Test Report No.: GETEC-E3-08-029

FCC Part 15 Subpart C

# APPENDIX I

: USER'S MANUAL

# Operating Your System With the MX-450



This remote control was Custom Programmed for you by:
For questions about your Custom Programming call:
Custom Programming of a complex home theater and/or a multi-room system is one of the most challenging tasks within an audio/video instal-

Only a Complete Control dealer has the requisite experience and training to quickly and effectively customize a remote control for true automated operation.

lation. It involves an intimate knowledge of how the components interact

and exact details on the proper sequences of control.

Congratulations on your choice!

MX-450 Owners Manual © 2008 Universal Remote Control, Inc. Front Cover Photo courtesy of Robert Ridenour of Connected Technologies, www.connected-technologies.com

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.

Complete Control is a registered trademark of Universal Remote Control, Inc. Entertainment Made Simple is a trademark of Universal Remote Control, Inc.

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

Printed in Korea



Universal Remote Control, Inc. 500 Mamaroneck Avenue, Harrison, NY 10528 Phone: (914) 835-4484 Fax: (914) 835-4532

#### TABLE OF CONTENTS

1
1
2
3
4
5
6
7
8
8

## **Congratulations!**

You've purchased a unique synthesis of hardware and software engineering, the Complete Control MX-450. The MX-450 achieves a magnificent combination of power and flexibility, simplifying and automating operation of even the most complex system.

#### **User Configurable Screen and Button Lighting**

A built in pick up sensor can be set to light the screen and/or the buttons automatically. Additionally, a dedicated LIGHT button enables the user to backlight the buttons if the pick up sensor is turned off.

#### **Fast Professional Setup**

The MX-450 sets up quickly via on screen setup. Your installer simply configures the remote for you using the MX-450 and his/her intimate knowledge of how your system is configured and operated to completely automate all operation and replace all of your remote controls with the MX-450.

#### **Backlit Color LCD Screen Buttons**

When you pick up the MX-450, it automatically lights up the color LCD screen which labels the six buttons to either side of the screeen. These button labels change based on what you are watching or listening to. Thus, if you have selected Watch TV, you will see a list of buttons that are useful to that activity, while if you select Watch DVD, the buttons will control the DVD.



#### **LIGHT Button**

Press the Light button on the side of the MX-450 to back-light all of the buttons.

# Optional RF "No Rules" Operation

In combination with a Complete Control RF Base Station, the MX-450 can control your system without being in line-of-sight of the equipment.

To preserve good operation always utilize a Narrow Band RF Base Station with RF Addressing. RF Addressing gives you the ability to control equipment locations throughout your home, even if they are concealed in other rooms or are behind closed doors.



ponents out of sight of the MRF-350's Front Blaster. The flashers plug in to the MRF-350's rear flasher line outputs via their 10 foot cables. Uniquely, the MRF-350 can also connect to components with rear panel IR Inputs

via its adjustable IR Line Outputs.

## **Replacing the Batteries**

Open the battery cover by pressing the release and pulling back the cover on the back of the control. Remove the cover.

Observe the + and - polarity indications inside the battery compartment.

Place the four AA batteries into their positions in the battery compartment observing the + and - polarity indicators on the batteries.

Now, replace the battery cover by inserting the hinged end in first, then snapping the cover back into place.

## **Programming the MX-450**

The MX-450 is programmed via on screen setup menus. Simply press and hold the MAIN button for 3 seconds to view the menus.

However, to fully automate an audio/video system the programmer must have a detailed knowledge of each component and how the system is connected and operated. We highly recommend that you use a professional audio/video installer to program your MX-450 so you will be able to enjoy all the benefits of the MX-450.

# Selecting a New "Activity"

The MX-450's MAIN button displays the activities you can control with your MX-450. When you want to watch something else (a DVD movie, a videotape or an HDTV broadcast), simply press the MAIN button and select the new activity.

Your installer will have programmed the button you pressed to totally configure your system to watch or listen to whatever you selected. Now, the screen will change, and all of the LCD buttons will be reconfigured to give you full control of your system while watching or listening to your selection!

When you press the MAIN button, you can see the most frequently used activities you have for listening in your system.



#### PAGE DISPLAY

At the bottom of the LCD screen, the page display informs you if there are other pages of buttons available.



Press either of the PAGE buttons to see any other available choices.

# Using the MX-450 to Control an "Activity"

SKIP

Once you've selected a new activity, the MX-450 displays the title of the activity at the top of the screen. Below the title, the LCD displays the customized names of any special features you need for the activity. All the hard buttons of the MX-450 have now changed to functions optimized for this activity.

OILL

MODE

ANGLE

The Title displays what activity you can control.

Press either of the PAGE buttons to see any other available choices.

The Volume and Mute buttons always control the sound regardless of what screen is displayed.

The transport buttons (Play, Stop, Skip-, Skip+, FF, REW and Pause) operate when the selected activity requires them (for example, if you watch CABLETV with a TiVo type of DVR, these buttons will control the built-in DVR, while if you are watching a DVD, these buttons will control the DVD player).

The LCD button labels describe special features for this activity.

The Channel and Previous Channel buttons will change channels when you have selected an activity like Watch CABLETV or Watch SAT TV.

The 4 way cursor buttons enable you to navigate on screen guides and menus with ease.

The Number keypad will enter numbers for the activity you've selected. Thus, for watching Cable TV, you use the number keypad to enter channel numbers, while when listening to CD, the number keypad enters track numbers.

MX-450

ENT

# **EUSA 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.UniversalRemoteControl.com or call the Universal Remote Control Customer Service Center (914) 835-4484.

This Limited Warranty only covers product issues caused by defects in material or work-manship 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.

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. 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.

# **Specifications**

Microprocessor - ARM 7

LCD Screen - 2" TFT Color LCD (176 x 220 Pixels)

Memory - 32 Megabits of Flash Memory

Total Customization Capability - Up to 18 devices on 3 Main pages with up to 8 pages for each device; plus up to eight pages of favorite channels for a total of 155 pages.

Learning Capability - Standard frequencies (15kHz to 460kHz)

Macro Capability - Up to 255 steps each

IR Range (Line of Sight via Infrared): 30-50 feet, depending on the environment RF Range (radio frequency): 50 to 100 feet, depending upon the environment RF Frequency: 418MHz

Weight: 6.9 ounces (with battery loaded)

Size: 8" H x 2.25" W x 1.25" D Batteries: Four AA Batteries (included)

Battery Life: 18 Hours of continuous button pressing with backlighting and LCD ON (months of use for most users). Users should expect some variation based on the brand of batteries used.

Note: In actual use, the MX-450 protects itself if it gets stuck between couch cushions (with a button being continuously pressed). After 30 seconds the MX-450 will turn off, and will not turn on again until the button is released.

#### **Contact Us**

Need assistance or have questions? Our Customer Service Support Center is here to help. Call (914) 835-4484 to speak with a customer service representative or email us at techsupport@universalremote.com

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

www.universalremote.com

#### **Information To The User**

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:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. 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..



(\*\*) Universal Remote Control®

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