



WDK-ERA-KIT

Owner's Manual

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

Introduction

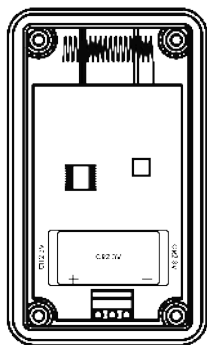
The WDK-ERA-KIT is a doorbell kit by Safeguard Supply that comes with a ERA-UTX transmitter, the ERA-DCRX receiver, a selected 12CV DC output accessory, and a bundle of 20AWG wire. The ERA-UTX is a Universal Transmitter compatible with the ERA-DCRX Receiver. These may be purchased separately & also sold as a kit, as the ERA-UTDCR. The ERA-UTX has several methods of activation. First, it has a push button that can be used as a panic button or doorbell button. The ERA-UTX also has terminals for a normally open (N/O) or normally closed (N/C) input. These inputs can be used with any detector contacts. There is also a magnetic contact that can be used for doors or windows. When the transmitter is activated, it will send a signal to the receiver which will sound one of 12 different tones for a few seconds, or the 12V DC outputs and/or activate the relay output.

Helpful Notes:

- Each receiver is capable of pairing with four (4) transmitters per zone.
- Each zone features 1 x 12V DC output.
- Output duration for the 12V DC output may be set to 5 sec, 10 sec, 1 min, & 2 min. The receiver features 1 x C-Form relay assignable to one or multiple zones & will take on the duration of the 12V DC output.
- Volume control: 4 levels plus mute, plus off.
- Each transmitter must be paired to a zone on the receiver.
- Each zone is programmed to the "ding-dong" sound from the factory. User may change this melody.
- When transmitter battery is low, it sends a signal to the receiver when triggered & the corresponding LED on the receiver will continue to flash for 10 minutes.

Battery Installation:

1. Flip over the ERA-UTX & remove the gray silicon grommets (one per corner). The screws are under the grommets.
2. Remove the four screws on the back of the case and open to find the battery compartment. (Figure 1)
3. Remove top half of case from lower case.
4. Install the included CR-2 battery in the holder (Figure 1).
5. Re-tighten screws & insert grommets.
6. **Note:** When battery gets weak, it will cause paired zone to flash LED on receiver for 10 minutes when triggered.



(Figure 1)

LED Indicator Light in Button:

The default setting is for the LED indicator to light up for two seconds when the ERA-UTX is activated.

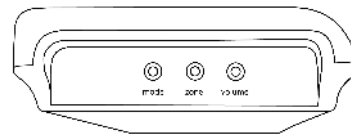
Pair Transmitter to Receiver:

(Always test unit prior to installation)

The transmitter works with the ERA-DCRX receiver & basic programming calls for the user to pair the transmitters with a receiver & select a melody for the transmitter to instruct the receiver to play when triggered.

For quick setup, however, each zone defaults to a basic "ding-dong" sound allowing you to easily pair the transmitter for a faster set up process.

1. On the ERA-DCRX receiver, hold down the "mode" (left button in figure 2 below) button until you hear a short tone sound & the "zone 1" LED flashes.
2. If you are programming the transmitter to zone 1, press the gray button on your transmitter. You will hear the receiver play a short musical note (zone 1 will continue to flash).
3. To program a transmitter to a different zone, press the "zone" button on the receiver to scroll to the appropriate zone. The zone you want to program will flash. Repeat step 2 above.
4. Once you have programmed all the zones move to the next step.
5. To exit program mode, hold down the "mode" button until you hear a short tone sound (approx 3 sec)



(Figure 2)

Changing the Zone Melody:

By default, each zone is programmed by the factory to play the ding-dong sound

1. Hold down the "zone" button until you hear a short tone & all LEDs on front panel of receiver are red (approx 3 seconds). The zone you are programming will flash.
2. Press the "volume" button to scroll through the 12 available melodies for selection. Once you find a melody you like, move to step 3.
3. Press the "zone" button to scroll to the next zone & repeat step 2 to program a melody to other zones.
4. Once you have programmed a melody to all necessary zones, move to step 5.
5. Hold down the "zone" button until you hear a short tone sound (approx 3 seconds) notifying the receiver is out of melody programming mode.

