

# Quick Guide PLUS® IVe

FCC/IC: 344.04 - 354.00 MHz CE: 433.62 - 434.22 MHz

Visit

# **wiki.pocketwizard.com** for complete operating

instructions.



Thank you for your purchase of this PocketWizard radio! Please read this Quick Guide thoroughly before operating.

# Congratulations and thank you for your purchase of a PocketWizard Plus IVe Transceiver!

The Plus IVe Auto-Sensing Transceiver allows you to have the benefit of on-camera TTL flash combined with remote manual flash. It delivers the best of both worlds in one easy to use, reliable wireless radio trigger system for cameras and flashes. Versatile, practical, and dependable for all types of remote photography.

## **Key Features**

#### Incredible Range and Reliability

With the new E Series technology, the Plus IVe can trigger remote cameras and flashes in the toughest situations from thousands of meters (yards) away.

#### Auto Sensing Transceiver

The Plus IVe will automatically switch between transmitting and receiving as needed with our patented auto sensing technology. Simply make connections and start working with near zero configuration time.

#### 32 E Channels and 80 LR (Long Range) Channels

Choose your own Channel so there's no interference from other shooters.

#### **Quad Zone Triggering**

Now available on all 112 Channels. Wirelessly activate or deactivate your remote flashes or cameras in 4 separately controllable Zones.

#### Remote Camera Triggering

Set up as many remote cameras as you want to catch a different angle from one single trigger. Two stage triggering gives you faster response time to catch the action.

#### Auto Relay

Trigger remote flashes in sync with your remote camera for even more creative and professional images.

#### PocketWizard Compatibility

The Plus IVe will work with all PocketWizard E Series radios and you can downgrade the firmware to work with all Legacy PocketWizards as well. (note: FCC and CE PocketWizard radios work on different frequencies-all of your radios must have the same frequency to be compatible.)

#### Camera & Flash Compatibility

The Plus IVe will work with virtually any camera or flash capable of triggering from a center pin trigger or with the appropriate sync cable and can sync a flash in manual mode, up to your camera's X-sync speed. It can provide pass-through TTL for on-camera flash for most manufacturers. A remote Plus IVe will not support TTL communication.

#### Simple User Interface

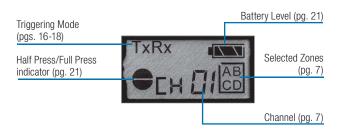
Everything is right at your fingertips with the intuitive soft touch keypad. Press any button (except test) to illuminate the LCD if you're in low light.

#### Fast and Easy Setup

On the camera, slide it into the hot shoe and tighten the locking ring. Connect the flash to your remote radio by using the secure miniphone connection. Turn on the radios, match the Channels and Zones, and you're ready to go!

# **PLUS IVe** Auto Sensing Transceiver





# **PLUS IVe** Auto Sensing Transceiver



NOTE: You need at least two PocketWizard radios: one for your camera and one for each remote flash. Batteries and cables not included. See pages 13 and 22.

#### **Keypad Lock**

Set to filled-in circle (near USB port) for normal operation. Set to open circle (near sync port) to lock settings and disable all keypad buttons except TEST.



Locked

# **Frequency**



FCC/IC: 344.04 - 354.00 MHz (<1 mW)



CE: 433.62-434.22 MHz (<1mW)



FCC/IC and CE radios are not compatible with each other.

PocketWizard.com/wheretobuy/frequency



# **PLUS IVe Transceiver Basics**

# **PocketWizard Compatibility**

PocketWizard uses two different lines of firmware to control their radios: Legacy and E Release. The firmware installed in this Plus IVe is the E Release and your radio is a member of the PocketWizard E Series family. The E Release uses a new communication protocol that enables your Plus IVe to have greater range, enhanced reliability, and more features than a Plus IV using the Legacy firmware.

This Plus IVe will work with any other PocketWizard that has been upgraded to E Release firmware operating on the same frequency. PocketWizard offers two frequencies: FCC for North and South America and CE versions for most of the rest of the world. E Series firmware will not work with Legacy firmware but the Plus IVe can be downgraded to the Legacy firmware to work with Legacy PocketWizard radios (such as the Plus II, MultiMAX, FlexTT5, etc). It can be upgraded again as often as you like at no additional cost. You may be able to upgrade your existing radios.

