



APPENDIX H

: USER'S MANUAL



TRF-ZW10 OWNER'S MANUAL



Table of Contents

Congratulations.....	1
Features and Benefits.....	1
Compatibility.....	2
Device Layout and Connections.....	3
LED Indicator Lights.....	5
Installation.....	7
Using the TRF-ZW10.....	7
Including (pairing) a Device.....	7
Excluding a Device.....	8
Restricting Installer Access.....	9
Hardware Specifications.....	10
Warranty Statement.....	10

Congratulations:

Thank you for purchasing URC's TRF-ZW10 Z-Wave Gateway. The TRF-ZW10 communicates with Z-Wave devices and your compatible URC control system, integrating them seamlessly together into a single user interface for control and automation. Incorporating this gateway as part of a URC control system offers a myriad of potential additions to your home.

Easily expand your system by adding virtually any Z-Wave enabled device to your connected home. Options include URC Lighting and thousands of 3rd party products such as door locks, thermostats, sensors, and more.

Features and Benefits:

● **Z-Wave Plus™ Certified**

Z-Wave plus and the next generation hardware platform offer enhanced features, capabilities, stability, and improve the overall experience. For more information, visit the [Z-Wave Alliance](http://www.z-wavealliance.org) web-site.

Improved performance features include:

- ☐ Network wide inclusion (pairing) allows for easier installation and expansion.
- ☐ Enhanced self-healing for improved reliability and user experience.
- ☐ Improved range creates a more robust network.

● **UI 7 Programming:**

Intuitive programming and control of Z-Wave devices. The platform includes URC Lighting specific programming such as simplified device options, EZ-associations, and more.



Features and Benefits Continued:

- **Easy Setup Wizard:**

End-user setup wizard allows for an intuitive setup with a simple Q&A format. Adding devices is easy with pre-configured settings for many of the most popular products available.

- **Wi-Fi Enabled (or Hard-line):**

Wi-Fi connectivity allows for flexible placement in strategic locations of the home/business.

- **ZigBee & Bluetooth Support (Limited):**

The TRF-ZW10 has the ability to communicate with devices using either a ZigBee or Bluetooth protocol. ZigBee/Bluetooth devices must be included in the UI7 programming portal library. Control of these devices is limited and not supported by URC.

Learn more about supported device by clicking [here](#).

Compatibility:

The TRF-ZW10 can work independently without any of URC's control systems. However, this builds a system designed to only control Z-Wave devices. In conjunction with URC's line of control systems, Z-Wave can execute complex macros including Z-Wave devices, scenes, and other devices around the home.

TRF-ZW10 is compatible with the following URC control systems:

- Total Control 2.0
- Total Control Flex 2.0
- MX HomePro

Parts List:

- TRF-ZW10 Z-Wave Gateway
- 12V Power Adapter
- Wall Mount
- 4x Mounting Screws

Device Layout and Connections:

1. **USB Port:** Provides features and support for advanced applications.
2. **Ethernet Port:** Connects the gateway physically to the local network via an ethernet cable.
3. **12V Power Receptacle:** Connects to the included power adapter.



6. **Reset Button:** For use **only when directed by URC Technical Support**. This button is **recessed** and can be pressed with a paperclip:
- **Reset Network Settings:** Press the button three (3) times within six (6) seconds.
 - **Factory Reset:** Press the button six (6) times within six (6) seconds.
 - **Power Cycle (Shutdown):** Press-n-hold the button for 30 seconds to shutdown the unit and then disconnect the gateway from its power supply.



LED Indicator Lights:

There are seven (7) indicator lights on the TRF-ZW10, below are their potential values:

- a. **Power LED:** Three (3) available states:
 - **LED On:** Indicates the device is powered on.
 - **LED Off:** Indicates the device is powered off.
 - **LED Flashing:** Indicates that a firmware update is in progress.
- b. **Internet LED:** Three (3) available states:
 - **LED On:** Gateway is connected via Ethernet.
 - **LED Off:** Gateway is not connected via Ethernet.
 - **LED Flashing:** Gateway cannot connect to the Internet.
- c. **Z-Wave LED:** Four (4) available states:
 - **LED On:** Z-Wave radio is enabled.
 - **LED Off:** Z-Wave radio is disabled.
 - **LED Flashing (slow - once per second):** The device is in **inclusion** (pair) mode.
 - **LED Flashing (fast - twice per second):** The device is in



e. **Service LED:** Provides information on the status of the cloud service.
Three (3) available states:

- **LED On:** Cloud service is connected and working properly
- **LED Off:** No Cloud service installed
- **Flashing:** Cloud service is not sending data properly.



