- 3. Control the intensity of the preset by pressing the ► (Right) and < (Left) Arrows.
- 4. Rename the preset by (15 char. limit):
  - a. Hold down the  $\mathbf{\nabla}$  (Down) Arrow to enter the renaming screen.
  - b. Press the  $\blacktriangle$  (Up) and  $\blacktriangledown$  (Down) Arrows to select the desired character.
  - c. Press the  $\blacktriangleright$  (Right) and  $\triangleleft$  (Left) Arrows to the desired position in the name.
  - d. To save the name, quick press the OK button to save the defined name
  - e. To cancel the renaming process, **PRESS** and **HOLD** the OK button to return to the preset screen.
- To delete a user-defined preset, scroll to the preset that you would like to delete, PRESS and HOLD the ▲ (Up) Arrow and the preset will be deleted from the list.

Note: The *Stored Preset* option is ONLY selectable when a compatible Flex Cine RGBW or Bi-Color mat is connected to the DMX Dimmer. If a Flex Cine RGBW or Bi-Color mat is attached and the option is not selectable, press the dimmer POWER SWITCH to the **OFF** position. Power the dimmer back on by pressing the POWER SWITCH to the **ON** position.

Note: Menu items, order, and functionality may change with future firmware updates.

# DMX Operation: Addressing and Operation

#### **Flex Mat Channel Requirements**

- Daylight Mode 1 channel
- Gel Mode 1 channel
- Source Presets 1 channel
- Bi-Color Mode 2 channels
- RGBW+I Mode 5 channels

#### Important DMX Addressing Information

- If more than one Flex Mat is set to the same DMX address, all Flex Mats addressed will function in unison from the same signal. Individual light control is not possible.
- Individual Flex mat control can be achieved by assigning each mat to the appropriate number of address values before adding the next mat.
- Hardline DMX controls will always take precedence over any other dimming control.

#### **DMX (Hardwired) Connection**

- 1. Locate the ONIOFF Power Switch located on the rear of the Cine DMX Dimmer. Turn the switch to the ON position.
- 2. From the Main Menu, select DMX(001)(Local).
- 3. Set Correct DMX Channel from 001-512 (DMX Address default is 001)
- 4. ▲ (Up) and ▼ (Down) Arrows Change the Numbers (0-5, 0-9, 0-9)
- 5. ► (Right) and ◄ (Left) Arrows Control the Position
- Connect the DMX512 5-pin cable into the DMX IN connector located on the side of the Cine DMX Dimmer.
- 7. Utilize a DMX Control Board (sold separately) to control the Cine DMX Dimmer.

#### **DMX over ArtNET Connection**

- 1. Ensure that the WiFi Antenna, which can be located on the back of the dimmer, has been raised to the ready position.
- 2. Once the preferred power supply is connected, locate the ONIOFF Power Switch located on the rear top right of the DMX Dimmer. Turn the switch to the ON position.

- 3. The DMX Dimmer screen will display the Westcott logo and current firmware version before displaying the dimmer user interface (UI) for controlling the attached Flex mat.
- 4. From the Main Menu, select DMX(001)(Local).
- 5. Set Correct DMX Channel from 001-512 (DMX Address default is 001)
- 6. ▲ (Up) and ▼ (Down) Arrows Change the Numbers (0-5, 0-9, 0-9)
- 7. ► (Right) and ◄ (Left) Arrows Control the Position
- 8. Locate the WiFi Selector on side of DMX Dimmer.
- 9. Slide the WiFi Selector into HOST mode
- 10. **PRESS** and **HOLD** the white **WIFI LINK** button on the side of the dimmer for 3 seconds and release
- 11. The WiFi HOST indicator LED on the front of the DMX Dimmer will illuminate [green]
- 12. Power cycle the dimmer by turning the unit OFF and ON.
- 13. Locate the WiFi settings on your mobile device.
- 14. Look for the name of your Wireless DMX Dimmer in the list of available networks, select the dimmer's WiFi network and input the password.
  - NOTE: A new dimmer will be named "Westcott Dimmer" and the password is "flexpanel."
  - NOTE: The dimmer name could take up to 1 minute to be visible in the Network Settings. Should the dimmer not appear, press the white WiFi LINK button for an additional 3 seconds.
- 15. Once connected, open the DMX over ArtNet control application (i.e. Luminair for iOS) on your mobile device.
  - Note: Instructions on how the setup and control DMX Fixtures via mobile apps (i.e. Luminair) can be located on the developer's website.
- 16. Once the dimmer has been set up in the app, the DMX indicator light on the dimmer will illuminate (green) once the app has established a connection to the dimmer and receiving data.