If you choose to downgrade your Plus IVe to Legacy firmware, some functions and settings may operate differently. Please refer to wiki.pocketwizard.com for a list of compatible radios, information on how to upgrade or downgrade your PocketWizards using the PocketWizard Utility, and how to use Legacy firmware with your Plus IVe.

### **Channels & Zones**

Your Plus IVe needs to be on the same Channel and Zone as other PocketWizard radios to work together. Channels can be set via the Plus IVe's Channel up/down buttons △▽. The Plus IVe has 4 Zones (ABCD). See "Channels & Zones" section (pg. 20) for more info.

## **PLUS IVe Transceiver Basics**

#### **Batteries**

Make sure batteries are properly installed (pg. 5). The Plus IVe will operate reliably using almost any pair of ~1.5 volt AA (IEC: LR6) batteries. Rechargeable batteries will work, though operation time may be reduced and battery level display may not be as accurate. Always turn off all equipment (PocketWizard radios, flashes, cameras, etc) before making connections or replacing batteries. Remove batteries during storage.

## Powering on/off

Slide switch from o to I to power on the unit. To power off the radio, slide the switch back to o. When turning on, the status LED will blink a red-green-red-green pattern once for E Release firmware (or a single bold green blink if unit has been downgraded to Legacy firmware) then blink every few seconds to indicate normal operation. See the Status LED section (pg. 21) for details about power levels. It will blink red when a trigger is transmitted or received.

## USB •<del><</del>

The Plus IVe's mini B USB port is located beside the power switch. It can be used with the PocketWizard Utility to install firmware updates or downgrade to Legacy firmware. It can also be used to power the unit with a compatible AC adapter or USB power source. See **wiki.pocketwizard.com** for more details.

# **Triggering a Remote Flash**

Connect everything securely

Power everything ON

Set Channel, Zone, and Mode on radio

#### NOTE:

On-camera speedlight optional. May be TTL-enabled or full manual.

The Plus IVe does not support remote TTL operation. Remote flashes must be set to Manual.



# **Triggering a Remote Flash**



# **Other Transmitter Mounting Suggestions**

Non-TTI flash on bracket or near camera



NOTE:

Compatible TTL flashes will also work with correct TTI off-camera shoe cord in this setup



TTL off-camera shoe cord. radio on camera



TTL off-camera shoe cord. radio off camera

# **Other Remote Mounting Suggestions**



\*See wiki.pocketwizard.com for more mounting suggestions.

Cables and mounting hardware not included. Visit your local dealer for PocketWizard accessories.

# Triggering a Remote Camera 💭



## Triggering a Remote Camera with your Plus IVe Transceiver

- 1. Connect a Plus IVe to your remote camera via the appropriate remote camera cable. The receiving Plus IVe does not need to be in the hot shoe.
- 2. Select a Channel and Zone A, B, C, or D via the Channel up/down buttons  $\triangle \nabla$  and Zone Toggle Buttons.
- 3. Full Press 

  the TEST button on the transmitting PocketWizard radio or the shutter button on the handheld camera to fire the remote camera. See page 21 for details about half press.

**NOTE:** A remote radio, set to RxTx or LR mode, in the hot shoe of a remote camera and connected by a remote camera cable will automatically engage Auto Relay. To disable Auto Relay, see page 15.



Remote camera cables not included. Find the correct cable for your remote camera or flash:

pocketwizard.com/cablefinder

# Auto Relay 😲

NOTE: Auto Relay allows you to trigger remote flashes in sync with a remote camera and requires three PocketWizard radios. With Auto Relay, not all radios are set to the same Channel: The relaying radio transmits on one Channel higher than it received on. Visit wikl.pocketwizard.com for additional information.



## **Using Auto Relay**

- 1. Set the transmitting PocketWizard radio in your hands to Tx Mode and the desired Channel and Zone.
- Connect the Relaying Plus IVe's Flash/Camera Port to the remote camera triggering port of the camera via a remote camera cable and place the radio in the camera's hot shoe.
- Set the Relaying Plus IVe attached to your remote camera to TxRx Mode and also to the same Channel and Zone as the transmitting PocketWizard radio in your hands.
- 4. Connect a remote flash to a receiving radio via the top hot shoe or appropriate sync cable and set it to TxRx or Rx ONLY Mode and one Channel higher than the transmitting PocketWizard radio in your hands. Match the Zones to the other Plus IVe radios.
- Press and release TEST on the transmitting PocketWizard to fire the remote camera. Remote flashes will be automatically synchronized with the remote camera.