Volume, Mute, Off:

The volume button on the side of the receiver controls the four different volume levels, mutes & turns off the receiver. Pushing the volume button controls these functions.

- When all four zone LED lights are red, this indicates maximum volume.
- Three zone LED lights indicate the third volume level.
- Two zone LED lights indicate the second volume level.
- One zone LED light indicates the minimum volume level.
- No zone LED lights & a red power indicator light means the sound is muted.
- No LED lights (no zone LED or power indicator) means the unit is off. Pushing volume again turns it back on to max volume.

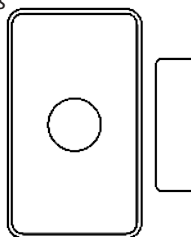
Erasing Programming (memory):

1. Hold down "mode" button until you hear a short tone & the zone 1 LED flashes.
2. Hold down the "mode" & "volume" button simultaneously until all LEDs stop flashing & you hear a short melody sound (approximately 5 seconds).
3. All LEDs will stop flashing & only the green LED power indicator will display. The memory is now erased.

Using the Magnetic Contact:

The magnetic contact can be used on most doors/windows with a gap of less than ½ inch.

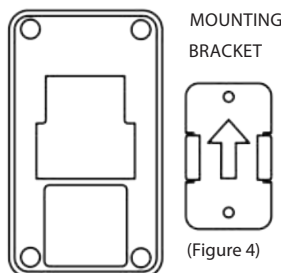
- Mount the push button on the door jam with the screws provided.
- Mount the magnet on the door (within ½" of the push button) with the screws provided.
- After mounting the magnet on the door snap the cover on the magnet case.
- The magnetic contact can be used on either side of the push button. (Figure 3)



(Figure 3)

Mounting the Transmitter:

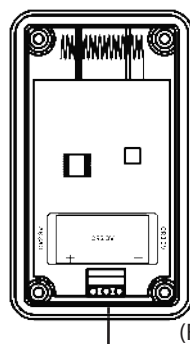
- The transmitter can be mounted to any wall using the mounting bracket. (Figure 5)
- The mounting bracket is located on the back of the ERA-UTX and can be removed by simply sliding it off.
- Position the bracket where you would like it and place two screws in the holes provided. To place the ERA-UTX back simply slide it over the bracket.
- If mounting the ERA-UTX outdoors it is recommended to place the silicone plugs in the screw holes at the back of the case to prevent moisture from entering the case.



(Figure 4)

Using the Relay on the ERA-UTX: The ERA-UTX can be activated by any type of detector which provides a normally open (N/O) or normally closed (N/C) output.

1. Locate the terminals at the bottom of the case. (Figure 6)
2. Insert the wires through the silicone gasket and make the connection on the terminals.
3. For a normally closed (N/C) connection, connect the wires to the NC and Common (center) terminals.
4. For a normally open (N/O) connection, connect the wires between the NO and Common (center) terminals.



(Figure 6)

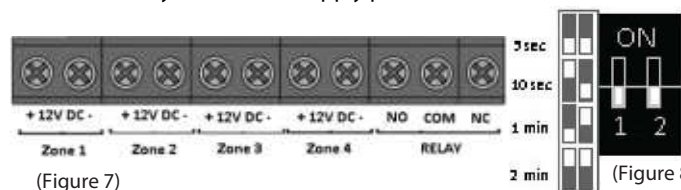
Using Multiple Devices on the ERA-UTX Relay:

- If multiple normally closed (N/C) contacts are to be used, they should be run in series to the N/C contacts.
- If multiple normally open (N/O) contacts are used, they should be run in parallel to the N/O contacts.
- Note: Both N/O and N/C contacts can be used simultaneously along with the magnetic contact and push button.

Connecting 12V DC Accessories to the ERA-DCRX Receiver

The ERA-DCRX receiver features a live 12V DC output for each of the four zones of the receiver. These outputs may be used to power 12V DC accessories such as strobe lights, sirens, fire alarm bells, and more. To access the live 12V DC outputs and C-Form relay, separate the top half of the receiver case from the lower half. The outputs and relay are located on the PC board and are shown below in figure 7.