Note: The Cine Wireless DMX Dimmer could take up to 1 minute to be visible in the list of selectable WiFi Networks.

Note: WiFi & DMX over ArtNet for the Flex Cine Dimmer have been tested on various iOS and Android devices. Older devices and operating systems may have connectivity issues.

#### Example DMX Addressing Scenario:

When connecting two RGBW Flex Cine mats, one Daylight mat, and one Bi-Color mat, the following addresses would be entered into the controller, which would be controlling each Flex mat's DMX Dimmer set to the corresponding DMX channel. (*Please note that the starting channel, nor order, matter. For this example, we will start the first mat on DMX channel 001.*)

- RGBW (Mat #1) DMX:001
  - Channel 1: Red
  - Channel 2: Green
  - Channel 3: Blue
  - Channel 4: White
  - Channel 5: Intensity
- RGBW (Mat #2) DMX:006
  - Channel 6: Red
  - Channel 7: Green
  - Channel 8: Blue
  - Channel 9: White
  - Channel 10: Intensity
- Daylight (Mat #3) DMX:011
  - Channel 11: Intensity
- Bi-Color (Mat #4) DMX:012
  - Channel 12: CCT
  - Channel 13: Intensity

# WiFi Host/Client Operation

#### **Setup Process**

Before setting up multiple HOST & CLIENT Dimmers, ensure that all dimmers are in the **OFF** position before setting up the HOST dimmer to ensure that the HOST dimmer is the only dimmer broadcasting a WiFi network. Once the HOST Dimmer has been setup, then use the CLIENT Mode instructions to connect the first CLIENT dimmer to the host. Repeat the CLIENT Mode instructions for all additional CLIENT Dimmers.

#### HOST Mode

- 1. Ensure Steps 1-4 in Basic Operation section have been completed.
- 2. Locate the **WiFi Selector** on side of DMX Dimmer.
- 3. Slide the WiFi Selector into HOST mode
- 4. **PRESS** and **HOLD** the white **WIFI LINK** button on the side of the dimmer until the **WiFi HOST** indicator on the front of the DMX Dimmer illuminates [green].
- 5. Power cycle the dimmer by turning the unit **OFF**, wait 3 seconds and turn the unit to the **ON** position.
- 6. Connect the Dimmer to WIFI enabled device (SEE: "DMX over ArtNET Connection" section)
- 7. Open the preferred DMX over ArtNet control application on the WiFi-enabled device
- 8. Ensure the HOST dimmer has been set up as a DMX fixture within the control app on WiFi enabled device
- 9. When the dimmer is connected and receiving a DMX signal from WiFi device the DMX indicator LED will illuminate (green)
- 10. The dimmer is now a HOST unit and will broadcast the DMX signals it receives from WiFi device

#### **CLIENT Mode**

- With the 2nd dimmer's power switch in the OFF position, ensure that the HOST dimmer's WiFi network [Default WiFi Network Name: Westcott Dimmer] is visible in the mobile device's list of available networks.
- 2. Press the 2nd dimmer's power switch to the **ON** position
- 3. Move the WiFi Selector on side of the dimmer to CLIENT mode
- 4. **PRESS** and **HOLD** the white **WIFI LINK** button on the side of the dimmer until the **WiFi CLIENT** indicator on the front of the DMX Dimmer illuminates [green].
- 5. Power cycle the dimmer by turning the unit **OFF**, wait 3 seconds and turn the unit to the **ON** position.

