



APPENDIX H
: USER'S MANUAL

TRF-UZ1 Z Extender Owner's Manual



TRF-UZ1 Z Extender Owner's Manual © 2012 Universal Remote Control, Inc.

The information in this manual is copyright protected. No part of this manual may be copied or reproduced in any form without prior written consent from Universal Remote Control, Inc.

UNIVERSAL REMOTE CONTROL, INC. SHALL NOT BE LIABLE FOR OPERATIONAL, TECHNICAL OR EDITORIAL ERRORS/OMISSIONS MADE IN THIS MANUAL.

The information in this manual may be subject to change without prior notice.

URC - Control the Experience is a registered trademark of Universal Remote Control, Inc.

All other brand or product names are trademarks or registered trademarks of their respective companies or organizations.



500 Mamaroneck Avenue, Harrison, NY 10528
Phone: (914) 835-4484 Fax: (914) 835-4532

| | |
|--|----------|
| Congratulations! | 1 |
| Features and Benefits | 1 |
| Parts Guide | 1 |
| TRF-UZ1 Panel Descriptions | 2 |
| Specifications | 3 |
| USA Limited Warranty Statement | 4 |
| Federal Communication Commission Interference Statement | 6 |
| Regulatory Information to the user | 7 |
| Delaration of Conformity | 8 |

Congratulations!

Thank you for purchasing the Total Control TRF-UZ1 Z Extender for use with an MRX Advanced Network System Controller. This device allows for optimal placement of the system's RF antenna, allowing for more robust coverage in all corners of the home or small office space. Designed to work on URC's 2.4GHz wireless network, this compact device works with other devices that use the same network protocol, like the MRX-10 Controller, TRC-780 Remote and the THZ-100 Thermostat.

Features and Benefits

- **Replaces the internal antenna on the MRX-10 to allow for optimal placement and communication, through the wired network, between devices operating on URC's 2.4GHz network.**

Using the optional TRF-UZ1 Z disables the internal antenna on the MRX-10 and uses its own internal antenna as the new "point of origin" for the RF signal. This feature provides an abundance of placement options, minimizes the need for ZR series repeaters, and ensures a robust signal to auxiliary devices.

- **Adds a 2.4GHz network antenna to the MRX-20 Advanced Network System Controller**

Without an included 2.4GHz antenna, the MRX-20 requires the use of the TRF-UZ1 Z to enable communication, over the 2.4GHz network, to compatible devices (TRC-780, THZ-100, etc.). Using this external antenna allows for optimal placement in the home or small office space.

- **Compact design for easy installation**

Easily and discretely install the TRF-GE1 Extender. Maintain your home decor while controlling your Total Control MRX Advanced Network System Controller.

Parts Guide

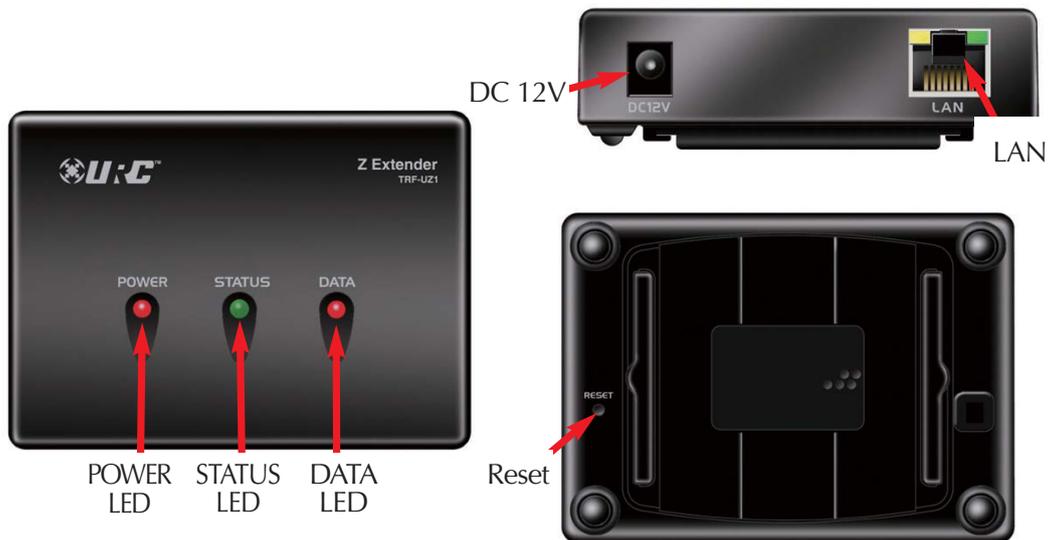
The TRF-UZ1 Z Extender includes:

1 - TRF-UZ1 Z Extender

1 - Owner's Manual

TRF-UZ1 Panel Descriptions

The front, rear and bottom panel consists of:



Power LED: When illuminated this light indicates the TRF-UZ1 is ON.

