

APPENDIX I  
: USER'S MANUAL

# Operating Your System With the MX-980i



**COMPLETE  
CONTROL**™

 **Universal Remote Control®**

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 installation. It involves an intimate knowledge of how the components interact and exact details on the proper sequences of control.

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

Congratulations on your choice!

MX-980i Owners Manual © 2007 Universal Remote Control, Inc.  
Front Cover Photo courtesy of Stone Glidden, King of Prussia and Doylestown, PA

[www.stoneglidden.com](http://www.stoneglidden.com)

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## Congratulations!

You've purchased a unique synthesis of hardware and software engineering, the Complete Control MX-980i. The MX-980i achieves a magnificent combination of power and flexibility, simplifying and automating operation of even the most complex system.

### Automatic Backlighting

The integral motion sensor detects any movement of the remote control and automatically backlights the screen. You do not have to press any button to display the screen. Any movement of the MX-980i renews the backlighting.

### Integrated Sound Signaling

The MX-980i incorporates a small speaker for beeps. Anytime you press a button, the MX-980i signals that it has understood your command with a beep sound.

## Using the Color LCD and the Screen Buttons

The MX-980i is equipped with a bright easy to read LCD screen which your installer will customize for your system. The screen labels the eight hard buttons (easy to find by feel) positioned on either side of the screen. Normally, the screen is "split" so each button is allocated to a specific function (as shown on the right). This provides you with the ability to see and operate up to 8 functions on a single screen.

However, your installer can combine two buttons to create a single row that can be accessed by either adjacent button. This simplifies operation for the entire family and enables convenient operation for both left and right-handed users for important functions you use frequently.



## Optional RF "No Rules" Operation

In combination with an MSC-400 Master System Controller, or an RF Base Station, the MX-980i can control your system without being in line-of-sight of the equipment.

The MSC-400 enhances the capabilities of the MX-980i by storing and issuing Smart Macros to your main system components. It is triggered by RF Smart Macro commands via RF (radio frequency). In addition, your MX-980i can control components in secondary rooms and systems via MRF-350i or MRF-260i RF base stations.

1. The MX-980i sends radio waves in every direction, so you don't have to point the remote anymore!



2. The RFX-250i RF Sensor can be freely positioned for optimal reception.

3. The MSC-400 can control IR, RS232 and Relay controlled devices.



4. Self-adhesive "Flashers" affix to the Infrared sensors on the front panels of your components. Uniquely, all Complete Control base stations can also connect to components with rear panel IR Inputs via adjustable IR Line Outputs. The MSC-400 offers RS-232 control via rear panel connections as well.

## Connecting the Battery Pack

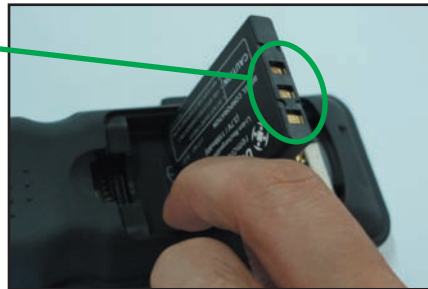
Open the battery cover by depressing the release and pulling back the cover on the back of the control. Remove the cover.



Observe the three contacts for the battery at the bottom left of the battery compartment.



Observe the contacts on the battery



First, angle the battery so that the contacts connect to the contacts inside the battery compartment. Then let the base of the battery pack down. Apply gentle pressure against the spring action of the contacts to fit the battery into place.



Now, replace the battery cover.

## Using the Charging Base

Plug the 5V DC adapter into a power outlet and into the back of the charging base.

Gently place the MX-980i into the cradle of the charging base.

The Status light should immediately light. Red indicates that it is charging. Blue shows that it is fully charged. There is no harm in leaving the MX-980i on its charging base whenever it is not in use. The Lithium Ion battery cannot be overcharged.



The MX-980i on it's Charger.

## Programming the MX-980i

The MX-980i is programmed via a Windows PC equipped with a USB port (programming cable included), using our proprietary software, MX-980i Editor. You could download this software from our website:

[www.universalremote.com](http://www.universalremote.com)

However, although some enthusiasts have learned to use the setup software, to fully automate an audio/video system the user must have a detailed knowledge of how the system is connected and operated. We highly recommend that you use a professional audio/video installer to program your MX-980i so you will be able to enjoy all the benefits of the MX-980i as well as one touch operation via macros.

## Selecting a New “Activity”

The MX-980i’s WATCH and LISTEN buttons display the activities you can control with your MX-980i. When you want to watch something else (a DVD movie, a videotape or an HDTV broadcast), simply press the WATCH button and select the new activity. When you want to listen to the radio or to a CD, touch the LISTEN button and select what you would like to listen to.

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



Press either of the PAGE buttons to see any other available choices. You may have only one page or your system may have several pages of “Listening Activities”.

When you press the WATCH button, you can see the most frequently used activities you have for watching the sources in your system.



Press either of the PAGE buttons to see any other available choices. You may have only one page or your system may have several pages of “Watching Activities”.

## Using the MX-980i to Control an “Activity”

Once you’ve selected a new activity, the MX-980i 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-980i have now changed to functions optimized for this activity.

The Title displays the activity you have selected.

Press either of the PAGE buttons to see any other available choices. You may have only one page or your system may have several pages of special features for this activity.

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

The transport buttons (Play, Stop, Skip-, Skip+ and Pause) operate when the selected activity requires them.



