: GETEC-C1-13-112 : GETEC-E3-13-029

# APPENDIX G

: USER'S MANUAL

**EUT Type: Network Base Station** FCC ID.: OZ5URCMRX2

# MRX-2 Owner's Manual Network Base Station





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Introduction	1	
Features and Benefits	2	
Parts Guide		
Front and Rear Panel Descriptions		
Network Installation	6	
Specifications	7	
USA Limited Warranty Statement	8	
Federal Communication Commission Interference Statement	10	
Declaration of Conformity	11	

# Introduction

The MRX-2 Network Base Station allows for control of your components by sending infrared and serial commands to your system. This base station can be used with either a Total Control or a Complete Control system.

### When used in a Total Control System:

Expand zones throughout the home or commercial space by installing multiple MRX-2's.

Control equipment such as shades and TV lifts using the base stations sensors, relays and RS-232 ports.

Control URC RF Lighting using the optional RFTX-1 transmitter.

# When used in a Complete Control System:

The MRX-2 is required to use the CC Control App for iOS devices, like the iPad and iPhone.

Extend control to other rooms by installing multiple MRX-2's throughout the home or commercial space.

The MRX-2 offers traditional IR only control from compatible URC MX series remotes via an optional RFX-250.

# **Features and Benefits**

### When used in a Total Control System:

**Expand Control:** Add an MRX-2 to a Total Control system to expand control to other rooms/areas in the home or office. Components located out of reach from the MRX Advanced Network System Controller may be controlled via IR, RS-232 or Relays by using an MRX-2 to expand the scope of a Total Control system.

**Lighting Control:** By connecting an optional RFTX-1 RF Transmitter, take control of your URC lighting (within range). Control a specific light, a whole room or even the entire home from any remote control or iOS device.

#### When used in a Complete Control System:

**Enables iOS Control**: The addition of an MRX-2 base station to a control system, allows for control via URC's CC Control iOS app for iPads, iPhones and iPod touch. Each iDevice requires programming by a qualified custom install professional. *Note: Requires the purchase of CC Control Setup code (one code per system).* 

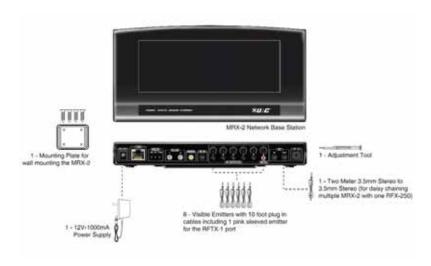
**No Aiming:** Using a base station results in flawless control of your components without having to aim the remote! The signal travels to the base station via RF or Wi-Fi and is then converted back to infrared before being sent to the device being controlled; perfect for hidden components.

Note: An optional RFX-250 Antenna is required for use with URC remote controls.

# **Parts Guide**

The MRX-2 Network Base Station includes:

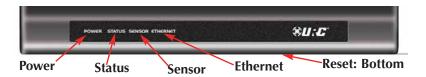
- 1 MRX-2 Network Base Station
- 1 12V-1000mA Power Supply
- 6 Visible Emitters with 10 foot plug in cables including 1 pink sleeved emitter for the RFTX-1 port
- 1 Two Meter 3.5mm Stereo to 3.5mm Stereo (for daisy chaining multiple MRX-2 with one RFX-250)
- 1 Adjustment Tool
- 1 Mounting Plate for wall mounting the MRX-2



# **Front and Rear Panel Descriptions**

## **Front**

The front panel consists of 4 indicator lights which will illuminate when in use.

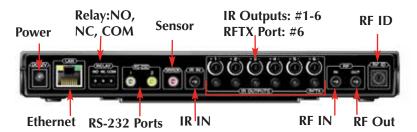


**Power:** Illuminates when the power supply is connected to an outlet. **Status:** Flashes blue when an RF or Network signal is received. **Sensor:** Illuminates to indicate when the sensor is activated. **Ethernet:** Illuminates when connected to an active network. **Reset:** Press the **Reset** button located under the MRX-2 to restart the

unit.

#### Rear

The rear panel ports are:



**Power:** Uses the included 12V/1Amp power supply.

LAN: Plug an ethernet cable (RJ45) to the LAN(Local Area network).

Relay NO, NC, COM: Configurable switch closure control.

RS-232 Ports: Two RS232 ports provide direct control.

**Sensor:** Connect with one of URC's or compatible third party, sensors.

**IR IN:** Allows MRX-2 control from a base station such as a MRF-260. Note: *IR Routing is lost from commands received from this input.* 

**IR Outputs:** Connect emitters for IR control of connected devices.

**RFTX Port:** Dual port #6 for the RFTX-1 connecting cable or included sleeved IR emitter.

**RF IN:** Connects to an optional single RFX-250 (Only for MX series products.)

**RF Out:** Used for daisy chaining MRX-2s for RF Operation (Refer to the RFX-250 manual.)

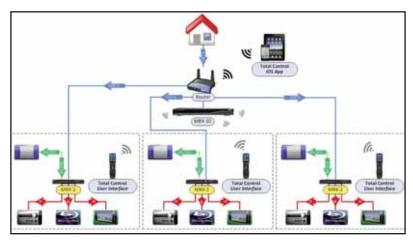
**RF ID:** 15 unique RF ID's provide RF control and routing to multiple MRX-2's in the same home.

Note: DO NOT USE RF ID #0, as it is the interference "sniffer", used to detect RF interference in the area.

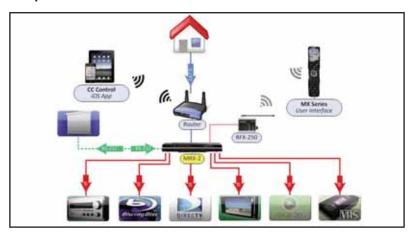
# **Network Installation**

The MRX-2 can be installed in either a Total Control or a Complete Control System. Connect the **Ethernet cable (RJ45)** to the rear of the MRX-2 and the other end to the **active network**.

## **Total Control Install**



# Complete Control Install



## MRX-2 Network Base Station

# **Specifications**

Network: One 10/100 Ethernet port

**Relay:** One relay configurable to be NO, NC or Momentary **Sensor:** One sensor supports Video or Voltage sensing via URC

sensors.

**RS-232:** Two RS-232 ports support TX, RX and GND two way communication via URC cables.

**IR:** Six adjustable IR ports enable the included URC emitters to control IR devices Note: 6th IR Output requires the included sleeved emitter (identified by a pink connector), since it can optionally be used to connect an RFTX-1

Weight: 8.4 oz.

**Size:** 248 x 120mm x28mm

Power: 12V External Power Supply

# **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: <a href="http://www.UniversalRemote.com">http://www.UniversalRemote.com</a> 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.** 

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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.

# **Declaration of Conformity**

Company Name : OH SUNG ELECTRONICS CO., LTD.

Company Address : #181 GONG DAN-DONG, GUMI, GYEONG BUK,

REPUBLIC OF KOREA

Contact Information : Phone: +82-54-468-7281, Fax: +82-54-461-8368

Brand Name : UNIVERSAL remote control
Product Name : Network Base Station

Model Name : MRX-2

This product herewith complies with the requirements of EMC Directive (2004/108/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

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

- EMC Directive
  - Report No.
  - Testi ng Labora tory : Gumi College EMC Center

Date of issue : January 30, 2013

Name and signature of authorized person : James N

Senior Product Manager Universal Remote Control Inc.



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