

**Home Theater Master®
LCD Screen
Preprogrammed and Learning
Remote Control**



**MX-600™
Operating
Manual**

Table of Contents

1. Introduction	3
2. Batteries	5
A. Battery Installation	
B. Battery Life	
3. Summary of Operations	6
A. Description of Devices	
B. Preprogrammed Codes	
C. Learning From Other Remote Controls	
D. Macro Operations	
E. Favorite Channel Buttons	
F. Punch Through Operations	
G. Editing LCD Text	
H. Cloning The MX-600™	
I. All Other Operations	
J. LCD Screen And Button Layout	
K. System Settings	
4. Programming the MX-600™ to Control Your Components	12
A. Using Preprogrammed Codes	
1. Three-Digit Code Number	
2. Auto Scan With Three-Digit Number	
B. Learning Method	
1. Programming The Function Buttons	
2. Programming The Ten Device Buttons	
5. Programming Favorite Channels	24
6. Programming Macro Buttons	26
A. Programming Macro Functions To M1, M2, M3, POWER and SYSTEM OFF Buttons	
B. Programming Macro Functions To The Ten Device Buttons	
7. Programming Punch Through Functions	32
8. Erasing Existing Programming	34
A. Erasing Learned Buttons	
B. Erasing Favorite Channel Buttons	



Table of Contents

C. Erasing Macro Functions	
1. Erase M1, M2, M3, POWER and SYSTEM OFF Buttons	
2. Erase Macro Functions In The Ten Device Buttons	
D. Erasing Punch Through Functions	
9. LCD Button Editing	39
A. To Create or Edit Text on Function and Device Buttons	
B. To Create or Edit Text for Favorite Channel Buttons	
10. Recalling the Preprogrammed Three-Digit Number	41
11. Setting Backlight	42
12. Cloning MX-600™	43
13. Adjustment of LCD contrast	44
14. Caution On Handling LCD Screen	45
15. Low Battery Message	45
16. Memory Lock	46
17. Glossary	46
18. Warranty	52
19. Specifications	52
20. Appendix	53
A. List of Preprogrammed LCD Text by Device	
B. Three-Digit Preprogrammed Code Tables	



1. Introduction

Congratulations! You have purchased one of the most sophisticated remote controls on the market. The MX-600™ has been designed to provide a new standard in remote control technology offering a very powerful and flexible preprogrammed and learning product.

Setting up your MX-600™ to operate your components is easy. Please follow the instructions in the manual and retain the manual for future reference. If any words used are unfamiliar to you, please refer to page 46 for a **Glossary** of terms used in this manual.

Your MX-600™ can operate up to ten home entertainment and home automation components by using the preprogrammed code library in the remote control, by teaching up to 530 commands into the MX-600™ from your original remote controls, or a combination of both.

The MX-600™ has many additional operating features to add convenience and enjoyment to the operation of your home entertainment system. You can create your own labels of the buttons on the LCD screen; program 50 favorite channel buttons; operate the volume, channel and transport buttons from one device when you are in another device; and have multiple things done with one press of a button!

1. Introduction

There is also a list of **Frequently Asked Questions (FAQ)** for the MX-600™ on the website that may prove to be helpful. Visit www.hometheatermaster.com for FAQs.

For any questions or comments about the MX-600™, please visit our website, www.hometheatermaster.com or contact us at:

Universal Remote Control, Inc.
500 Mamaroneck Avenue
Harrison, NY 10528
Tel: 914-835-4484

You can also e-mail us at service@urcmx.com.
Regular customer service hours are 9:00 AM to 6:00 PM
EST, Monday – Friday.