- Pair the transmitter to the receiver per the instructions for that transmitter.
- Each zone features 1 x 12V DC output that is activated when that zone is triggered, the + & - screws for each output may be seen in figure 7 below.
- The output duration for the 12V DC output may be set to 5 sec, 10 sec, 1 min, & 2 min by adjusting dip switches (see figure 8). The duration setting applies to all zones.
- The C-Form Relay, labeled "Relay" in figure 7 below, may be associated with a specific zone or multiple zones & will take on the duration of the 12V DC output.
- 12V DC output current: 400mA maximum.
- The form "C" relay is rated for 24 VDC at 3 Amp maximum current.
- Form "C" relays DOES NOT supply power to external device.



(Figure 7)

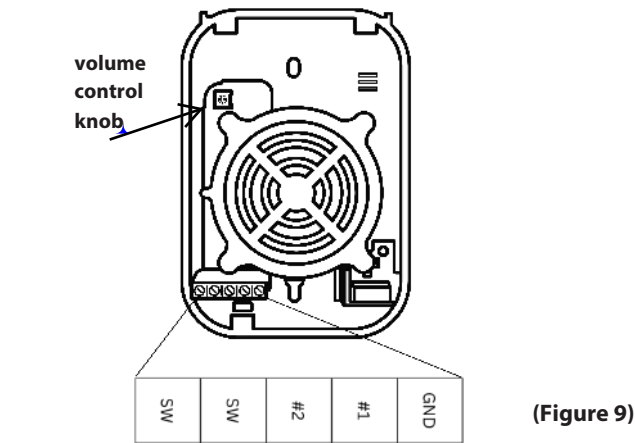
(Figure 8)

1. Unplug the receiver & separate the top half from the lower half of the case.
2. On the Located the positive (+) & negative (-) wires on the 12V DC accessory. The Red is positive wire is positive & the negative wire is black or black/red stripped.
3. For the SS-PSIREN ONLY: There are no wires for this accessories, only terminal screws. Open the case of the SS-PSIREN-W. Located the screws at the bottom (see Figure 3).
4. Locate the external 12V DC terminal connection block that corresponds to the respective zone on the ERA receiver (figure 1). For example, if a push button is paired to zone 1, and you want the siren to sound for zone 1, wire the siren into the terminal block for zone.
5. Loosen the + and - screws for the respective zone you are hooking an accessory to on the ERA-DCRX receiver.
6. **WIRING for the SS-PSIREN-W** is slightly different from the others accessories to continue wiring of the SS-PSIREN-W, go to the section titled "**Wiring the SS-PSIREN-W.**"
7. For all other accessories, insert the positive (red) wire from the accessory into the positive (+) terminal screw for the respective zone on the ERA-DCRX. Insert the negative (black or red/black) from the accessory into the negative (-) terminal screw.
8. Re-tighten screws on the terminal blocks of the ERA-DCRX receiver.
9. Adjust the output duration of the 12V DC output. Please see section titled "Adjusting 12V DC Output Duration."
10. Snap the cover back on the ERA-DCRX.
11. Plug-in the ERA-DCRX receiver.
12. Ensure the volume is turned on the receiver, the battery is installed in the transmitter, and the transmitter is programmed to the receiver.
13. Test to ensure the transmitter triggers the receiver and the accessory is triggered by the 12V output on the ERA-DCRX.

Wiring the SS-PSIREN-W

The instructions here pick up from Step 6 in the section "Connecting 12V DC Accessories to the ERA-DCRX Receiver."

- 1. Wire from the negative (-) terminal screw on the receiver (figure 1) to the "GDN" screw on the siren (figure 9).
- 2. Wire from the positive (+) terminal screw on the receiver to the #1 or #2 screw on the siren. #1 is a continuous siren sound (for set time duration), while #2 is an alternating siren sound (for set time duration).
- 3. The "SW" screws are not used in this application.
- 4. Finish setup by going to **Step 8** in section titled "**Connecting a 12V DC accessory to the ERA-DCRX Receiver.**"



GND	Negative supply terminal.
#1	Positive supply terminal. 1-st sounder tone – continuous beep.
#2	Positive supply terminal. 2-nd sounder tone – alternating beep.
SW	Tamper switch terminal.
SW	Tamper switch terminal.

