



[www.fusiontlc.com](http://www.fusiontlc.com)

A Smart Team LLC Project  
935 Falls Rd, Shelburne VT, 05482  
Copyright © 2021 FUSION TLC



# RAVEN


## Quick Setup Guide





## Menu

• Welcome to Fusion TLC .....	1
• Features, Warranty and Support .....	2
• Physical Orientation .....	3
• Getting Started .....	4
◦ Turning Raven On .....	4
◦ Turning Raven Off and Setting Raven Lock Screen .....	4
◦ Mounting Raven On The Camera .....	4
◦ Charging Raven Battery .....	5
◦ WiFi Setup For Firmware Updates .....	6
◦ Updating the Raven Firmware .....	7
• Navigating Interface .....	9
◦ Zone Control Display .....	9
◦ Zone Mode Screen .....	11
◦ Quick Settings Screen .....	13
• Connecting Flash .....	15
◦ Prepare Raven .....	15
◦ Prepare Flash .....	15
◦ Test Connection .....	16
• Warning Information .....	17
• Follow Us .....	19



## Welcome to Fusion TLC

Hello!

We're delighted to invite you to our community of avid photographers and creators. With the need to advance photography equipment and make better tools to give you the ultimate creative experience, Fusion TLC is the revolution in total light control.

We are committed to bringing you a premium user experience through modern equipment that is smart, intuitive and flexible. With easy upgrades through cloud software updates increasing the product life expectancy, designing more greener products, and creating the first trigger with LED focus assist lighting, we are here to disrupt the market.

The Raven will transform your photoshoots with seamless cross compatibility between devices and effortless adjustments, liberating you to create beautiful images faster.

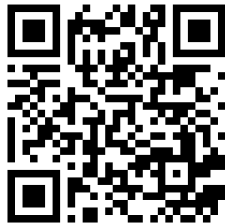
Enjoy your new Raven!

Jim Clark and Jason Lin  
Founders at Fusion TLC

## Features, Warranty and Support

Here are some of the features that come with your Raven. For more details on these features, scan the QR code and navigate to "Explore Raven" in the main menu.

- Dual brand connectivity and control
- TTL, Manual & PowerTrack
- SyncView & HSS
- Remote camera triggering
- MultiPop & SpeedCycle
- OLED touchscreen & lithium-ion battery
- Nose light
- RF noise indicator
- Intervalometer
- WIFI firmware updates



The Raven comes with a limited, one year manufacturers, warranty for parts and labor that is automatically activated from the date of unit purchase. If you have any questions, contact us at [support@fusiontlc.com](mailto:support@fusiontlc.com) and we'll help you find a solution.

## Physical Orientation




## Getting Started

### Turning Raven on

Press and hold the Back/Home button for 1 second. The FusionTLC icon and logo will appear while the Raven boots up. The Raven will then launch the Zone Control Display. To navigate the menu, use the touchscreen to scroll up or down to select features. Pressing the Back/Home button will return you to the previous menu.

### Turning Raven off and setting Raven lock screen

Press and hold the Back/Home button for 3 seconds. A window will appear. With your finger, slide the power icon right to "OFF" to turn the Raven off or slide to the left to  to lock the Raven screen.

### Mounting Raven on the camera

Confirm that the make of the camera and model of Raven are identical (e.g. Nikon camera and Nikon-Raven). The make of the Raven is described on the label on the underside of the Raven. Press and hold the Shoe Release buttons on both sides of the Raven and then slide the Raven onto the hot shoe mount of the camera. Do not force the Raven onto the hot shoe mount or you risk breaking the locking pin.



## Getting Started

### Charging Raven battery

The Raven has a built-in 2500 mAh rechargeable lithium-ion battery that delivers up to 16 hours of continuous use (users may experience up to 30 hours of use depending on environmental conditions). The Raven can charge from 0% to 100% in approximately 3 hours when using the supplied USB 2.0 type A to Micro B cable and using at least **1 amp minimum USB charger/phone charger**. It can also be charged while in use for extremely long photoshoots.

It is not recommended to leave the Raven plugged in and charging continuously. When not in use, topping off the Raven battery once or twice a week will achieve a longer battery life.

When the Raven has 20% or less battery charge remaining, select screens will display a red tint as a warning to charge your Raven. A Raven with 24% or less battery charge remaining will not be able to perform WiFi cloud updates.

## Getting Started

### Wifi setup for firmware updates

First you will need to connect your Raven to a 2.4GHz Wifi network. Once the Wifi is connected to a network, checking for updates in the future is just one push of a button from the Quick Settings Screen.