- This 2nd dimmer is now searching for HOST units within its WiFi range with identical WiFi settings (See: "<u>WiFi Settings</u>" section)
- 7. Ensure the CLIENT dimmer has been set up and addressed as a DMX fixture within the app on the WiFi device
- 8. When the CLIENT dimmer is connected and receiving a DMX signal from the HOST dimmer the DMX indicator LED will illuminate (green)
- 9. Both dimmers can now be controlled from the control app

NOTE: Should you experience issues while setting up the HOST Dimmer, then ensure all additional dimmers are in the **OFF** position, confirm the HOST Dimmer's WiFi selector switch is in the **HOST** position, press the white **WiFi Link** button for 3 seconds until the dimmer's **WiFi HOST** indicator light is green, and power cycle the dimmer **OFF** & **ON**. The HOST Dimmer's WiFi network should be visible in the mobile device's network list which could take up to one minute to become visible.

## WiFi Settings

#### Step-by-Step

- 1. Ensure Steps 1-4 in Basic Operation section have been completed.
- 2. Move the **WiFi Selector** to the **HOST** position.
- 3. **PRESS** and **HOLD** the white **WIFI LINK** button on the side of the dimmer until the **WiFi HOST** indicator on the front of the DMX Dimmer illuminates [green].
- 4. Power cycle the dimmer by turning the unit **OFF**, wait 3 seconds and turn the unit to the **ON** position.
- 5. Locate the WiFi settings on your mobile device or a computer (See *Image01: WiFi Networks*).
- 6. Look for the name of your Cine DMX Dimmer in the list of available networks, select the dimmer's WiFi network and input the password.
  - a. NOTE: The dimmer's name could take up to 1 minute to be visible in the list of available networks. If it doesn't appear press the white **WiFi LINK** button again.
  - b. NOTE: A new dimmer will be named "Westcott Dimmer" and the password is "flexpanel."
- 7. Open WiFi enabled device's web browser and enter 10.10.100.254 in the address bar.
- 8. When prompted, enter the following:
  - a. Username = admin
  - b. Password = admin
- 9. Select English language (if necessary)
- Select Mode Selection from the links listed on the left of the web page and ensure the following settings (See <u>Image02: Mode Selection</u>):
  - a. AP Mode: Access Point (radio button is marked)
  - b. Data Transfer Mode: Transparent Mode
- Next, select AP Interface Setting from the list of links on the left and ensure the following settings are selected (See <u>Image03: AP Interface Setting</u>):
  - a. Wireless Network
    - i. Network Mode: 11b/g/n mixed mode
    - ii. Network Name(SSID): Westcott Dimmer (*Update "Network Name (SSID)" to change the dimmer name*)
    - iii. BSSID: [Prefilled by WiFi module]
    - iv. Frequency (Channel): AutoSelect
    - v. Wireless Distribution System(WDS): WDS Configuration
      - 1. WDS Mode: Disable
  - b. Westcott Dimmer
    - i. Security Mode: WPA2-PSK
  - c. WPA
    - i. WPA Algorithm: AES (radio button selected)
    - ii. Pass Phrase: flexpanel (Update "Pass Phrase" to change password)

