

# PocketWizard

## Plus Ve Manual



FCC model: 340.00 - 352.00 MHz North America

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

The Plus Ve will work with all PocketWizard E Series radios.

(Note: FCC and CE PocketWizard radios work on different frequencies. All of your radios must have the same frequency to be compatible.)

Visit [www.wiki.pocketwizard.com](http://www.wiki.pocketwizard.com) for complete operating instructions.

---

## Key Features

### Incredible Range and Reliability

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

### Auto Sensing Transceiver

The Plus Ve 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 Release Flash Channels and 80 LR (Long Range) Camera Channels

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

### Hex Zone Triggering

Extra Zones now available on all Channels. Wirelessly activate or deactivate your remote flashes in up to 6 separately controllable Zones or remote cameras in up to 5 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 a 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 Ve will work with all PocketWizards using E Release firmware.

(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 Ve 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 does not support TTL communication.

### Simple User Interface

Everything is right at your fingertips with the intuitive soft-touch keypad.

### 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 mini-phone connection. Turn on the radios, match the Channels and Zones, and you're ready to go!

---

## Plus Ve Transceiver Basics

### Pocket Wizard Compatibility

The firmware installed in this Plus Ve is called E Release firmware and your radio is a member of the PocketWizard E Series family. The E Release uses a new communication protocol that enables your Plus Ve to have greater range and enhanced reliability.

This Plus Ve will work with any other PocketWizard that has been upgraded to E Release firmware operating on the same frequency. Please note that the Plus Ve is NOT backward compatible with PocketWizard radios using the older Legacy firmware (Plus, Plus II, Max, MultiMAX, MultiMAX II).

PocketWizard offers two frequency versions: FCC version for North and South America and CE version for most of the rest of the world. All radios must be the same frequency version to be compatible.

### Channels & Zones

Your Plus Ve needs to be set to the same Channel and Zone as other PocketWizard radios to work together. Channels can be set via the Plus Ve Channel up/down buttons. There are 3 Flash  Channels and 3 Camera  Channels. These are chosen by using the **MODE** button. See the "Channels & Zones" section for more info.

### Battery

The Plus Ve is equipped with a single-cell 800mAh rechargeable battery that is user-replaceable.

### Powering on/off

Press the **MODE** button quickly and release, then press the **MODE** button again and hold it for about two seconds to power on the unit. Hold down the **MODE** button for about three seconds to power off the unit.

### USB

The Plus Ve USB-C port is located on the right side of the unit below the F Zone button. This is used for charging your Plus Ve radio.

# Triggering a Remote Flash

1. Slide a Plus Ve into your camera's hot shoe and twist the locking ring until snug. Do not over-tighten! You may also connect the Plus Ve to your camera's PC sync port using the appropriate sync cable via the Plus Ve's miniphone port.
2. Select a triggering mode. For normal shooting, **TR** mode is recommended. Use the E Release Flash Channels for triggering remote flashes.
1. Select a Channel via the up/down buttons  $\Delta \nabla$  and Zone (ABCDE) via the Toggle Buttons on the side of the Plus Ve.
3. Connect a Plus Ve to your remote flash via the appropriate sync cable. Set the remote PocketWizard radios to the matching Flash **TR** mode, Channel, and Zone. Momentarily pressing the **TEST** button will trigger the flash.
4. Take pictures normally at or below your camera's X-sync speed.

**Notes: The Plus Ve does not support TTL communication. Flashes must be set to Manual.**

Please see the sections below for details about triggering modes, Channels, and Zones.

# Triggering a Remote Camera

1. Slide a Plus Ve into your remote camera's hot shoe and twist the locking ring until snug. Do not over-tighten!
2. Connect the Plus Ve to your remote camera via the appropriate remote camera cable.
3. Select a triggering mode. If you are using a Sony camera use  **Ls** mode, if you are using any other camera, use  **RX** mode. Always use the Long Range (LR)  Camera Channels for triggering remote cameras.
4. Select a Channel via the up/down buttons  $\Delta \nabla$  and Zone (ABCDE) via the Toggle Buttons on the side of the Plus Ve.
5. Set your transmitting Plus Ve to  **LR** mode and the same Channel and Zone.
6. Fully press the **TEST** button on the transmitting PocketWizard radio or the shutter button on the handheld camera to fire the remote camera.