Connecting to Wifi:

- Start by swiping from the bottom to top on the Zone Control Display.
- Then rotate the dial until you see the Settings icon and tap on it.
- Now rotate the dial until you see the Wifi icon and tap on it.
- This will begin the Wifi scanning process. Once that is complete, a list of all 2.4 GHz Wifi networks names will appear. Scroll through the list and to find your Wifi network. When your Wifi network is centered, tap on ✓.
- Here you will enter your Wifi password.
- Press the A button, or tap on A on the touch screen, to select uppercase, lowercase, number, or symbol.

## Getting Started

### Wifi setup for firmware updates cont.

- Use the dial to rotate through the characters. You can use the touch screen as well. Scroll through until the first character is centered in the display. Then press the C button to enter that character. It will move that character to the left to allow you to proceed to the next character. Do not press the C button or tap on C on the touch screen for your last character of your password.
- If you need to edit your character selections, press the D button to go back to an earlier entry to edit your selection.
- Pressing the B button will delete the character entry.
- When finished entering your Wifi password tap on ✓ to connect to your Wifi network.
- Once connected press the Back/Home button to return to the Zone Control Display

### Updating the Raven firmware

#### Cloud updating

- From the Zone Control Display swipe from the top to the bottom.
- Tap on the cloud icon and the Raven will search the cloud for available updates.

## Getting Started

### Updating the Raven firmware cont.

If there is an update available it will say "Downloading Now", or tell you if you are up to date.

- When done downloading, it will ask to "Update Now?", tap on ✓ to proceed.
- The majority of the updates will take less than the stated 8 minutes.
- During the updates you might see up to 5 progress bars. However, not every update will contain updates to every category of the Raven.
- Once completed, the Raven will return to the Zone Control Display.

\*Your Raven must have at least 25% battery to update firmware

### Raven reset

- To do this, you will need to press 3 buttons at exactly the same time for one quick press and release.
- Press and release the Test, Back/Home, and SyncView buttons.
- The reset should be very quick, about 6 seconds, to reboot to the Zone Control Display.

If the reset of the Raven does not work, and the issue still exists, please contact us.

## Navigating Interface

### Raven screen flowchart

Scan the QR code to visit the screen navigation for the Raven.



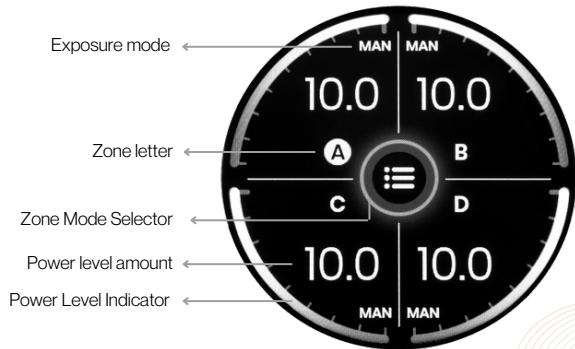
### Zone control display (main screen)

Enable a zone: A zone that is enabled will display an intensity value in its respective quadrant. If a zone is not enabled, no intensity value will be displayed. If a zone is enabled, the Raven will trigger it. To enable a zone, press and hold the Zone Button for 1 seconds OR tap and hold the zone field on the touchscreen for 1 seconds. The same process is used to disable a zone.

Select a zone: a zone that is selected will display a white circle around the zone letter. To select a zone, press the Zone Button once or tap the zone on the touchscreen. The same process is used to deselect a zone.

Edit a zone: select the zones you wish to edit. Then tap the central zone mode selector. You will then be taken to the zone mode screen.

## Navigating Interface



## Navigating Interface

### Zone mode screen

This menu is accessed by pressing the central zone edit icon in the Zone Control Display. To enable or disable a feature, simply touch the icon. If the icon is green, the feature is enabled, if it is gray, the feature is disabled. The zone edit menu contains the following options:

**PowerTrack:** Enable or disable power tracking to keep a constant exposure as you adjust settings on the camera like ISO or shutter speed.

