

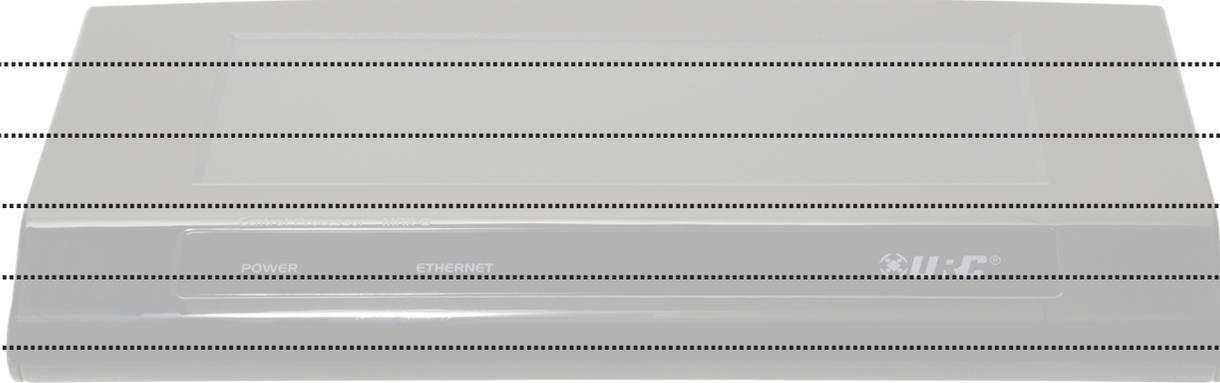


**MRX-8  
OWNER'S MANUAL**



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### Technical Support

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Hours: 9:00am - 5:00pm EST M-F

### Introduction

The MRX-8 Advanced Network System Controller controls is designed to meet the needs of large residential or small commercial environments.

Only **Total Control** software, products, and user interfaces are supported by this powerful device.

### Features and Benefits

- **Stores and issues commands** for all IP, IR, RS-232, Relays, Sensors, and 12V Triggers controlled devices.
- Provides **two-way communication** with **Total Control** user interfaces. (remotes and keypads).
- Easy rack-mounting via the included **rack mounting ears**.

### Parts List

The MRX-8 Advanced Network Controller includes:

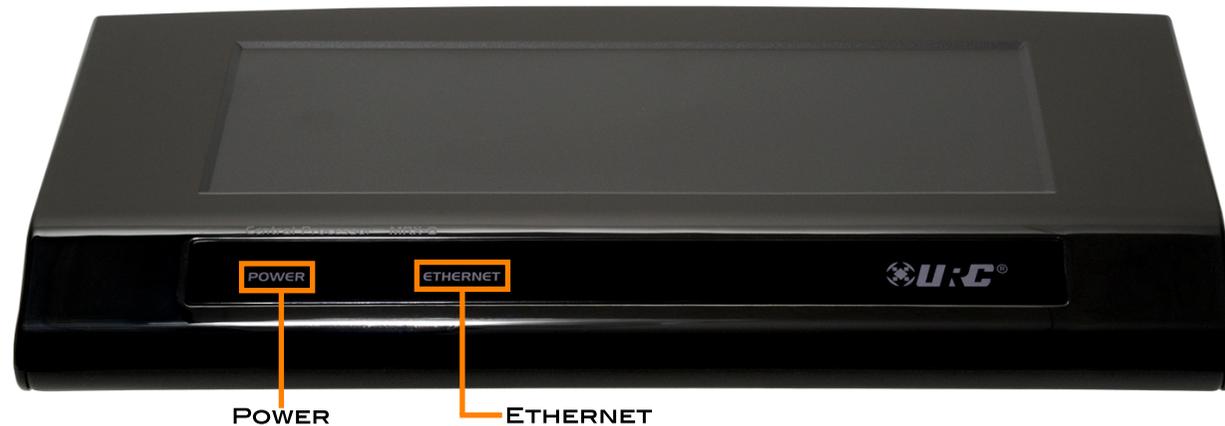
- 1x MRX-8 System Controller
- 1x Power Cord
- 1x Adjustment Tool
- 1x Ethernet Cable
- 5x IR Emitters 3.5mm (standard)
- Sleeved Emitter for RFTX-1 port
- Wall Mount and 4x Screws



### Front Panel Description

The front panel consist of two (2) indicator lights that illuminate during usage:

1. **Power:** Indicates that the MRX-8 is powered when illuminated.
2. **Ethernet:** When the device has a valid Ethernet connection the indicator light remains a solid blue.