# **Disabling Auto Relay**

Auto Relay mode is engaged by default when the remote camera radio is set to TxRx or LR mode and is placed in the remote camera's hot shoe. The radio on the remote camera will receive a signal on one Channel, then automatically send a new trigger signal out one Channel higher once the camera takes a photo. When shooting in multi-user environments, it is important to know how to disable Auto Relay to prevent unwanted triggers to another photographer's PocketWizard radio.

#### There are 4 ways to disable Auto Relay:

- 1. Disable the hot shoe of the Plus IVe. Hold down the Zone D button for 3 seconds until the "CH" on the display changes to "Cd". At this point, the Plus IVe will not receive any signal from its hot shoe and Auto Relay is disabled. To reactivate the hot shoe, hold the Zone D button for another 3 seconds until "Cd" switched back to "CH" on the display or turn the radio off. When the radio is turned back on, it will return to an active shoe.
- 2. Set the receiving radio to Rx Only. The remote radio will receive a signal but will not sent out a new trigger when the camera's shutter fires.
- 3. Take the receiving radio out of the remote camera's hot shoe.
- 4. Cover the hot shoe contacts or turn off the hot shoe in the camera's menu.

# **Triggering Modes: Transmit & Receive**

## **Modes of Operation**

Your Plus IVe Transceiver supports six modes of triggering for different applications. You can switch between modes by pressing and quickly releasing the MODE button.



TXRX Mode allows the radio to be used as a transmitter attached to a camera or as a receiver connected to a remote flash or remote camera. As an Auto-Sensing Transceiver, the Plus IVe automatically switches between transmit and receive. This is the default mode.



**Tx ONLY** Mode disables all receiving (**Rx**) functionality and allows you to use your Plus IVe as a transmitter only. Use this mode when sharing remote flashes with other photographers. This mode will prevent other photographers from triggering the Plus IVe on your camera.



**Rx ONLY** Mode disables all transmit (**Tx**) functionality allowing you to use your Plus IVe radios as receivers for remote flashes or remote cameras. Use this mode when you do not want a remote Plus IVe to perform Auto Relay (page 14) when mounted in the shoe of a remote camera, or to prevent a remote Plus IVe from triggering other radios when its TEST button is pressed.

# Triggering Modes: HSR & LR



**HSR (High Speed Receive)** Mode shortens the contact time of the Flash/Camera Port, allowing for triggering of remote cameras or flashes at higher FPS (frames per second). This radio does not support HSS (High Speed Sync).



LR (Long Range) Mode dramatically increases the maximum range of a radio in a given shooting environment. LR Mode must be enabled on both transmitting and receiving radios. Use when triggering remote cameras at greater distances. It can also be used with remote flash, but there will be a reduction in maximum X-sync speed. Line of sight is recommended. With LR mode, the Plus IVe will automatically switch between transmit and receive, like TxRx mode.

Hit Mode button to select LR mode. You can now choose from LR Channels 1-80. E Channels 1-32 and LR Channels 1-80 use different frequencies and will not trigger each other. Both the transmitting and receiving radios must be set to the same type of Channel.

If you choose to downgrade your Plus IVe to Legacy firmware, Long Range settings operate differently. Please see wiki.PocketWizard.com for details.



# Triggering Modes: RP



RP (Repeater) Mode allows you add one or more Plus IVe radio(s) between a pair of transmitting and receiving units to increase maximum triggering distance. For example, if you can reach 200 meters, you can add a Repeater to reach 400 meters. This mode can be used when triggering remote cameras. It can also be used with flash but there is a reduction in maximum. X-sync speed. This is not the same operation as Auto Relay Mode.