- d. LAN Setup
  - i. IP Address(Default DHCP Gateway): 10.10.100.254
  - ii. Subnet Mask: 255.255.255.0
  - iii. DHCP Type: Server
- 12. Next, select **STA Interface Setting** from the list of links on the left and ensure the following settings are selected (See *Image04: STA Interface Setting*):
  - a. STA Interface Parameters
    - i. AP's SSID: Westcott Dimmer
    - ii. MAC Address (Optional): [leave blank]
    - iii. Security Mode: WPA2PSK
    - iv. Encryption Type: AES
    - v. Pass Phrase: flexpanel
  - b. DHCP Mode
    - i. Hostname(Optional): HF-A21
- 13. Next, select **Application Setting** from the list of links on the left and ensure the following settings are selected(*See <u>Image05</u>: Application Setting*):
  - a. Uart Setting
    - i. Baudrate: 230400
    - ii. Data Bits: 8
    - iii. Parity: None
    - iv. Stop: 1
    - v. CTSRTS: Disable
  - b. UART AutoFrame Setting
    - i. UART AutoFrame: Disable
  - c. Network Setting
    - i. Mode: Server
    - ii. Protocol: UDP
    - iii. Port: 6454
    - iv. Server Address: 10.10.100.255
    - v. MAX TCP Num. (1~32): 32
- 14. Finally, select **Device Management** link from the list on the left and ensure the following settings are selected (See *Image06: Device Management*):
  - a. Administrator Settings
    - i. Account: admin
    - ii. Password: admin
  - b. Restart Module
    - i. Restart
- 15. Select **Restart Module** (See <u>Image07: Restart Module</u>. Any changes that have been selected in previous sections require that the WiFi module be restarted.)
- 16. The unit will restart and new settings are now applied. (See Image08: Rebooting)

NOTE: Any changes to the WiFi module sections within these sections require the user to hit the "Apply" button to confirm the changes (See <u>Image09: Apply</u>).

NOTE: Depending on the browser, the browser may state that the dimmer WiFi is "Rebooting." The web interface may NOT inform you the rebooting process is complete. The reboot process will be completed after 10 seconds and the browser can be closed.

NOTE: You can confirm that any changes were successful by accessing the WiFi module via the 10.10.100.254 web address (For example: if the name of the dimmer was changed you can look for the dimmer's new name in the list of available networks.)

NOTE: The process of the WiFi-enabled device to locate the dimmer's network could take up to 2 minutes. If the dimmer name isn't listed in the list of available networks after 2 minutes, then power cycle the unit and allow the dimmer time for the WiFi-enabled device to list the dimmer in the available networks.

NOTE: In order to allow any of your multiple Westcott Units to function as a CLIENT or HOST unit, please keep the "AP interface Settings" and "STA interface Settings" identical.

#### WiFi Setup Images

Image01: WiFi Networks

	Wi-Fi
Settings	
Q Search	Wi-Fi
	✓ Westcott Dimmer
Apple ID, iCloud, iTunes & App St	PERSONAL HOTSPOTS
Airplane Mode	CHOOSE A NETWORK
S Wi-Fi Westcott Dimmer	ASUS_2G
Bluetooth On	ASUS_5G
VPN VPN	Other
<b>D</b> Notifications	
Sounds	Ask to Join Networks
C Do Not Disturb	networks are available, you will have to manually select a network.
Screen Time	
General	
Control Center	
AA Display & Brightness	
🛞 Wallpaper	
Siri & Search	
Touch ID & Passcode	

#### Image02: Mode Selection

				10.10.100.2	54	Ċ	Û	+	
<ul> <li>Mo</li> <li>▲ AP</li> <li>♥ ST.</li> <li>♥ Ap</li> <li>♥ Dev</li> </ul>	de Selection Interface Sel A Interface Sel Dication Sett rice Manager	ting etting ing nent	Workin You may configur O AP Mode: Correction Mode: Station Mod Data Transfor Mo	10.10.100.24	54 iguration le wifi mode and data t pply Cancel	¢ transfor mode.	( <sup>#</sup> x)	+ English	

#### Image03: AP Interface Setting

<	> 🕮		10.10.100	).254		Ç	Ê	+	<u> </u>
						(ª	<b>文</b> 中	English	
	Mode Selection		AP Interface Settin	g					
	AP Interface Sett STA Interface Set	ting -	AP Interface Setting such as SSID,	Security					
	Application Setti	ing	Wireless Network Network Mode	11b/g/n r	nixed mode				
	Device Managem	nent	Network Name(SSID) BSSID	Westcott F0:FE:6B	Dimmer I :BE:73:38	Hidden			
			Frequency (Channel) Wireless Distribution System(	AutoSele WDS) (WDS C	onfiguration	-			
		l		(Apply)	Cancel				
			Westcott Dimmer Security Mode	WPA2-PSK					
			WPA WPA Algorithms		AES OTKIPAE	s			
		l	Pass Phrase	flexpanel	Cancel				
		Ĩ	LAN Setup						
			IP Address(Default DHCP Gat Subnet Mask	eway) 10.10.10	255.0				
			<b>DHCP Туре</b>	Server					
				(Apply)	Cancel				