### Rear Panel Description

Below are the rear panel ports:

1. **Power:** Attach the included power supply here.
2. **LAN:** RJ45 10/100/1000 Ethernet port.
3. **Relay:** A programmable relay at NO, NC, or COM.
4. **RS232:** Two (2) RS-232 ports. Supports TX, RX, and GND connections for wired two-way communication.
5. **Sensors:** Two (2) sensor ports that allow the programming of state dependent and triggered macros. Compatible with all URC sensors.
6. **IR Outputs:** Six (6) standard 3.5mm IR emitter ports with individual output level adjustment screws.
7. **RFTX-1:** Attach an optional RFTX-1 transmitter to control URC Lighting products via 418MHz or 433.92MHz wireless RF.
8. **Reset:** Press once to power cycle the device. Press and hold for 15 seconds to factory default the device.



# TOTAL CONTROL

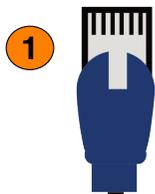
## Installing the MRX-8

The MRX-8 Advanced Network System Controller can be installed almost anywhere in the home.

Once physically installed, it requires **programming by a certified URC integrator** in order to operate local equipment using IP (Network), RS-232 (Serial), IR (Infrared), or relays. All cables must be connected to their respective ports at the rear of the device.

### Network Installation

1. Connect an **Ethernet cable (RJ45)** to the rear of the MRX-8 and the onto an available LAN port of the network's local router (Luxul preferred).
2. A certified URC integrator is **required** for this step, configure the MRX-8 to a DHCP/MAC reservation within the local router.



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# TOTAL CONTROL

## Connecting IR Emitters

IR emitters are used to communicate to AV devices such as cable boxes, televisions, blu-ray players and more.

1. Plug IR emitters (six (6) supplied in the box) into any of the six (6) IR outputs available on the rear of the MRX-8.

All IR outputs include an adjustable sensitivity dial. Turn this dial to the right to increase the gain and to the left to decrease it.

2. Remove the **adhesive covering from the emitter** and place it over the **IR receiver** of the 3rd party device (cable box, television, etc.).



# TOTAL CONTROL

## Connecting RS-232 (Serial)

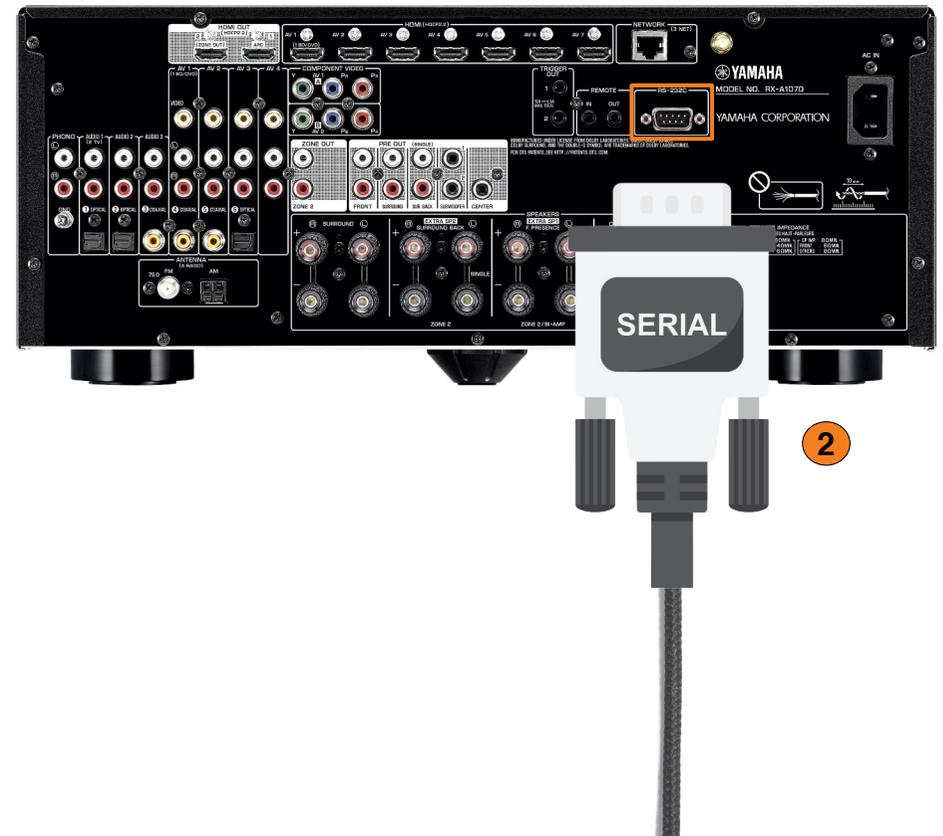
The MRX-8 can operate equipment via RS-232 communication. This allows discrete serial commands to be triggered from the Total Control system.