2. Batteries

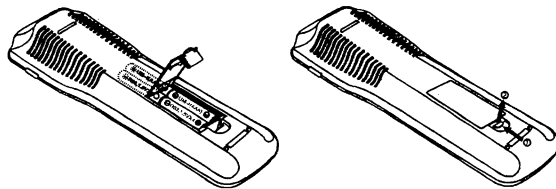
A. Battery Installation

Before the remote control can be used, the batteries need to be installed. First, remove the battery cover on the back of the unit and install the four AAA batteries inside the battery compartment as shown. Make sure the batteries line up with the (+) and (-) markings. Improper installation could damage the remote control. When you're done, slide the battery cover back on. The remote control starts up automatically and the default devices will appear on the LCD screen.

B. Battery Life

Under normal operating conditions, the batteries will last approximately six months. If the batteries are running low, you will notice reduced range from the remote, commands that are not sent properly, or are not sent at all. You may also notice the backlighting of the LCD screen and the buttons is diminished. Should any of these occur, replace the batteries immediately. To ensure proper performance of the unit, use 4 new AAA alkaline batteries.

The remote control will retain the commands and settings in memory even after the batteries are low or become discharged. See Memory Lock on page 46. However, you should replace the worn batteries with a fresh set as soon as possible. Do not mix new and used batteries.



5

3. Summary of Operations

A. Description of Devices

The MX-600™ is designed to operate up to ten components including **Audio Receivers, Cable and Satellite Boxes, TV, DVD (LD), VCR1, VCR2, CD, Tape and AUX.** However, each of the device buttons and corresponding functions can be changed to meet your individual requirements. Almost any device that uses infrared commands can be controlled by the MX-600™, including Home Automation, Personal computers and more.

Tip: The auxiliary function (AUX) could be used to operate lighting controls; or the second VCR (VCR2) could be changed to operate a second TV, etc.

Each device button on the main screen contains two sub-pages of commands and you can change the name of any LCD button using up to five alphabet characters, numbers and symbols to customize the unit to fit your audio/video devices. Please refer to "LCD Button Editing" on page 39 for additional details.

B. Preprogrammed Codes

The MX-600™ comes with extensive preprogrammed IR codes for practically all major audio and video equipment. You can set up and operate all of your components with the MX-600™ by simply entering a three-digit code number assigned to your brand of component. The code numbers for the various brands of components are listed in the back of this instruction manual. Please refer to the programming instructions shown on page 13 for details.

6

3. Summary of Operations

C. Learning From Other Remote Controls

The MX-600™ can learn codes from your original remote controls. There are 26 LCD screens in the MX-600™. Each screen (page) has ten function buttons, including the ten device buttons on the main menu screen that can be taught. In addition, there are 31 buttons and a joystick (thumbpad) that can be taught for each of the ten devices. You can teach up to 530 new functions into the remote control. Please refer to page 19 in this instruction manual for details.

D. Macro Operations

A “macro” is a series of commands that you choose to be sent out with the push of one button. Any function available on your original remote control or in the preprogrammed database can be added to a macro to completely automate what you would normally do by pushing buttons one at a time. It can be as simple as turning on your TV and Cable Box, turning the TV to the appropriate channel for operation with the Cable Box, and changing the Cable Box channel to your favorite morning news. A macro can be configured to Power On your TV, DVD player and receiver, change to the appropriate inputs and outputs, dim your lights and start a movie. It can be as simple or as comprehensive as you want.

There are two types of macro buttons you can use for macro operations:

M1, M2, M3, POWER and SYSTEM OFF Buttons

The M1, M2, and M3 are called “system-wide” buttons because they send out the same signal no matter what device you are currently controlling. The POWER and

3. Summary of Operations

SYSTEM OFF buttons can be made “system-wide” if they are programmed with macros.

(Note: Programming the POWER or SYSTEM OFF buttons with a macro overrides the preprogrammed or learned code on the button.)

See page 26 of this manual for further information. Each of these five buttons is designed to be able to send out a series of up to 20 commands you program into the buttons. One common use is to turn on and turn off all of your A/V components with one button press, but the buttons can be programmed with whatever macro you desire.