28

#### Image04: STA Interface Setting

			G	
	6		<u>(</u> #	
Mode Selection	STA Interface Settin	ng		
AP Interface Setting	You could configure STA interface	parameters here.		
STA Interface Setting	STA Interface Parameters			
Application Setting	AP's SSID	Westcott Dimmer	Search	
Device Management	MAC Address (Optional)			
	Security Mode	WPA2PSK		
	Encryption Type	AES		
	Pass Phrase	flexpanel		
		Apply Cancel		
	WAN Connection Ty	pe:	DHCP(Auto config)	
	DHCP Mode			
	Hostname(Optional)	(Apply) (Cancel	]	

#### Image05: Application Setting

				Langion
Mode Selection	Wifi-Uart Setting			
<u>AP Interface Setting</u>	You could configure the Uart of	aramaters and network narameters of	of the wifi-wart application	
STA Interface Setting	Hart Sotting	anameters and network parameters of	n the win-tart application	
Application Setting	Baudrate	230400		
Device Management	Data Bits	8		
	Parity	None		
	Stop			
	CTSRTS	Disable		
		Apply Cancel		
	UART AutoFrame Setting			
	UART AutoFrame	Disable		
		Apply Cancel		
	Network Setting			
	Mode	Server		
	Protocol	UDP		
	Port	6454		
	Server Address	10.10.100.255		
	MAX TCP Num. (1~32)	32		
		(Apply) (Cancel)		

#### Image06: Device Management

<	>	$\square$		10.10.10	00.254	C	Û	+	
						C	<u>+</u> 2	English	
	<ul> <li>➡ Mo</li> <li>➡ AP</li> <li>➡ STA</li> <li>➡ App</li> <li>➡ Dev</li> </ul>	de Selection Interface Se A Interface S plication Set vice Manage	etting Setting ting ment	Device Managerr 5.02T.04 You may configure administrat Administrator Settings Account	or account and password, load	d default setting or up	date firware.		
				Password Restart Module Restart Module	admin       (Apply)     Cancel       Restart	)			
				Load Factory Defaults Load Default Button Update Firmware Location: (Apply)	Choose File no fil	le selected			

#### Image07: Restart Module

<				10.10.	100.254	¢	Û	+	
						C	中文	English	
	<b>ф</b> <u>Мо</u>	de Selection		Device Manage	ment				
	➡ <u>AP</u>	Interface Se A Interface S	tting Setting	5.02T.04					
	📦 <u>Apr</u>	olication Set	ting	You may configure administr	ator account and password, loa	ad default setting or up	late firware.		
	Dev Dev	rice Manage	<u>ment</u>	Account Password	admin	)		_	
					Apply Cancel	)			
				Restart Module	Bestart				
				Load Factory Defaults					
				Load Default Button	Load Default				
				Update Firmware	Choose File no	file selected			
				Apply					

#### Image08: Rebooting

<					10	.10.10	0.254	ļ		Ċ		Û	+	
	,													
				Rebooting							(中文	)	English	)
	➡ <u>Мо</u> ➡ <u>АР</u>	de Selection Interface Se	tting											
	⇒ <u>ST.</u>	A Interface S	Setting											
		vice Manage	ment											

### Image09: Apply

				10.10.7	100.254		Ċ	Û	+	
							(	<u>中文</u>	English	
<ul> <li>Mc</li> <li>AP</li> <li>ST.</li> <li>Ap</li> <li>De</li> </ul>	ide Selection Interface Se A Interface S plication Set vice Manage	tting etting iing ment	Work You may cond Access STA Mode Station Data Transfor	figure the Uart-W Point e: Mode Mode Transpa	TIFI module wifi m	Cancel	asfor mode.			

