



# MRX-30 OWNER'S MANUAL



### Table of Contents

Introduction .....	1
Front Panel Description .....	2
Rear Panel Description .....	3
Installing the MRX-30 .....	4
Network Installation.....	4
Connecting IR Emitters.....	5
Connecting RS-232 (Serial).....	6
Specifications .....	7
Limited Warranty Statement.....	7



### Technical Support

Toll Free: 800-904-0800

Main: 914-835-4484

[techsupport@urc-automation.com](mailto:techsupport@urc-automation.com)

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

# TOTAL CONTROL

## Introduction

The MRX-30 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.

This device is **not compatible** with Total Control 1.0 legacy products.

## 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-30 Advanced Network Controller includes:

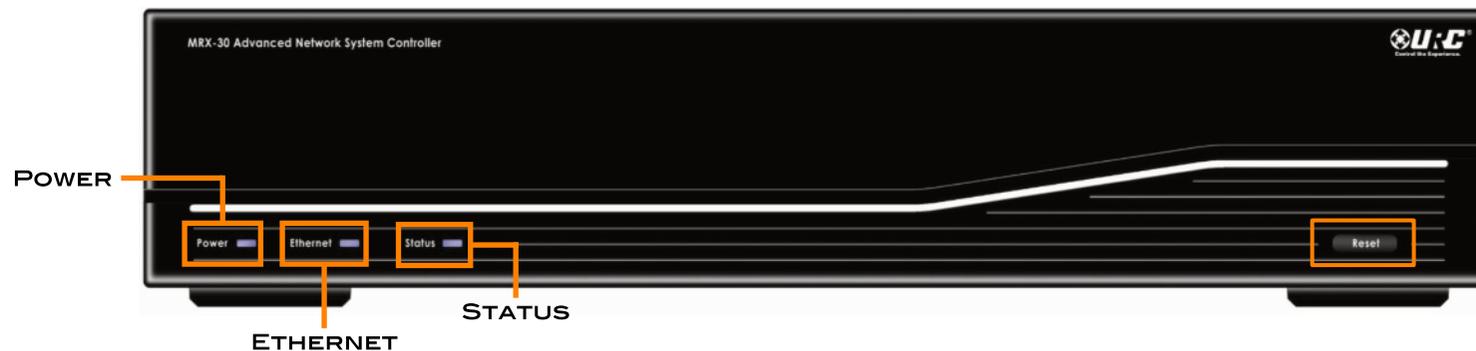
- |                               |                                    |
|-------------------------------|------------------------------------|
| • 1x MRX-30 System Controller | • 1x Adjustment Tool               |
| • 1x AC Power Adapter         | • 1x Ethernet Cable                |
| • 1x Power Cord               | • 12x IR Emitters 3.5mm (standard) |



### Front Panel Description

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

1. **Power:** Indicates that the MRX-30 is powered when illuminated.
2. **Ethernet:** When the device has valid Ethernet connection, the indicator light remains a solid blue.
3. **Status Light:** Two (2) possible states:
  - **Status Light On:** Connected to LAN and internet.
  - **Status Light Off:** Connected to LAN, no internet or Ethernet cable has been unplugged.
4. **Reset:** Press once to power cycle the device.

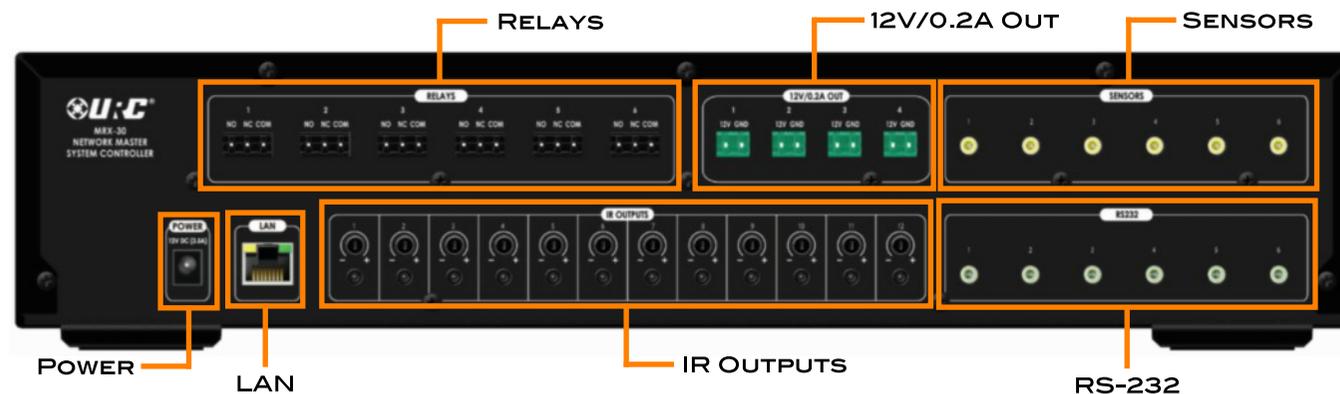


# TOTAL CONTROL

## Rear Panel Description

Below are the ports located at the rear of the MRX-30:

1. **Relays (NO, NC, or COM):** Six (6) programmable relays.
2. **12V OUT:** Four (4) programmable outputs. Each port may be programmed to turn on, off, or momentarily toggle.
3. **Sensors:** Six (6) programmable sensor ports, compatible with all URC sensors.
4. **Power:** Attach the included power supply here.
5. **LAN:** RJ45 10/100/1000 Ethernet port.
6. **IR Outputs:** 12 standard 3.5mm IR emitter ports with variable output level adjustment screws
7. **RS-232:** Six (6) RS-232 serial ports (TX, RX, and GND) for wired one-way or two-way communication.