Ten Device Buttons

There are ten device buttons and each of these device buttons can send out a series of up to 20 programmed commands when pressed for more than **one second**. These buttons are commonly used in sending audio input codes when you press the button to go to a device. The audio receiver would make an automatic input switch according to the device button you pressed. However, these buttons can be programmed with whatever macro you desire.

E. Favorite Channel Buttons

You can create up to 50 favorite channel buttons in the MX-600™ by programming the most frequently watched channel numbers into these buttons. Each of these buttons can send out up to 10 commands. Please refer to page 24 of the manual for Favorite Channel Programming.

F. Punch Through Operations

The MX-600™ can be set up to operate your audio component volume control buttons (VOLUME UP and DOWN and

3. Summary of Operations

MUTE) while all the other buttons control other equipment. You can also set up the remote to operate channel control and transport functions (PLAY, STOP, REWIND, FAST FORWARD, SKIP-, SKIP+, PAUSE and RECORD buttons) from VCR, DVD, LD, CD or any other mode while all other buttons in the remote control are controlling other components. Please refer to page 32 in the manual for details.

G. Editing LCD Text

You can write your own text on each of the twenty-six LCD screens. Please refer to page 39 in the manual for details.

H. Cloning The MX-600™

The MX-600™ is capable of sending all the programmed codes and operations from one MX-600™ to another MX-600™. Please refer to page 43 in the manual for details.

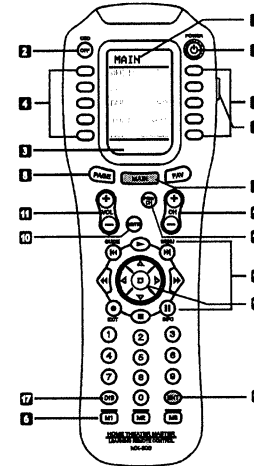
I. All Other Operations

You can set the duration of the backlight on time and change the LCD screen contrast. Please refer to pages 42 and 44 in the manual for additional details.

Note: The last Device selected will remain active when you are on the MAIN page and will be shown at the bottom of the LCD screen. For example, if you are using "TV" and then return to the MAIN page, the hard buttons remain in TV mode. The LCD buttons only change when you select another device.

3. Summary of Operations

J. LCD Screen And Button Layout

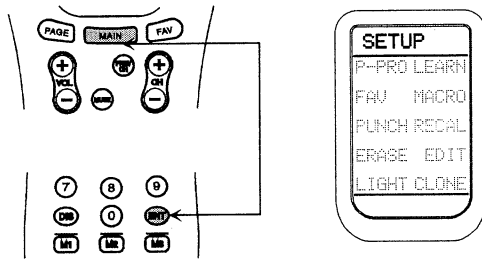


- 1 Displays the name of the device selected.
- 2 System off (Power off)
- 3 Displays page number.
- 4 Displays the device and function names.
- 5 LIGHT button.
- 6 MACRO buttons.
- 7 MAIN DEVICE menu button.
- 8 LCD Page change button.
- 9 POWER
- 10 MUTE
- 11 VOLUME
- 12 CHANNEL
- 13 Previous channel button.
- 14 TRANSPORT functions(PLAY, STOP, REWIND and FF) for VCR, CD and DVD etc.
- 15 JOYSTICK button(UP, DOWN, LEFT, RIGHT and ENTER) to move the cursor and enter the selection by pushing down the joystick in the center. Also called THUMB PAD.
- 16 ENTER
- 17 DISPLAY

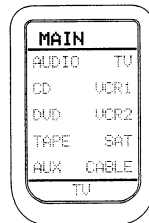
3. Summary of Operations

K. System Settings

All **programming** is done by first entering the **SETUP** mode in the remote control. Press both the **MAIN** and **ENTER** buttons simultaneously for **three seconds** to enter the **SETUP** mode. **SETUP** will be shown at the top of the LCD screen.