**NOTES:** A remote radio, set to TR, RX, or LR modes, placed in the hot shoe of a remote camera and connected by a remote camera cable will automatically engage Auto Relay. See below for details. The receiving Plus Ve does not need to be in the hot shoe, if you prefer to mount it elsewhere.

Please see the sections below for details about triggering modes, Channels, and Zones.

**Remote camera cables not included.** Find the correct cable for your remote camera or flash:  
[pocketwizard.com/cablefinder](http://pocketwizard.com/cablefinder)

# Auto Relay

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. Auto Relay uses ⚡ Flash Channels.

## Using Auto Relay

1. Set the transmitting PocketWizard radio in your hands to ⚡ **Tx** Mode and the desired Channel and Zone.
2. Connect the Relaying Plus Ve 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.
3. Set the Relaying Plus Ve attached to your remote camera to ⚡ **TR** Mode and to the same Channel and Zone as the transmitting PocketWizard radio in your hands.
4. Connect a remote flash to a receiving Plus Ve radio via the appropriate sync cable and set the Plus Ve to ⚡ **Rx** Mode. Set it one Channel **higher** than the transmitting PocketWizard radio in your hands and the relaying PocketWizard. Match the Zones to the other Plus Ve radios.
5. Press and release **TEST** on the transmitting PocketWizard to fire the remote camera. The remote camera will fire and 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 ⚡ **TR** mode and is placed in the remote camera's hot shoe. The radio on the remote camera will receive a signal on one Channel, and 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 Ve. Turn off the radio. Hold down the Zone D button then press the **MODE** button to turn on the unit. The display should show "**Cd**" instead of the normal "**CH**". At this point, the Plus Ve will not receive any signal from the camera's hot shoe and Auto Relay is disabled. To reactivate the hot shoe, 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** (receive only) mode. The remote radio will only receive a signal but will not send out a new trigger when the camera's shutter fires.
3. Take the receiving radio out of the remote camera's hot shoe and mount it elsewhere.
4. Cover the hot shoe contacts or turn off the camera's hot shoe in the camera's menu.

# Triggering Modes: Transmit & Receive

## Modes of Operation

Your Plus Ve Transceiver supports six modes of triggering for different applications. You can switch between modes by pressing and quickly releasing the **MODE** button. Flash Channels ⚡ 1-32 and Camera  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.

## E Release Flash ⚡ Modes

The first 3 mode settings are used to sync remote flashes. The Plus Ve can sync a flash up to the camera's X-sync, in manual mode. These modes are indicated by the lightning bolt icon next to the mode. There are 32 Flash Channels. The lightning bolt icon will blink every time a signal is sent or received.

**⚡TR Mode** (Transmit/Receive) 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 Ve automatically switches between transmit and receive. This is the default mode.

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

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

## E Release Long Range Camera 📷 Modes

The next 3 mode settings are used to trigger remote cameras. These settings will give the signal longer range but you will lose a stop of sync speed if you use these modes with a flash. These modes are indicated by the camera icon next to the mode. There are 80 Long Range Camera Channels. The camera icon will blink every time a signal is sent or received.

Long Range Mode dramatically increases the maximum range of a radio in a given working environment. LR mode must be enabled on both transmitting and receiving radios. Use when triggering remote cameras at a greater distances. Long Range Mode can be used with remote flash but there will be at least a 1 stop reduction in maximum X-sync speed. Line of sight is recommended for best results.

**📷 LR Mode** (Long Range Transmit/Receive) allows the radio to be used as an Auto-Sensing Transceiver where the Plus Ve automatically switches between transmit and receive in Long Range Mode.

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

**📷 Ls Mode** (Long Range Sony) is for triggering remote Sony cameras. Use this mode on the transmitting radio and with any remote Plus Ve radios connected to remote Sony cameras.