Status LED: The **Status LED** signifies when the TRF-UZ1 is connected to the network:

- **Connected:** Illuminates **green**.
- **Not Connected:** Remains OFF.
- **Pairing:** Illuminates **orange**.

Data LED: The **Data LED** flashes as the TRF-UZ1 receives and transmits data.

DC 12V (1A): Plug in the included AC/DC adapter to power up the TRF-UZ1.

LAN: Communicate over the network to an MRX-10/20 using an Ethernet cable.

Reset: Pressing the **Reset** button, with a stylus or paper clip, refreshes the TRF-UZ1. Unplugging and re-plugging the power cable also resets the unit.

Pressing and holding the **Reset** button for 10 seconds, factory defaults the TRF-UZ1 and places the unit back to its original factory condition.

Specifications

Microprocessor: ARM32-bit Cortex- M3(120MHz)

Power Supply: 12V DC 1A

RAM: 128Mbyte Mobile DDR

RF Range(radio frequency): 50 to 100 feet, depending upon the environment

RF Frequency: 2.405~2.480 GHz

NAND: 128Mbyte

FLASH: 768Kbytes

SRAM: 128 + 4 Kbyte

Weight: 3.058 oz

Size: 3.74" X 2.7" X 1.1"

Power: 12V DC 1A

USA Limited Warranty Statement

Your Universal Remote Control, when delivered to you in new condition, is warranted against defects in materials or workmanship as follows:

UNIVERSAL REMOTE CONTROL, INC. warrants this product against defects in material or workmanship for a period of one (1) year and as set forth below. Universal Remote Control will, at its sole option, repair the product using new or comparable rebuilt parts, or exchange the product for a comparable new or rebuilt product. **In the event of a defect, these are your exclusive remedies.**

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty.

To obtain warranty service, you must deliver the product, freight prepaid, in its original packaging or packaging affording adequate protection to Universal Remote Control at the address provided in the Owner's Manual. **It is your responsibility to backup any macro programming, artwork, software or other materials that may have been programmed into your unit. It is likely that such data, software, or other materials will be lost during service and Universal Remote Control 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 product support and other important information visit Universal Remote Control's website: <http://www.UniversalRemote.com> or call the Customer Service Center (914) 835-4484.

This Limited Warranty only covers product 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 Universal Remote Control product. This Limited Warranty does not cover Universal Remote Control products 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 product. This Limited Warranty is valid only in the United States of America. **This Limited Warranty specifically excludes products sold by unauthorized resellers.**

LIMITATION OF REMEDIES

UNIVERSAL REMOTE CONTROL SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY OR CONDITION ON THIS PRODUCT. IN NO EVENT SHALL UNIVERSAL REMOTE CONTROL BE LIABLE, WHETHER IN CONTRACT OR IN TORT (INCLUDING NEGLIGENCE) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, ACCESSORY OR SOFTWARE, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, SOFTWARE OR APPLICATIONS OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS, ACCESSORIES OR SOFTWARE TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THERE IS NO OTHER WARRANTY EXPRESSED OR IMPLIED. UNIVERSAL REMOTE CONTROL WILL NOT BE HELD RESPONSIBLE FOR STATEMENTS MADE BY OTHERS CONCERNING THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT. 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 you. This Limited Warranty gives you specific legal rights and you may have other rights which vary from state to state or jurisdiction to jurisdiction.

REV020708

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.

Federal Communication Commission (FCC) Radiation Exposure Statement

The device and the antenna for this device must be installed to ensure a minimum separation distance of 20 cm more from a person's body. Other operating configurations should be avoided.

Regulatory Information to the user

■ CE conformity Notice

Products with "CE" marking comply with the R&TTE Directive 1995/5/EC, EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EEC issued by the commission of the European Community.

1) R&TTE Directive

- Safety : EN 60950-1
- EMC : ETSI EN 301 489-1,17
- RF : ETSI EN 300 328

2) EMC Directive

- Emission : EN 55022
- Immunity : EN 55024
- Power : EN-61000-3-2, 3

3) Low Voltage Directive

- Product safety : EN 60950-1

■ Safety instruction for charging internal rechargeable battery of remote control

Use only with EN60950-1 approved as Limited power source and double insulation() marked power adaptor & same ratings described on the product label(12V DC 1A).