RP mode with E Release firmware requires a multiple Channel setup. Set the transmitting and first Repeater radio to the same Channel. Then increase the Channel number for each successive repeater unit. Make sure each Repeating radio can only receive the signal from one other radio, otherwise an endless loop could occur. Put the transmitting radio into Tx ONLY Mode for hest results

For example: If you are using one Repeater in the middle, set the transmitting and Repeater radio to Channel 1. Set the receiving radio to Channel 2. (Ch1>Ch1>Ch2). If you are using a total of five radios for very long distance, set the transmitter and first Repeater to Channel 1, the second Repeater to Channel 2, the third Repeater to Channel 3, and the receiving radio to Channel 4, (Ch1>Ch1>Ch2>Ch3>Ch4).



If you choose to downgrade your Plus IVe to Legacy firmware, Repeater settings operate differently. Please see wiki.PocketWizard.com for details.

# Special Feature: Fast Mode

#### Fast Mode

The Plus IVe can be set to trigger more quickly to reduce flash clipping at or around X-sync for some cameras. Clipping appears as a black bar, or underexposed area, usually at the bottom of your image. It can happen with slower shutter cameras (1/200 X-sync cameras usually have slower shutters), combined with a longer duration flash. These timing factors, combined with the time it takes for the Plus IVe to transmit and receive. can cause clipping in some situations. You can use either of these methods, or combine them, to speed up the Plus IVe triggering time and possibly eliminate flash clipping in your images:

**Method 1**: Tx Only mode: Use the MODE button to set your on-camera radio to Tx Only Mode. This enables the Plus IVe to respond about 15% faster to triggers from the camera. This simple method may be all you need to eliminate clipping for most situations.

**Method 2**: Fast Mode: Set your receiving radio, connected to a flash, to Fast Mode. This feature trades the ability to set a specific Zone for a faster trigger response time. You need to engage Fast Mode on each receiving Plus IVe connected to a flash. Setting Fast Mode on your on camera transmitting radio will have no effect.

#### To engage Fast Mode:

- 1. Set each receiving Plus IVe to the same Channel as your transmitting radio.
- 2. Use the MODE button to set HSR (High Speed Receive) Mode. HSR Mode does not affect clipping by itself (it is for faster FPS (Frames Per Second), but is required for Fast Mode. Note: HSR is different than HSS (High Speed Sync). This radio does not support HSS.
- 3. Turn off all Zones by pressing the letters A, B, C, or D until no Zone indicators are showing on the LCD. The Channel indicator will change from CH to F to indicate you have entered Fast Mode.

This function is available on all QuadZone Triggering Channels -F Channels 1-32 and LR Channels 1-80

## **Channels and Zones**

**NOTE:** This PocketWizard Plus IVe uses the new E Release firmware. This protocol will not work with Legacy firmware. This Plus IVe can be downgraded via the Utility to work with Legacy firmware. Please see **wiki.PocketWizard.com** for more information.

# Channels 32 Rounnels Rounnels

The Plus IVe Transceiver supports 32 different E Channels and 80 different LR Channels. Each Channel represents a digital code transmitted on specific PocketWizard radio frequencies. This enables many photographers to work in the same area or for one photographer to exclusively control different sets of receivers. A Plus IVe will trigger any number of receiving PocketWizard radios set to the same Channel. Radios set to different Channels will not trigger each other.

Press the Channel up/down buttons △▼ to change Channels.

# **Using Zones**

Zones can be used to toggle remote cameras or flashes on or off from a transmitting PocketWizard radio. Zones can also be used when sharing flashes with another photographer so only some of the remote flashes are shared, even when using the same Channel.

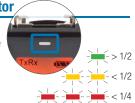
Zones A, B, C, and D are selectable via the Plus IVe's Zone Toggle Buttons and are available on all E and LR Channels. The enabled Zones are displayed in a box on the right side of the LCD. You can enable any combination of all four Zones. A receiving Plus IVe will only trigger if the transmitting PocketWizard radio has at least one matching Zone enabled.

**NOTE:** If you choose to downgrade to Legacy firmware, Channels and Zones will operate differently. Please see **wiki.pocketwizard.com** for details.

## **Other Functions**

## Status LED/Battery Level Indicator

Status LED blinks regularly to show battery level and illuminates red briefly when the radio sends or receives a signal. The front LCD panel will also show a battery level indicator.



