MRX-12
OWNER'S MANUAL

Total Control™

Table of Contents

Technical Support
Toll Free: 800-904-0800
Main: 914-835-4484
techsupport@urc-automation.com
Hours: 9:00am - 5:00pm EST M-F

Rev 1.2

Introduction

The MRX-12 Advanced Network System Controller 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-12 Advanced Network Controller includes:

- 1x MRX-12 Advanced Network System Controller
- 1x AC Power Adapter
- 1x Power Cord
- 1x Adjustment Tool
- 6x IR Emitters 3.5mm (Standard)
- 2x Rack Ears

Front Panel Descriptions

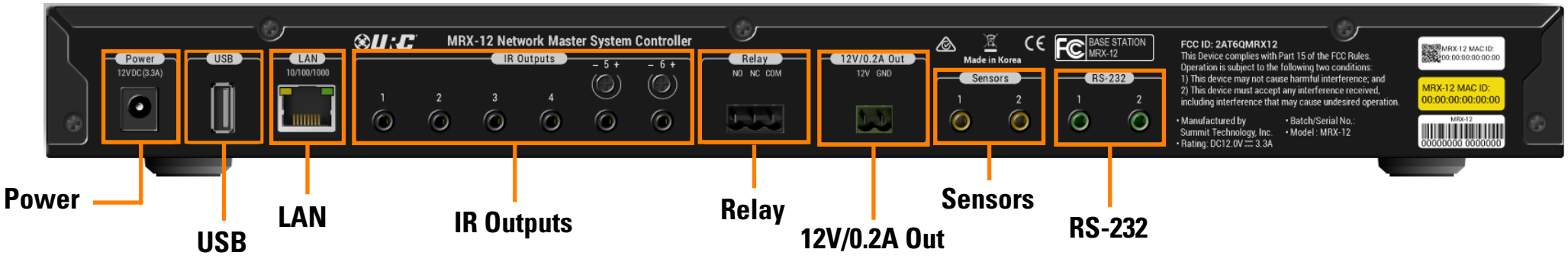
The front panel consist of two (2) indicator lights that illuminate during usage:

1. **Power:** Indicates that the MRX-12 is powered when illuminated.
2. **Ethernet:** When the device has a valid Ethernet connection the indicator light remains a solid blue.
3. **Reset:** Press once to power cycle the device.

Rear Panel Description

Below are the rear panel ports:

1. **Power:** Attach the included power supply here.
2. **USB:** For future expansion.
3. **LAN:** RJ45 10/100/1000 Ethernet port.
4. **IR Outputs:** Six (6) standard 3.5mm IR emitter ports with two output level adjustment screws for outputs five (5) and six (6).
5. **Relay:** Single programmable relay at NO, NC, or COM.
6. **12V Out:** Single programmable output. May be programmed to turn on, off, or momentarily toggle.
7. **Sensors:** Two (2) sensor ports that allow the programming of state dependent and triggered macros. Compatible with all URC sensors.
8. **RS232:** Two (2) RS-232 ports. Supports TX, RX, and GND connections for wired two-way communication.