Connect RS-232 device using URC's proprietary RS-232 cables. These use either male or female DB-9 connections with standard pin-outs.

1. Connect the **3.5mm** into the **RS-232 Output** available on the MRX-8.
2. Connect the Serial connection onto the **available port** on the 3rd party device, such as AVRs, Televisions, Matrix Switchers, and other devices.



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# TOTAL CONTROL

## Specifications

**Network:** One 10/100 RJ45 port (Indicator 2 LED)

**Weight:** 10.5oz

**Size:** 9.76" X 4.72" X 1.10"

**Power:** 12V External Power Supply

**12V/.2A:** Two (Programmable)

**IR Outputs:** Six adjustable outputs

**RS-232:** Two, supporting TX, RX, and GND

**Sensors:** Two, supporting Video or Voltage sensing (requires URC sensors)

**Relays:** One relay configurable to be NO, NC or Momentary



## Limited Warranty Statement

<https://www.urc-automation.com/legal/warranty-statement/>

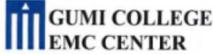
## End User Agreement

The terms and conditions of the End User Agreement available at <https://www.urc-automation.com/legal/end-user-agreement/> shall apply.

## 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.



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## TEST REPORT

Order Number	: GETEC-C1-14-179
Test Report Number	: GETEC-E2-14-018
Type of Equipment	: CENTRAL PROCESSOR
Model Name	: CP-2
Trade Name	: UNIVERSAL Remote Control
Applicant	: OHSUNG ELECTRONICS CO., LTD.
Applicant Address	: #335-4 Sanho-Daero, Gumi-si, Gyeongbuk, Republic of Korea
Serial Number	: Prototype
Date of Incoming	: Apr 16, 2014
Date of Issue	: May 08, 2014

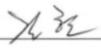
### SUMMARY

This device has been verified to comply with the requirement of following regulation. (EMC directive 2004/108/EC)

- EN 55022 (2010) class B	- EN 55024 (2010)
- EN 61000-3-2 (2006) + A1 (2009) + A2 (2009)	- EN 61000-3-3 (2013)
- AS/NZS CISPR 22 (2009) + A1(2010)	

This test report only contains the result of a specific sample supplied for the examination.  
It is not a generally valid assessment of the features of the respective products of the mass-production.

This test report consists of 28 pages.  
It is not allowed to copy this report even partly without the approval of EMC center.

Tested by: 

Hyun, Kim / Associate Engineer  
GUMI COLLEGE EMC CENTER

Approved by: 

Jae-Hoon Jeong / Technical Manager  
GUMI COLLEGE EMC CENTER

GETEC-QP-28-005 (Rev.01)

EMC CENTER

### **Warning!**

The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

### **Regulatory Information to the User**

- CE conformity Notice Products with "CE" marking comply EMC Directive 2014/30/EU issued by the commission of the European Community.

#### 1. EMC Directive

- Emission
- Immunity
- Power

- Declaration of Conformity

"Hereby, Universal Remote Control Inc. declares that this MRX-8 is in compliance with the Essential requirements."