# **TE-9 Pin Connector Diagram**

The Flex Cine Mat TE-9 Pin Connector diagram below is for owners who need to replace a damaged mat connector on set.

Note: This diagram is for replacing the mat connector ONLY.

**Important**: Replacing a Flex Cine Mat connector should only be completed by an experienced professional. Failure to use a pin extractor tool and/or re-assembling incorrectly will damage the Flex Cine Mat and void the Limited Lifetime Warranty.

- PIN 1 GREEN
- PIN 2 YELLOW
- PIN 3 ORANGE
- PIN 4 BLACK
- PIN 5 BROWN
- PIN 6 WHITE
- PIN 7 RED
- PIN 8 BLUE
- PIN 9 BLACK + WHITE



**9pin Layout** 

# V-Mount Plate Pin Data

**Important**: Do not replace or alter the V-mount plate on the dimmer as it's been specially designed to accept 14.4V-26V V-mount batteries.

- 14.4V-14.8V V-mount batteries use Pin 1 for Positive DC Voltage and Pin 5 for Negative DC Voltage
- 26V V-mount batteries use Pin 1 for Positive DC Voltage and Pin 3 for Negative DC Voltage
- The Westcott Dimmer V mount Plate links Pin 3 and Pin 5 which allows the usage of either voltage battery

# V-Mount Plate D-Tap Port

The D-Tap port on the DMX Dimmer's V-mount plate **DOES NOT** allow output voltage from the dimmer in order to eliminate potential damage due to incorrect voltage usage. However, it can be used as a power source input should a user have a D-Tap power supply or non-V-mount battery that they would like to use to power the dimmer.

Note: A separate D-tap to D-tap cable would be required for this power supply option.

## Warranty Information

Westcott's warranty obligations for this product are limited to the following terms.

The F.J. Westcott Co. ("Westcott") warrants this Westcott branded product against defects in materials and workmanship under normal use for a period of ONE (1) YEAR from the date of retail purchase from Westcott or an authorized retailer by the original end-user purchaser ("Warranty Period"). If a defect arises and a valid claim is received within the Warranty Period, at its option and to the extent permitted by law, Westcott will either (1) repair the defect at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. This Limited Warranty applies only to products manufactured by or for Westcott that can be identified by the Westcott trademark, trade name, or logo affixed to them.

This warranty does not apply to: (a) damage caused by accident, abuse, misuse, flood, fire, earthquake, mold, or other external causes; (b) damage caused by operating the product outside the permitted or intended uses described by Westcott; (c) a product or part that has been modified to alter functionality or capability without the written permission of Westcott; or (d) cosmetic damage, including but not limited to scratches, dents, and broken plastic.

Disclaimer: By purchasing, borrowing and/or using this product for any event, both public or private, you, the customer, accepts all responsibility and releases Westcott, and its associates, of any and all liability in the event of manufacturer's defect, malfunction or misuse of the product which may lead to further injuries or complications unforeseen by the user. Westcott is not responsible for any potential or incurred damage caused by failure to properly mount, hang, or store the product, which includes, but is not limited to damage to cameras, electronics, electrical equipment, buildings, building materials, personal injury, death, or disability, fire damage, or any and all other damage not mentioned previously.

Please contact Westcott's Repair Department for a Return Authorization Number "RMA" prior to requesting warranty service. This RMA must be clearly written on the outside of the box to the left of the shipping label. Items sent in without pre-authorization or that do not fall under the limited warranty will be returned at the expense of the sender.

Repair Department: 800-886-1689 / 419-243-7311 (International)Email: service@fjwestcott.comShipping: F.J. Westcott Co, 1425-B Holland Rd. Maumee, OH 43537

# Legal Information

Westcott products are made to the company's traditionally high standards of quality and comply with all applicable government safety regulations and requirements. In an effort to provide the best quality products possible, we periodically make product modifications. Actual products may not be identical to items pictured.

Made in the USA.

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