Installing the MRX-12

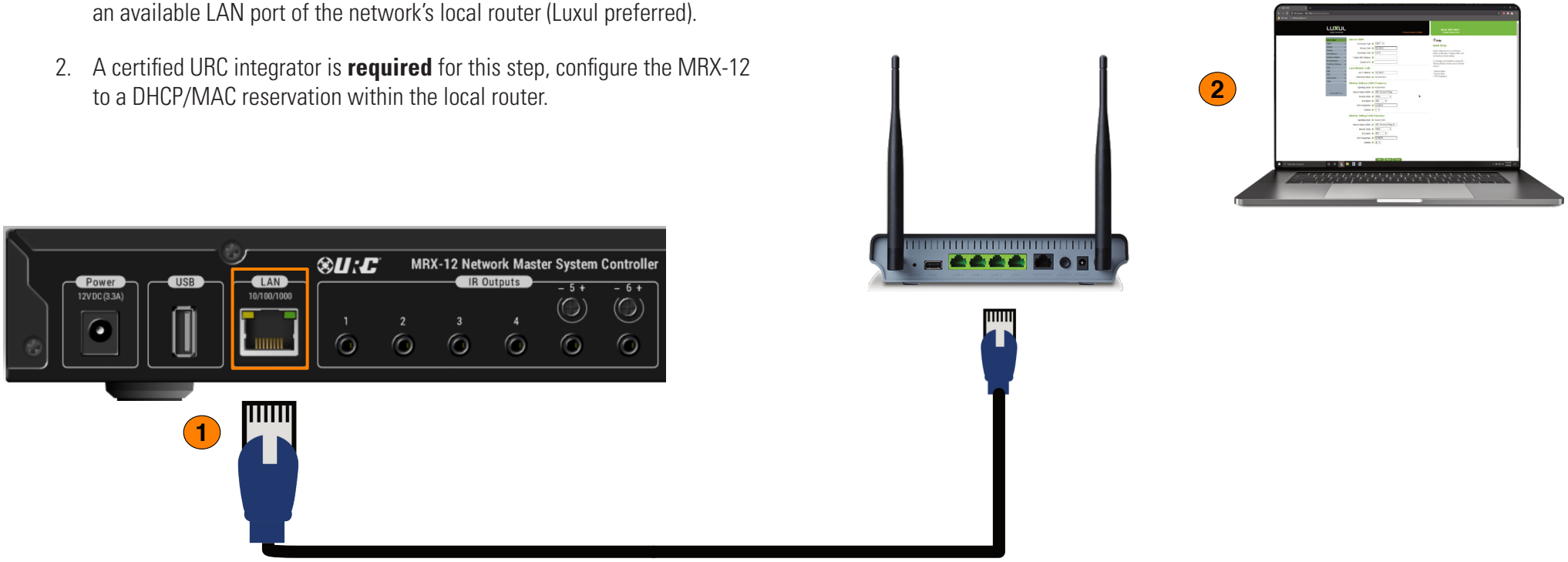
The MRX-12 Advanced Network System Controller can be installed almost anywhere in the home.

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-12 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-12 to a DHCP/MAC reservation within the local router.



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-12.

   IR Output **5** and **6** include an adjustable sensitivity dial. Turn this dial to the right to increase the gain and to the left to decrease it.

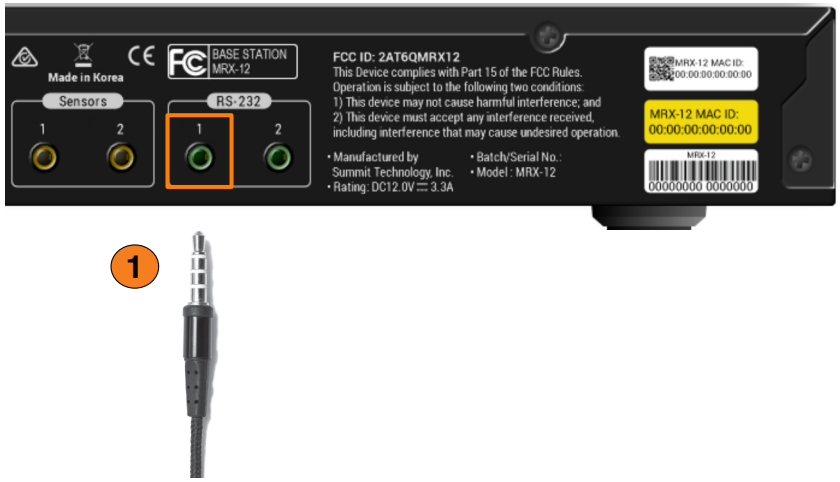
2. Remove the **adhesive covering from the emitter** and place it over the **IR receiver** of the 3rd party device (cable box, television, etc.).