Installation:

Setup of the TRF-ZW10 and Z-Wave devices is performed by a certified URC integrator. This also includes integration of the Z-Wave system to a compatible URC control system.

After the URC integrator has performed the initial configuration, an email is sent to the end-user. This email contains information on your Z-Wave account and system. Follow the email's instructions on finalizing your account.

This Z-Wave account allows users to monitor your Z-Wave system's devices and provides the ability to "block Dealer access". Blocking Dealer Access prevents the URC integrator from programming and/or controlling the systems' Z-Wave devices/scenes.



URC highly recommends the end-user to setup the Z-Wave system's location and block the integrators access once programming is complete.

Using the TRF-ZW10:

It is recommended that **adding and removing devices** should always be performed by using the **UI7 Programming Portal**.

Manually Including (pairing) and Excluding (removing) Z-Wave Devices:

Z-Wave devices are **normally paired (or unpaired) with the Z-Wave gateway via the web-portal (UI7)**; however, it is possible to complete the process manually:

Including (pairing) a Device (manually):

1. Press the **Sync** button once (page 3). The Z-Wave light blinks slowly (once every second) to indicate that it is in pairing mode.
2. Follow the **pairing/un-pairing instructions** for the Z-Wave device (devices provide manufacturer-specific instructions).
3. When paired successfully, the TRF-ZW10's Z-Wave light flashes rapidly for less than a second, then returns to the inclusion state.
4. Pressing the **Sync** button again returns the gateway to its normal operation mode.

When **adding a device manually, device are not assigned to a room or provided a name**. This must be performed from the UI7 Programming Portal.

Excluding a Device:

1. **Press-n-hold the Sync** button for three (3) seconds. The Z-Wave light blinks faster, twice every second to indicate that the gateway is in exclusion mode.
2. Follow the **pairing/unpairing instructions** for the Z-Wave device.
3. When the device has been successfully unpaired, the Z-Wave LED flashes rapidly for less than a second, then returns to the exclusion state.
4. Pressing the **Sync** button once, returns the gateway to the inclusion state. Press the button a **second time** to return the gateway to its **normal operating mode**.



It is significantly faster to exclude devices using the manual method rather than through the UI7 Portal.

Hardware Specifications:

Microprocessor : ARM® CORTEX®-A5

RF : Z-Wave / 900MHz / GFSK / -6dBm

USB : USB 2.0 INPUT DEVICES

NAND Flash : 1GB

RAM : DDR2 256MB

LAN : RJ-45 Connector, 10/100 Mb, POE

Power : DC 12V Adaptor, POE 48V

Operating TEMP : 0~40 °

Size : 100 X 80 X 30 (mm)

Weight : 3.52 oz

Warranty Statement:

1. LIMITED WARRANTY AND DISCLAIMERS

Universal Remote Control, Inc. ("URC") warrants that URC equipment purchased directly from URC or from an authorized URC dealer or distributor shall be free from defects in material and workmanship under normal usage for a period of one (1) year from the date of purchase of the product by the end-user, but no longer than thirty-six (36) months from the date of shipment of the URC equipment by URC to an authorized URC dealer or distributor, except that with respect to Total Control® whole-house products, the warranty extends for two (2) years from the date of purchase by the end-user, but no longer than forty-eight (48) months from the date of shipment of the URC equipment by URC to an authorized URC dealer or distributor.

This limited warranty is valid only in the United States of America.

URC equipment purchased from other than an authorized URC dealer or distributor is without warranty.