## TEST Button (Two Stage Trigger)

A Plus IVe cannot send a half press signal but it can receive one from a transmitting Plus IIIe. Half pressing — the TEST button on a handheld transmitting Plus IIIe can wake up and pre-trigger a remote camera when using a Plus IIIe or Plus IVe as the receiving radio with the correct remote camera cable (available separately). Half pressing — the test button will make the camera respond more guickly and consistently but also reduces camera battery life. It will not affect remote flashes.

Fully pressing  $\blacksquare$  the TEST button on a Plus IVe or Plus IIIe fires any remote cameras or flashes connected to receiving PocketWizard radios set to the same Channel and Zones.

#### Reset

To reset your Plus IVe Transceiver to the default setting, hold the TEST button as you power the radio on. The default mode after a reset is **TxRx** on Channel 1 with all Zones enabled.

#### More Information

Please search for Plus IVe at wiki.pocketwizard.com for the most up to date and detailed information about your Plus IVe.

## **Technical Information**

Hot Shoe/Metal Foot: ISO compatible, on-camera TTL pass-through for pin/electrically compatible equipment including most Canon, Nikon, Panasonic, and Olympus speedlights and cameras (and some compatible third party equipment). Sony Multi-Interface cameras and speedlights compatible for simple manual flash sync only (no on-camera TTL with Sony equipment).

**WARNING**: Panasonic battery-less speedlights will damage your Plus IVe.

Transmit Output Power: Less than 1 milliwatt (1/1000 of a watt)

Batteries/Power: 2 x AA (IEC:LR6) Alkaline recommended for ~50 hour life.

External USB Power at ~5 volts and < 100mA

Triggering Delay: 1/1200 of a second

#### **Operating Temperature:**

Above -15° C (5° F) and below 50° C (120° F)

Always use fresh batteries in cold temperatures.

50°C (185°F)

-15°C (5°F)

-30°C (-22°F)

# Storage Temperature (without battery):

Above -30° C (-22° F) and below 85° C (185° F) without batteries.

#### Flash/Camera Port Sync Voltage Tolerance: 300 Volts

**Backlit LCD**: The Plus IVe's backlit LCD activates automatically when any button other than TEST is pressed. It turns off after 5 seconds.

LEDs: Red LEDs are used for dim light application and do not indicate a hazardous status.

Maximum Sync Voltage: 300 V Dimensions: 10.7 cm (4.2") x 5.3 cm (2.1")

**Radio delay**: 1/1200s x 3.0 cm (1.2")

**X-Sync**: Up to 1/250, 14.5 FPS **Weight**: <110 g (3.9 oz)

22

# Sustaining High Performance

**NOTE**: Your PocketWizard radios use the environment as a medium for transmitting and receiving nearby radio interference, and the radios' orientation and position relative to each other.



Keep radios away from metal, concrete, or high water-content objects.



#### Wireless Basics

The Plus IVe is designed to work in many challenging environments. For the best performance with any radio, maintain a line of sight between radios and keep antennas parallel. Make sure radios are not near any large metal. concrete, or high water-content objects. People and trees are mostly water! Make sure radios are not blocked by these objects or by hills.

The Plus IVe Transceiver's antenna is omnidirectional and its orientation should not significantly impact performance in most shooting scenarios, but optimizing for radio reception will always improve the maximum range.

Maintain at least a 12" distance between antennas. Avoid direct antenna contact with anything metallic. "Dead spots" have a number of causes, but the solution is usually the same: move the radio a few inches or feet away from the problem area. Always obey the laws of physics.

## **USA - The FCC wants you to know:**

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

NOTE: 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.

## **USA / Canada**

This device complies with Part 15 of the FCC rules and with Industry Canada Licence-exempt RSS Standards. 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Transceiver FCC ID Number: KDS-PW4-100 Transceiver CANADA IC: 2170A-PW4100

## **Simplified EU Declaration of Conformity**

Hereby, LPA Design Inc. South Burlington VT USA declares that the radio equipment type PocketWizard Plus IVe CE wireless photographic remote control is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.pocketwizard.com/support/reference/CE/





© 2019 LPA Design. All rights reserved. Product features and specifications are subject to change without notice. PocketWizard, ControlTL, MiniTT1, FlexTT5, FlexTT6, HyperSync, Plus, and MultiMAX are either trademarks or registered trademarks of LPA Design. All other trademarks contained herein are the property of their respective owners.

Patent information: www.pocketwizard.com/products/patents