You exit the **SETUP** mode by simply pressing the **MAIN** button.



Important: When using the Preprogramming method starting on page 13, always use the appropriate button as shown in the illustration above when asked “FROM TABLE”. You may have already changed the labels of the buttons, but the code tables are in the positions as shown. For example, the **AUDIO** Code Table (refer to pages starting at 58) will **ALWAYS** be the top-left button. The **SAT** Code Table will always be the 4th button down on the right side of the LCD screen, etc.

4. Programming the MX-600™ to Control Your Components

WHERE DO I START?

First of all, get all of your original remote controls together. Find out what brands of components you have. You may have one or more components that do not have original remote controls, but can still be controlled by the **MX-600™**. You must use the preprogrammed method for those devices. For the rest, you can program the **MX-600™** to make it compatible with your components by following the preprogrammed method instructions, by using your original remote controls to teach the **MX-600™**, or both methods.

Next, it is a good idea to decide whether you want a “Device-based” configuration, or if you want an “Activity-based” configuration.

A “Device-based” configuration centers on each Device with its two LCD pages controlling one component. All of the functions that your original remote control has on it would be put on to one device. The **MX-600™** comes with the labels and preprogrammed codes in a “Device-based” setup.

If you go to the “List of Preprogrammed LCD Text by Device” on page 53, you will see diagrams of how the **MX-600™** is set up at the factory. When you choose a preprogrammed code for a component from the “Setup Code Tables” in the Appendix of this manual, that code will be applied to one device only.

An “Activity-based” configuration centers on what you are doing at the time. If you are watching a DVD on your TV, and are using your Home Theater receiver to control the

4. Programming the MX-600™ to Control Your Components

sound, you may want to start by setting up the DVD Device using the preprogrammed method described below, and then add functions from the other devices you will be using while watching your DVD video to the DVD device.

For example, while playing a DVD, you will want to adjust the volume of your receiver. So, you would use the “Punch Through” method described on page 32 to put the Receiver's Volume control into your DVD Device. You may then want to adjust other functions of your Receiver while staying in the DVD device, so you would use the learning method described on page 19 to add those functions to your DVD device, such as surround sound controls, the receiver's DVD input code, the TV's power code, etc. Everything that you need for watching a DVD on your TV without having to jump back and forth from Device to Device.

You can decide where on the MX-600™ you want your functions to reside, relabeling the LCD screen buttons (explained on page 39) for those functions, and choosing preprogramming, learning, or a combination of both to fully customize your MX-600™ will give you a remote totally customized to your needs.

So, let's start with learning how to Preprogram the MX-600™.

A. Using Preprogrammed Codes

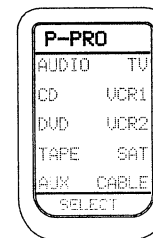
1. Three-Digit Code Number

You can program the MX-600™ to make it compatible with your components by using the preprogrammed method:



4. Programming the MX-600™ to Control Your Components

1. Manually turn on the device you wish to operate.
2. Go to the SETUP mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for **three seconds** until SETUP appears at the top of the LCD screen.
3. Press the **P-PRO** button next to the LCD screen.



4. The remote will be flashing “SELECT BUTTON”. Press the button for the device you wish to program. (For example, to program TV, press the TV button.)
5. The remote will be flashing “FROM TABLE”. Select the device from which you want to access the code table.
Important: If you have already relabeled your device keys, your LCD screen will not look like the illustration above. Select the appropriate LCD button for the “FROM TABLE” using the labels **as shown in the illustration** on page 11 of this manual. For example, if you have relabeled AUX as LIGHTS, you would still push the bottom-left button to access the AUX Code Table.
Note: Use VCR1, not VCR2, to access the VCR code library.
6. The remote will be flashing “ENTER NUMBER”. Refer to the tables starting on page 58 in the back of this manual and find the manufacturer of your device. (If you are programming the remote for the TV device, find the TV device code table.)
7. Point the remote control toward the device and enter the



4. Programming the MX-600™ to Control Your Components

first three-digit code number you selected for your device. There is no way of knowing which code is the one that will have the functions that more closely match your device than the others, so it is wise to try them all. See step #9 below.