URC warrants that the software will substantially conform in any material respect to its functional specifications at the time of delivery. URC SHALL NOT BE LIABLE FOR OPERATIONAL, TECHNICAL OR EDITORIAL ERRORS AND/OR OMISSIONS MADE IN THE URC DOCUMENTATION. URC DOES NOT WARRANT THAT THE URC SOFTWARE IS BUG-FREE OR ERROR FREE OR THAT THERE ARE NO ERRORS/BUGS IN THE URC SOFTWARE.

URC warrants that at the time of purchase the URC equipment and the URC software complied with all applicable regulations and policies of the Federal Communications Commission ("FCC") regarding electromagnetic interference caused by electronic/computing devices and to the extent that the URC equipment and/or the URC software fails to so comply, URC shall, at its own expense, take all reasonable measures to promptly cause such to comply.

TOTAL CONTROL 2.0

TRF-ZW10 OWNER'S MANUAL

THIS LIMITED WARRANTY DOES NOT COVER TECHNICAL ASSISTANCE FOR HARDWARE OR SOFTWARE USAGE EXCEPT AS EXPRESSLY PROVIDED FOR HEREIN.

CERTAIN IMPLIED WARRANTIES, INCLUDING AN IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, MAY BE AVAILABLE WITH RESPECT TO URC EQUIPMENT. IMPLIED WARRANTIES VARY FROM STATE TO STATE. URC EXPRESSLY LIMITS THESE IMPLIED WARRANTIES, TO THE EXTENT ALLOWABLE BY LAW, TO THE TIME PERIODS COVERED BY THE EXPRESS WRITTEN WARRANTIES PROVIDED HEREIN. OTHERWISE AND EXCEPT AS PROVIDED FOR HEREIN, URC EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, AND MAKES NO REPRESENTATIONS REGARDING THE USE OF, OR THE RESULTS OF THE USE OF, THE EQUIPMENT, SOFTWARE OR DOCUMENTATION IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY OR OTHERWISE.

EXCEPT AS EXPRESSLY PROVIDED FOR HEREIN, TECHNICAL SERVICES ARE SUPPLIED "AS IS", WITHOUT ANY WARRANTY, EXPRESS, STATUTORY OR IMPLIED, OF ANY KIND. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, URC EXPRESSLY DISCLAIMS ALL WARRANTIES RELATING TO TECHNICAL SERVICES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF QUALITY OR REASONABLE SKILL AND CARE, OR OUTCOME OR RESULTS.

WITHOUT IN ANY WAY LIMITING THE GENERALITY OF THE OTHER PROVISIONS HEREIN, THIS LIMITED WARRANTY DOES NOT COVER: (I) DAMAGE FROM MISUSE, NEGLIGENCE OR ACTS OF NATURE, (II) MODIFICATIONS, (III) INTEGRATION WITH THIRD PARTY CONTENT, OR (IV) BEYOND THE WARRANTY PERIOD AND/ OR FAILURE TO FOLLOW URC WARRANTY CLAIM PROCEDURE.

The warranty limitations and warranty disclaimers may not apply to end user in whole or in part, where such are restricted or excluded by applicable law, and such shall apply to the maximum extent permitted by applicable law.

In the event of any warranty claim, URC will, at its sole option, repair the URC equipment using new or comparable rebuilt parts, or exchange the URC equipment for new or rebuilt equipment. In the event of a defect, these are the end user's exclusive remedies.

All the URC equipment returned for service, exchange or repair require an RGA number. To obtain an RGA number, you must complete a Return Request Form which you may obtain by calling (914) 835-4484 or contacting URC at returnrequest@universalremote.com. To obtain warranty service, end user must deliver the URC equipment, freight prepaid, in its original packaging or packaging affording adequate protection to URC at 37 Ramland Road, Unit 104, Orangeburg, NY 10962. It is end user's responsibility to backup any macro programming, artwork, software or other materials that may have been programmed into the unit. It is likely that such data, software, or other materials will be lost during service and URC will not be responsible for any such damage or loss. A dated purchase receipt, bill of sale, installation contract or other verifiable proof of purchase is required. For the URC equipment support and other important information, please visit URC's website available at www.universalremote.com or call the Customer Service Center at (914) 835-4484.