■ Declaration of Conformity

"Hereby, Universal Remote Control Inc. declares that this TRF-UZ1 is in compliance with the Essential requirements and other relevant provisions of Directive 1999/5/EC."



| | |
|---------------------|-----------------|
| Certification | CE 2200 |
| Type No.(Model No.) | TRF-UZ1 |
| Batch/Serial No. | - |
| Power Rating | 12V DC 1A |
| Frequency band | 2.405~2.480 GHz |

Declaration of Conformity

Company Name : Universal Remote Control Inc.
 Company Address : 500 Mamaroneck Avenue, Harrison, NY 10528, U.S.A
www.universalremote.com
 Contact Information : Phone: (914)835-4484 Fax: (914)835-4532
 Brand Name : UNIVERSAL remote control
 Product Name : BASE STATION
 Model Name : TRF-UZ1

This product herewith complies with the requirements of EMC Directive (2004/108/EC) and R&TTE Directive(1995/5/EC) issued by the Commission of the European Community

Compliance with these directives implies conformity to the following European Community

- EMC Directive
 - EN 55022
 - EN 55024
 - EN 61000-3-2
 - EN 61000-3-3
- R&TTE Directive
 - EN 60950-1
 - ETSI EN 301-489-1, 17
 - ETSI EN 300 328
- Low Voltage Directive
 - EN 60950-1

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

- EMC Directive
 - Report No.
 - Testing Laboratory : Gumi College EMC Center
- R&TTE Directive
 - Certificate No.
 - Certificate Body : SIEMIC (No. 2200)

Date of issue : March 16, 2012

Name and signature of authorized person : James Novak
 Senior Product Manager
 Universal Remote Control Inc.



Declaration of Conformity

Code of Federal Regulations (CFR) 47, Part 2.906

MODEL NAME: TRF-UZ1
TRADE NAME: UNIVERSAL Remote Control
RESPONSIBLE PARTY: Universal Remote Control Inc.
ADDRESS: 500Mamaroneck Avenue, Harrison, NY 10528, U.S.A
CONTACT PERSON: James Novak
TELEPHONE NUMBER: (914)835-4484

Equipment Class : Computing device peripheral
EUT Type : Base Station
Rule Part(s) : FCC Part 15 subpart B
Test Procedure(s) : ANSI C63.4 (2009)

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 operating.

We hereby declare that this device bearing the trade name and model specified above has been shown to be in compliance with the applicable FCC rules under the most accurate measurement standards possible, and that all the necessary steps have been taken and are in force to assure that production units of the same equipment will continue to comply with the commission's requirement

Date of issue : _____

Name and signature of authorized person : _____

James Novak
Universal Remote Control Inc.

Duties of the Responsible Party

The responsible party upon signing or accepting the Declaration of Conformity as specified in Section 2.906 of the FCC Rules hereby agrees to the duties listed below:

§ 2.1073(a).

The responsible party warrants that each unit of equipment marketed under DoC is identical to the unit tested and found acceptable with the standards; and that the records maintained by the responsible party continue to reflect the equipment being produced are within the variation that can be expected due to quantity production and testing on a statistical basis.

§ 2.1073(b).

The responsible party must have a written statement from the manufacturer or accredited test laboratory that the equipment complies with the appropriate technical standards.

§ 2.1073(c).

In case of transfer of control of equipment, as in the case of sale or merger, the new responsible party shall bear the responsibility of continued compliance of the equipment.

§ 2.1073(d).

Equipment shall be retested if any modifications or changes are made that could adversely affect the emanation characteristics of the equipment.

§ 2.1073(e).

If any modifications or changes made by anyone other than the responsible party, the party making the modifications or changes, if located within the U.S., becomes the new responsible party. The new responsible party must comply with all provisions for the DoC, including having test data on files demonstrating that the product continues to comply with all of the applicable technical standards.

§ 2.1075(a)(1).

The responsible party shall maintain records of the original design drawings and specifications and all changes made to the product that may affect compliance.

§ 2.1075(a)(2).

The responsible party shall maintain records of the procedures used for production inspection and testing to insure the conformance with the FCC Rules.

§ 2.946(a)(1).

The test report data shall be provided to the FCC within 14 days of delivery of request. The test sample(s) shall be provided within 60 days of delivery of request.

§ 2.946(b).

In cases involving harmful interference of safety of life or property, the production sample must be provided within 60 days, but not less than 14 days. Failure to comply with such a request with the time frame shown may be cause for forfeiture, pursuant to Section 1.80 of Part 1 of the FCC Rules.



500 Mamaroneck Avenue, Harrison, NY 10528

Phone: (914) 835-4484 Fax: (914) 835-4532

www.universalremote.com



OCE-0132B Rev 01