(Please enter the code number within 20 seconds of beginning programming, otherwise the remote will revert to the SETUP menu, and then after a period of time, it will go back to the MAIN device page.)

If there is more than one code number assigned to your brand, try one code number at a time until you find the right code number (the number that **turns off** your device.)

If the device turns off when you enter the three-digit code, make note of the code. It will have at least some of the functions in it that are needed to control your device.

8. Confirm that it is the right code by pressing the Power button. The device should turn on. After you have confirmed that the right code is entered, save the code by pressing the **SAVE** button on the LCD.

9. At this point try ALL of the buttons on the remote, and see which ones work with your device. The majority of the buttons should work with your device. Make note of the code if it seems to be the right one, and try the next one. You are trying to find the one that has the most functions to operate your equipment. If there are any functions missing, you will learn them from your original remote in the "Learning Method" section on page 19.

10. Continue to program other components by repeating from Step 1 above.

11. You can press **EXIT** at any time if you do not wish to proceed.

4. Programming the MX-600™ to Control Your Components

12. When you are finished programming your remote, exit from the preprogramming mode by pressing the **MAIN** button and then exit from the SETUP mode by pressing the **MAIN** button once again.

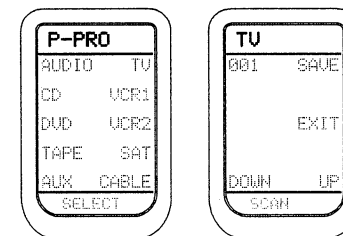
Tip: You can change the preprogrammed code for each device at any time by following the steps above. The new code will override the old code. For example, this would be done if you replaced your old TV with a new one.

Tip: Please note that you use the code table from VCR1 for VCR2 setup. The code table for Laser Disc is stored under DVD. The code table for Tuner is stored under Audio.

2. Auto Scan With Three-Digit Number

You can also program your remote control by sending out a series of Power Off commands for different brands stored in the library by using the following steps. This is similar to the first method, except it is easier to move through all of the device codes for your device and make note of each one that turns your device OFF.

1. Manually turn on the device you plan to operate.
2. Go to the SETUP mode by pressing both the **MAIN** and **ENT** buttons simultaneously for **three seconds**.
3. Press the **P-PRO** button next to the LCD screen.



4. Programming the MX-600™ to Control Your Components

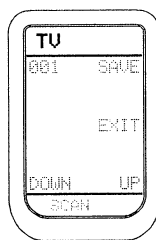
4. The remote will be flashing “SELECT BUTTON”. Press the device you wish to program. (For example, to program TV, press the TV button.)

5. The remote will be flashing “FROM TABLE”. Select the device from which the scanned code will be selected.

(Important: If you have already relabeled your device keys, your LCD screen will not look like the illustration above. Select the appropriate LCD button for the “FROM TABLE” using the labels **as shown in the illustration** on page 11 of this manual. For example, if you have relabeled AUX as LIGHTS, you would still push the bottom-left button to access the AUX Code Table.)

Note: Use VCR1, not VCR2, to access the VCR code library.)

6. Point the remote control toward the component and press either the **UP** or **DOWN** button on the LCD. (It will send out a series of Power Off codes when the button is kept pressed and the code numbers that are being sent are shown on the LCD.) If the right code number is sent, the component will turn off right after the code number is transmitted.



7. Release the **UP** or **DOWN** button you were pressing as soon as the device is turned off. If you should happen to go past the one that turned off your device, just manually turn

4. Programming the MX-600™ to Control Your Components

the device back on, and reverse your **UP** or **DOWN** one press at a time, until the unit turns off. There is no way of knowing which code is the one that will have the functions that more closely match your device than the others, so it is wise to try them all. See #9 below.