**TTL:** enables or disables TTL mode for remote flashes

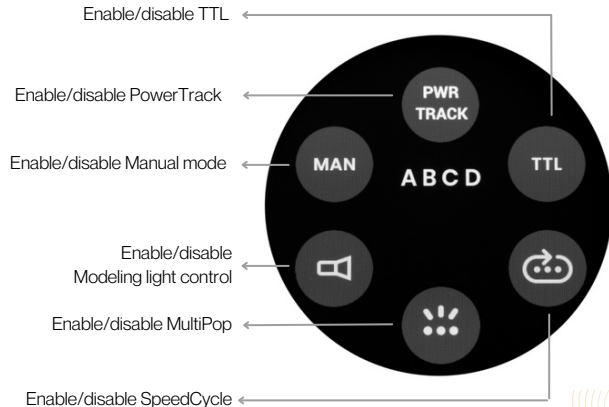
**SpeedCycle:** Triggers each zone sequentially with each shutter release starting at lowest lettered zone.

**MultiPop:** Triggers remote flashes multiple times with one exposure

**Modeling Light Control:** enables or disables modeling light control

**Manual mode:** enables or disables manual mode for remote flashes

## Navigating Interface





## Navigating Interface

### Quick settings screen

This menu is accessed by swiping from top to bottom while in the Zone Control Display (main screen). The quick settings menu contains the following options:

**Primary brand channel selection:** press this button to quickly change the channel for your primary remotes. This setting will also activate the RF noise level indicator for each channel.

**Cloud firmware update:** the Raven's firmware can be updated as needed via the cloud, when the Raven is connected to WiFi

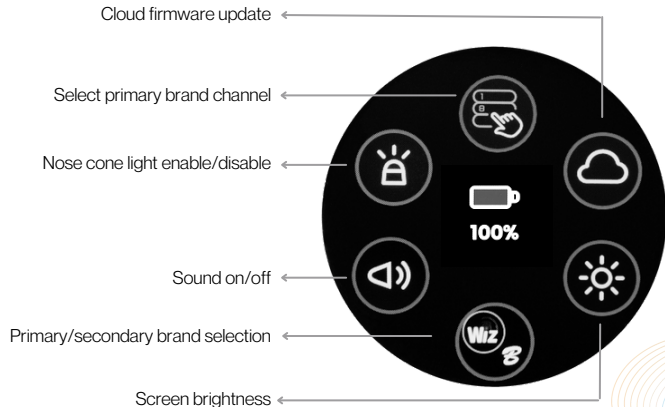
**Screen brightness:** allows you to adjust the brightness level of the Raven's screen, either manually or automatically

**Primary/secondary brand selection:** Allows you to choose 2 different remote systems for triggering.

**Sound:** enables or disables the Raven's sound indicators and sound effects

**Nose Cone Light:** enables or disables the built in LED light. Specific settings for the LED can be found in the settings carousel screen under "local light".

## Navigating Interface



## Connecting A Flash

### Prepare Raven

From the main menu, swipe down to get to the quick settings screen menu. Then tap the primary/secondary brand selection button at the bottom. Select your primary and secondary flash brand from the list of available flash brands. If you are only utilizing one flash brand, select "None" for the secondary. Swipe up to return to the zone control display screen. Select the zone(s) for which you want to utilize a flash brand. Edit these zones to correspond to the desired use (i.e. TTL, Multi-Pop, etc).

Select the channel you'd like to control the flash with in the quick settings menu by selecting the channel selector icon. All remotes must use the same channel, regardless of brand.

### Prepare Flash

Set the flash to the same channel and zone you intend to use with the Raven. If the Raven is set to Manual + Sync or Sync Only in Control Mode, then you will need to physically set the flash to either Manual or TTL mode. When using Nikon or Canon speedlights with the PocketWizard FlexTT, set the flash to TTL even if the Raven is set to Manual.

## Connecting A Flash

### Test Connection


Press the Test button on the Raven to send a test flash command to all active zones. If a flash does not fire, confirm the following:

- Flash & Raven zones are the same and in same control mode;
- Flash is powered on and able to receive control signals;
- Flash & Raven are updated to the latest firmware;
- Flash is compatible with Raven. Learn more about compatibility by scanning the QR code.



We hope you love your Raven. Feel free to contact us for any questions at [support@fusiontlc.com](mailto:support@fusiontlc.com) or scan the QR code.





**WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Mounting and cable connections detailed in this document represent the intended usage, however, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- (1) Reorient or relocate the receiving antenna.
- (2) Increase the separation between the equipment and the receiver.
- (3) Consult the dealer or an experienced radio or television technician for help.

This device complies with Part 15 of the FCC rules and also with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation. Part 15.21: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Contains FCC ID: 2AC7Z-ESPWROOM32D

Contains IC: 21098-ESPWROOM32D

FCC ID: 2AWL4-R1

IC: 26969-R1

## Follow Us



Instagram



Facebook



YouTube