## Channels and Zones

### Channels

The Plus Ve Transceiver supports 32 different E Flash ⚡ Channels and 80 different LR Camera 📷 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 Ve 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.

## 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, D, E, and F are selectable using the Zone Toggle Buttons on the side of the Plus Ve and are available on all E flash Channels. Long Range camera Channels use Zones A, B, C, D, and E.

The enabled Zones are displayed in boxes on the LED screen. You can enable any combination of all Zones. A receiving Plus Ve will only trigger if the transmitting PocketWizard radio has at least one matching Zone enabled.

**NOTE:** This PocketWizard Plus Ve uses the new E Release firmware. This protocol will not work with Legacy firmware (Plus, Plus II, Max, MultiMAX, MultiMAX II).

## Other Functions

### Auto Power Off

The Plus Ve will automatically turn off after 12 hours to conserve battery power if it does not receive a button press or radio trigger.

### Battery Level Indicator

When the battery is full, the battery symbol in the OLED is filled with **green**. As the battery level drops, the indicator will gradually change and be less full. When the battery level drops to 50%, the color changes to **yellow**. When the battery level hits 25% or lower, it changes to **red**.

To charge your Plus Ve, connect the included USB-C to a 1amp or higher AC adapter. If the unit is off, press **MODE** and the unit will show you a battery level icon. Once the battery is fully charged, the screen will go blank. If the unit is powered on, you will see a lightning bolt in the middle of the battery symbol.

Once the battery is fully charged, it will not start charging again if the battery power drops. You must disconnect it from the power source and reconnect it if you want to charge it again or use an AC adapter that can do a power cycle every 12 hours (or less).

### TEST Button

Fully pressing the **TEST** button fires any cameras or flashes connected to the Plus Ve as well as any cameras or flashes connected to remote PocketWizard radios set to the same Channel and Zone.

### Factory Reset

To reset the radio back to factory default: Turn off the radio. Hold in the E button and then press the mode button once. Release the E Button when you see "RESET" appear in the screen. The radio will turn on after a factory reset.

**More information:**

Please search for the Plus Ve in our PocketWizard Wiki for the most up to date and detailed information. You will also find additional suggestions about how to maximize all of the features the Plus Ve has to offer.

[www.wiki.pocketwizard.com](http://www.wiki.pocketwizard.com)

## Technical Information

Frequency: FCC model: 340.00 - 352.00 MHz North America

Transmit Output Power: Less than 1 milliwatt (0.001 watt)

X-Sync: Up to 1/250 for focal plane shutters, up to 1/500 for leaf shutters

Triggering Speed: Up to 14.5 frames per second (FPS)

Radio Triggering Delay: 1/1200 of a second

Maximum Sync Port Voltage Input: 100 V (Camera/Flash Port)

Maximum Sync Port Voltage Output: 3.3 V (Camera/Flash Port)

Operating Temperature: Above -10° C (14° F) and below 40° C (104° F)

Storage Temperature: Above -29° C (-20° F) and below 65° C (150° F)

Display Screen: 1.9 cm (0.75") color OLED display

Battery: User replaceable, single cell, 3.7 volt, 800 mAh, rechargeable Lithium-Ion battery

Battery Charging Time: up to

Dimensions: Height: 9.0cm (3.5")

Width: 5.1cm (2.0")

Depth: 1.8cm (0.7")

Weight: 68 grams (2.5 ounces) with batteries installed

## Sustaining High Performance

NOTE: Your PocketWizard radios use the environment as a medium for transmitting and receiving radio signals. The performance of your radios depends on their placement in the environment, nearby radio interference, and the radios' orientation and position relative to each other.

**Wireless Basics:**

The Plus Ve 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 Ve 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. For best results, raise the radio at least 60 cm (2') above the ground. 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.

# FCC statement:

## 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.

## FCC Notice:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

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. 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

## RF Exposure

The equipment has been evaluated to meet general RF exposure requirement. The device can be used in portable condition without restriction.