Adjusting the 12V DC Output Duration

The ERA-DCRX will supply 12V DC power to each of the zones. The duration of the output may be adjusted using the dip-switches as seen in Figure 2 below.

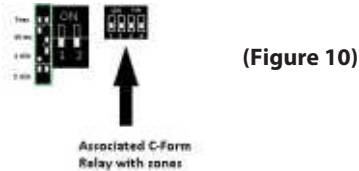
- The duration may be adjusted t 5 seconds, 10 seconds, 1 minute, and 2 minutes. This means, when a zone is triggered, it will supply 12V DC power for the specified duration.
- The duration setting will apply to all zones.
- In the diagram (figure 8), the dip-switches to the right correspond to duration that the receiver will output power.
- Adjust the dip-switches to the desired output time.

Using the C-Form Relay

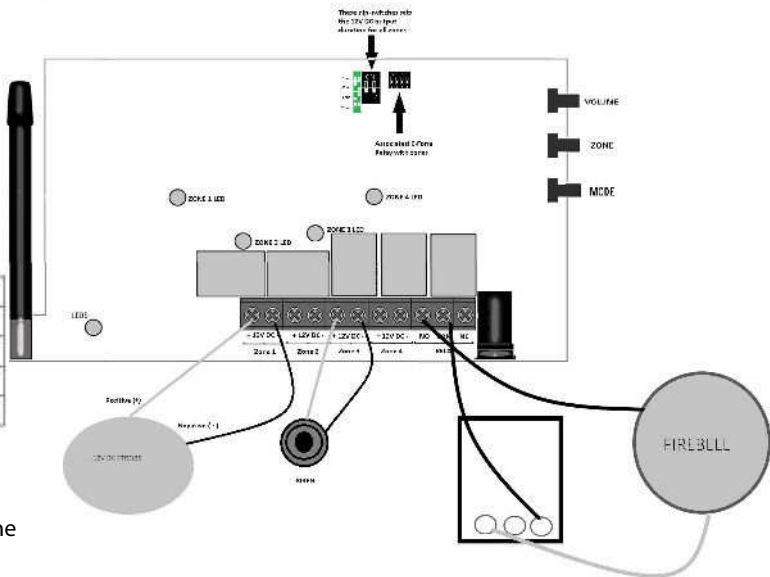
The last 3 screws in the terminal block, labeled "Relay" in in figure 7, may be used for integration to 3rd party devices that accept "Normally Open (N/O) or "Normally Closed" (N/C) connections. Please consult the device you are integrating with for specifications on how to integrate the device using a C-Form relay. It is important to note that this connection DOES NOT supply power to the integrated device, rather, the device must have it's own power supply.

Examples of Connecting Devices to the 12V DC Outputs and the C-FORM Relay

The C-Form relay can work with any combination of zones by setting the dip-switches in figure 10. By default, the C-FORM relays are set to work with all zones.



The diagram below provides a basic overview of how devices may be connected to other devices. In the diagram, a 12V DC strobe is connected to zone 1. When a transmitter is triggered that is programmed to zone 1, the strobe light will flash. In zone 2, a siren is connected, and it will sound when that zone is triggered. A Fire Alarm Bell is connected to the Relay and will sound when the associated zone to the Relay is triggered. Note, an external power supply must be provided for the device connected to the Relay.



TECHNICAL SUPPORT

If you encounter any difficulty in the operation of this product after reading the manual, please contact us. You can reach us by phone at 904-245-1184 from 8:00 AM to 5:00 PM Monday through Friday (Eastern Standard Time). We will be happy to answer your questions and help you in any way we can.

WARRANTY

Safeguard Supply warrants this product to be free of defects in material and workmanship for a period of one year from the date of purchase. This warranty does not cover damage resulting from accident, abuse, act of God or improper operation. If this product does become defective, simply return it to Safeguard Supply. Please include a note describing the troubles along with your name and return address as well as the original sales receipt. If the product is covered under warranty it will be repaired or replaced at no charge. If it is not covered by warranty, you will be notified of any charges before work is done.

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