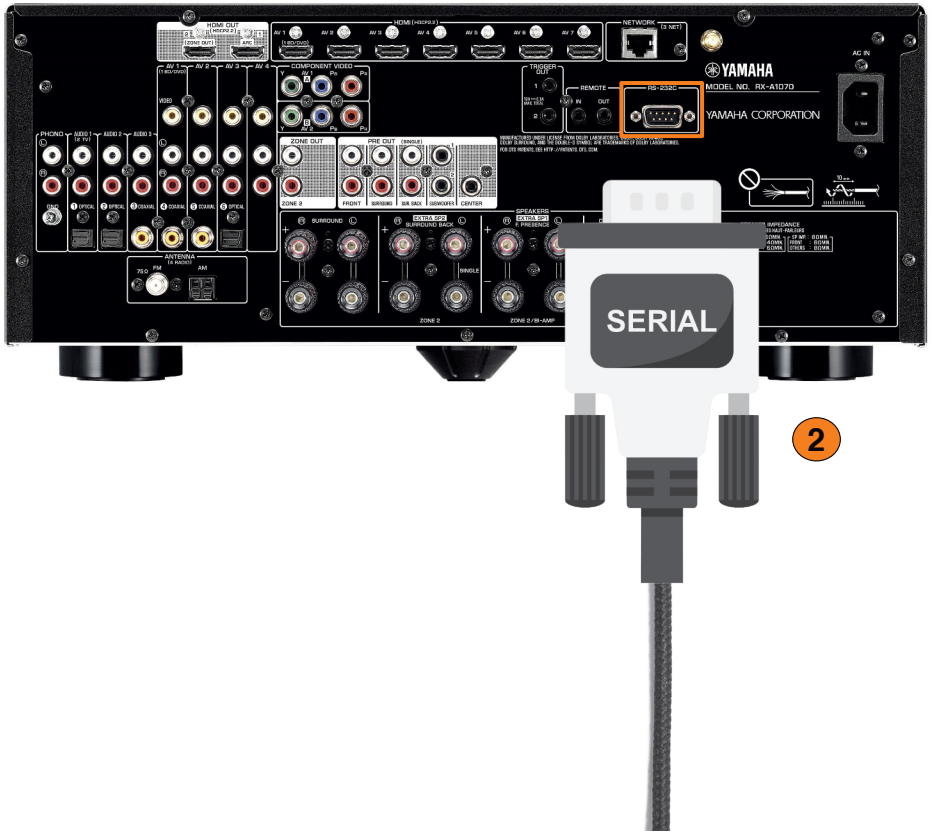
Connecting RS-232 (Serial)

The MRX-12 can operate equipment via RS-232 communication. The 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-12.
2. Connect the Serial connection onto the **available port** on the 3rd party device, such as AVRs, Televisions, Matrix Switchers, and other devices.





Specifications

Microprocessor: ARM Cortex-A5 Processor 536MHz

Memory: eMMC 4GB

RAM: SDRAM 1GB x2

Network: RJ45 10/100/1000 (Shielded LAN cable is recommended)

USB: USB 2.0 A Type Plug

IR Outputs: Six (6) standard 3.5mm IR emitter ports

Relay: 3-pin Terminal

DC Out: 12V/0.2A 2-pin Terminal

Sensor: Two (2) programmable sensor ports

RS-232: Two (2) programmable sensor ports

Power: 12.0V 3.3A

Operating Temp: 0-40 ℃

Size: 140 x 433 x 48mm (with feet) / 140 x 433 x 43.5mm (without feet)