This limited warranty only covers the URC equipment issues caused by defects in material or workmanship during ordinary consumer use. It does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, third-party installation, misuse, limitations of technology, or modification of or to any part of the URC equipment. This limited warranty does not cover the URC equipment sold as used, as is, refurbished, so called "B stock" or consumables (such as

batteries). This limited warranty is invalid if the factory applied serial number has been altered or removed from the URC equipment. This limited warranty specifically excludes the URC equipment sold by unauthorized resellers.

With the exception of URC's IR-only, broad-based consumer remotes, none of URC's PC programmable remotes or any of our Total Control® whole-house equipment are authorized for online internet sales. Buying URC's PC programmable remotes or any of our Total Control® whole-house equipment online means buying equipment that does not have URC's limited warranty. Such equipment is not eligible for URC tech support or software support, either.

2. URC's LIMITATIONS OF LIABILITY

IN NO EVENT SHALL URC BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND OR LOSS OF PROFITS OR BUSINESS OPPORTUNITY, EVEN IF URC IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IN NO EVENT SHALL URC BE LIABLE FOR LOSS OF OR DAMAGE TO DATA, COMPUTER SYSTEMS OR COMPUTER PROGRAMS.

URC'S LIABILITY, IF ANY, FOR DIRECT DAMAGES OF ANY FORM SHALL BE LIMITED TO ACTUAL DAMAGES, NOT IN EXCESS OF AMOUNTS PAID BY END USER FOR THE URC EQUIPMENT.

IN NO EVENT SHALL URC BE LIABLE FOR ANY EVENTS BEYOND ITS CONTROL, INCLUDING ANY INSTANCE OF FORCE MAJEURE.

IN NO EVENT SHALL URC BE LIABLE FOR THE ACTS OR OMISSIONS OF END USER OR ANY THIRD PARTY.

THE LIMITATIONS OF LIABILITY MAY NOT APPLY TO END USER IN WHOLE OR IN PART, WHERE SUCH ARE RESTRICTED LIMITED OR EXCLUDED BY

APPLICABLE LAW AND SUCH SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW.

URC SHALL NOT BE HELD RESPONSIBLE FOR THE STATEMENTS MADE BY OTHERS.

SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO END USER. THIS LIMITED WARRANTY GIVES END USER SPECIFIC LEGAL RIGHTS AND END USER MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.

End User Agreement:

The terms and conditions of the End User Agreement are available at www.universalremote.com/eua.php shall apply.

Importer & Manufacturer:

● **Importer:**

Universal Remote Control, Inc.
500 Mamaroneck Ave
Harrison, New York 10528

● **Manufacturer:**

Summit Technology Inc.
612, 130, Digital-ro, Geumcheon-gu, Seoul, Republic of Korea

Federal Communication Commission Interference Statement:

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 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 manufacturer could void the user's authority to operate the equipment.

Note: The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC Caution:

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communication Commission (FCC) Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Declaration of Conformity:

Company Name : Summit Technology, Inc

Company Address : 130, Digital-ro, Namsung Plaza
Suite 611, Geumcheon-gu, Seoul, Korea

Contact Information : Phone: (+82)-2-6929-3161

Product Name : Z-Wave Gateway

Model Name : TRF-ZW10

This product herewith complies with the requirements of Radio equipment Directive (2014/53/EU) issued by the Commission of the European Community Compliance with these directives implies conformity to the following European Community.

Date of Issue: : _____

Name an signature of authorized person : _____
General Product Manager
Summit Technology, Inc

- Radio Equipment Directive
 - EN 62368-1 (2014) + A11 (2017)
 - EN 62479 (2010)
 - ETSI EN 301 489-1 V2.1.1 (2016)
- Test Report No.:
 - ETSI EN 301 489-17 V3.1.1 (2016)
 - ETSI EN 300 328 V2.1.1 (2016)
- Radio:
- EMC:
- Health:
- Safety

List of test reports and/or certificate verified compliance with the standards above

- Radio equipment Directive
 - Certificate No. :
 - Certificate Body : TUV
Rhineland