# TOTAL CONTROL

## Installing the MRX-30

The MRX-30 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-30 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-30 to a DHCP/MAC reservation within the local router.



2



# 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 (twelve (12) supplied in the box) into any of the twelve (12) IR outputs available on the rear of the MRX-30.

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.).


**1**

**2**


# TOTAL CONTROL

## Connecting RS-232 (Serial)

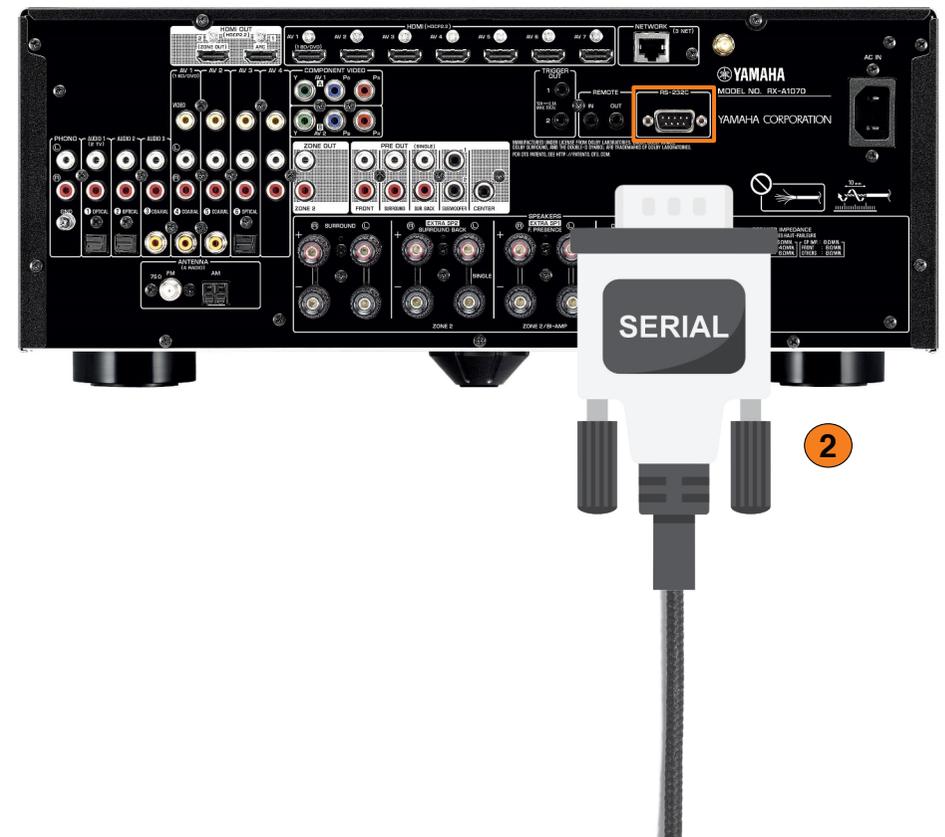
The MRX-30 can operate equipment via RS-232 communication. This allows discrete serial commands to be triggered from the Total Control system.

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-30.
2. Connect the Serial connection onto the **available port** on the 3rd party device, such as AVRs, Televisions, Matrix Switchers, and other devices.



1



2

# TOTAL CONTROL

## Specifications

**Network:** One 10/100/1000M RJ45 Ethernet port (two LED indicators)

**Weight:** 99.15 oz

**Size:** 16.92" (W) x 3.7" (H) x 8.66" (D)

**Power:** DC 12V/3.3A

**12V/.2A:** Four (programmable)

**IR Outputs:** 12 Standard 3.5mm IR emitter ports (variable)

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

**Sensors:** Six programmable sensor ports



## Limited Warranty Statement

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

## End User Agreement

The terms and conditions of the End User Agreement available at <https://www.urb-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.


Page: 1 / 25

### TEST REPORT

Order Number	: GETEC-C1-18-065
Test Report Number	: GETEC-E2-18-011
Type of Equipment	: BASE STATION
Model Name	: MRX-30
Applicant	: OHSUNG ELECTRONICS CO., LTD.
Applicant Address	: #181 Gongdan-dong, Gumi-si, Gyeongsangbuk-do, Republic of Korea
Serial Number	: Prototype
Date of Incoming	: January 29, 2018
Date of Issue	: February 20, 2018

#### SUMMARY

This device has been verified to comply with the requirement of following regulation.

- EN 55032 (2015)	- EN 55024 (2010) + A1 (2015)
- AS/NZS CISPR 32 (2015)	- EN 61000-3-2 (2014)
- EN 61000-3-3 (2013)	

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 25 pages.  
It is not allowed to copy this report even partly without the approval of EMC center.

This test report should not be used to claim quality endorsement by KOLAS.  
The test results in this report are traceable to the national or intentional standard.

Tested by: Soon Hoon

Soon-Hoon Jeong / Senior Engineer  
GUMI UNIVERSITY EMC CENTER

Approved by: [Signature]

Hyung-Seop Kim / Technical Manager  
GUMI UNIVERSITY EMC CENTER

GETEC-QP-28-005 (Rev.03)
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-30 is in compliance with the Essential requirements."