Weight: 1370g

Limited Warranty Statement

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

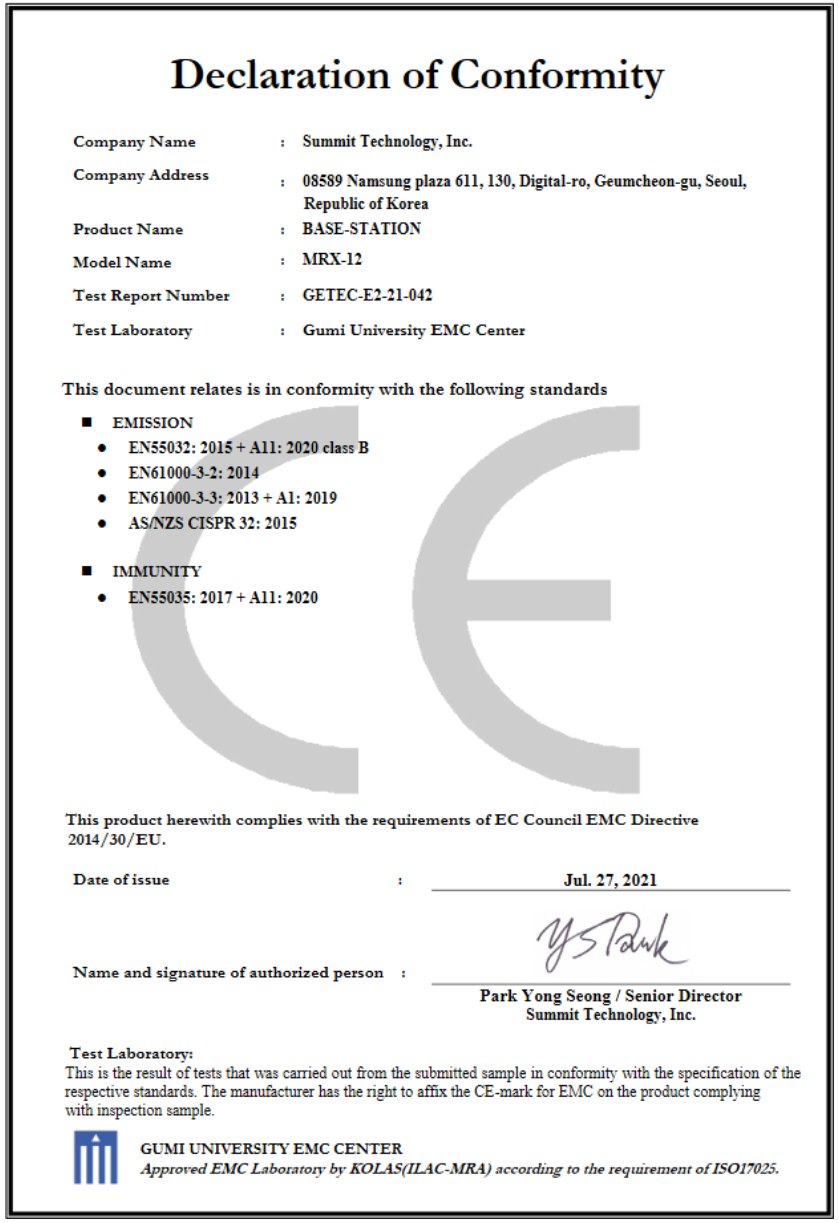
End User Agreement

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.



Declaration of Conformity

Company Name	:	Summit Technology, Inc.
Company Address	:	08589 Namsung plaza 611, 130, Digital-ro, Geumcheon-gu, Seoul, Republic of Korea
Product Name	:	BASE-STATION
Model Name	:	MRX-12
Test Report Number	:	GETEC-E2-21-042
Test Laboratory	:	Gumi University EMC Center

This document relates is in conformity with the following standards

- EMISSION
  - EN55032: 2015 + A11: 2020 class B
  - EN61000-3-2: 2014
  - EN61000-3-3: 2013 + A1: 2019
  - AS/NZS CISPR 32: 2015
- IMMUNITY
  - EN55035: 2017 + A11: 2020

This product herewith complies with the requirements of EC Council EMC Directive 2014/30/EU.

Date of issue : Jul. 27, 2021

Name and signature of authorized person :

Park Yong Seong / Senior Director
Summit Technology, Inc.

Test Laboratory:
This is the result of tests that was carried out from the submitted sample in conformity with the specification of the respective standards. The manufacturer has the right to affix the CE-mark for EMC on the product complying with inspection sample.

GUMI UNIVERSITY EMC CENTER
Approved EMC Laboratory by KOLAS(ILAC-MRA) according to the requirement of ISO17025.

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-12 is in compliance with the Essential requirements."