(Please press the **UP** or **DOWN** button within 20 seconds of beginning programming, otherwise the remote will revert to the **SETUP** menu, and then after a period of time, it will go back to the **MAIN** device page.)

If there is more than one code number assigned to your brand, try one code number at a time until you find the right code number (the number that **turns off** your device.)

If the device turns off when you enter the three-digit code, make note of the code. It will have at least some of the functions in it that are needed to control your device.

8. Confirm that it is the right code by pressing the Power button. After you have confirmed that the right code is entered, save the code by pressing the **SAVE** button on the LCD.

9. Confirm that you entered the right code number that matches your component by pressing other functional buttons. If any of the buttons do not operate, as they should, please repeat from Step 1.

10. Continue to program other components by repeating from step 1 above.

11. You can press **EXIT** at any time if you do not wish to proceed.

12. Exit from Preprogrammed mode by pressing the **MAIN** button and then exit from the **SETUP** mode by pressing the **MAIN** button once again.

Set-Up Code Table

LD

Manufacturer/Brand	Set-Up Code Number
DENON	206 207
FUNAI	120
KENWOOD	152 013
MAGNAVOX	032 121
MARANTZ	211
MITSUBISHI	121
NAD	121
OPTIMUS	049 013
PANASONIC	113
PHILIPS	032
PIONEER	106 117 121
RADIO SHACK	120
RCA	002
REALISTIC	049
RUNCO	127
SANYO	075
SHARP	152 013
SONY	053 110
TECHNICS	113
THETA DIGITAL	032
TOSHIBA	152 106
YAMAHA	043 129

•Note : These codes are stored in DVD.

Set-Up Code Table

TAPE

Manufacturer/Brand	Set-Up Code Number
AIWA	015 071 100 114
CARVER	006 008 027 024 036
DENON	105 227 229
FISHER	064
GOLDSTAR	011
HARMAN KARDON	233
JVC	106 116 239 240
KENWOOD	005 013 023 026 064 145 146 181 190
LINN	124
LUXMAN	035 137 139
MAGNAVOX	027
MARANTZ	014 027 056 065 087
MCINTOSH	238
MITSUBISHI	242 243
NAD	029 048
NAKAMICHI	244 245 025
ONKYO	002 012 016 017 018 019 115
OPTIMUS	026 054 055
PANASONIC	007 010 032 088 195
PHILIPS	027 087
PIONEER	003 039 047 050 066 098 222
QUASAR	007 088
SANSUI	027 113 119 224
SHARP	026 057 131 175 181
SHERWOOD	038 004 028 030 033 034
SONY	020 022 052 084 089
TEAC	009 059 212
TECHNICS	007 010 076 088 109 122 193
TOSHIBA	112
VICTOR	106
YAMAHA	021 026 031 067 040

Set-Up Code Table

•AUX - Light, Switch, Tivo, etc. AUX

Manufacturer/Brand	Set-Up Code Number
3M	152
AIWA	184
ARCHER	155
AUTON	191
DMX	156
DRAPER SCREEN	204
DWIN	080
EVERQUEST	206
EXTRON	151
FAROUDJA	184
FUJI	209
JERROLD	153
JVC	185
KENWOOD	185
LITE-TOUCH	208
LUTRON	077 158 159
MAKITA	186 201
MINDPATH	205
NILES	160 187
NSM	161
PIANO DISC PLUS	085
PHILIPS	090
POLK AUDIO	162
REPLAY	075
RUSSOUND	081
SCIENTIFIC ATLANTA	156 163
SIMA	082
SOLO ELECTRONICS	207
SOMFY	078 079
SONY	104 164 165 166
STARCOM	153
TURBOSCAN	167
VELODYNE	203
X-10	093 183
XANTECH	168 169 170 171 172 188 189