The LCD button labels describe special features for this activity. When there are two functions, you press the corresponding button, when a single function is listed, you can press either the left or the right side button.

The Channel buttons operate when the selected activity requires them.

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

The number buttons operate when the selected activity requires them.

## Displaying the Setup Screens

You can adjust the settings of the MX-980i whenever you like by pressing and holding both the WATCH and the ENTER button at the same time for three seconds. If you do not press any button on the SETUP screen within 30 seconds, the MX-980i will time out and automatically return to normal operation. You can return to normal operation before that by pressing either the WATCH or the LISTEN button.

At the same time, press and hold both the WATCH button and the ENTER button. When the SETUP screen appears, you can release the two buttons.

To adjust one of the settings, press either the left or the right hand button.



## Main Settings Menu



**DISPLAY** - Press this setting button to adjust the screen and button backlighting. The longer your screen is lit, the more frequently you'll need to charge the MX-980i.

**SOUND** - Adjust the volume of the sounds your MX-980i makes when you press buttons.

**SYSTEM** - These settings are for service use. For diagnostic purposes, an installer can turn off the Pick Up sensor, display remaining battery charge and erase all programming permanently. Some of this menu may have been disabled by your installer as a safety measure.

**INFORMATION** - Adjust the time, date or you can display the amount of memory available and the version number of the firmware loaded into your MX-980i.

## Adjusting the Display

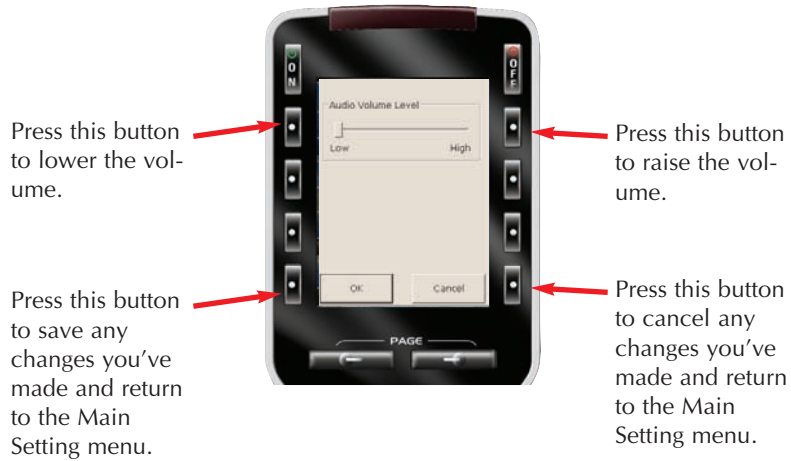


**BACKLIGHT** - Specify how long the MX-980i screen should stay lit after you press a button. You can select two different time out settings. One for when it is hand held, another for when it is in the charging base.

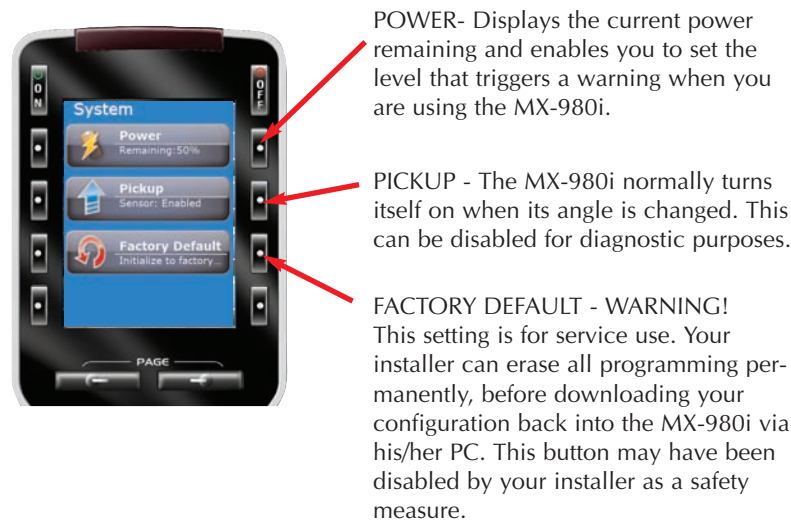
**BRIGHT** - Adjust the brightness of the screen.

**BUTTON LIGHT** - Turn the backlighting for all buttons on or off. When on, all the buttons backlight so that you can read their labels in total darkness.

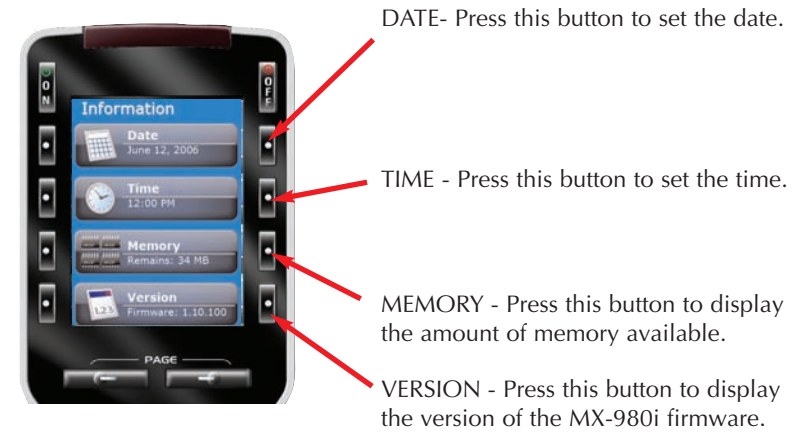
## Sound Volume



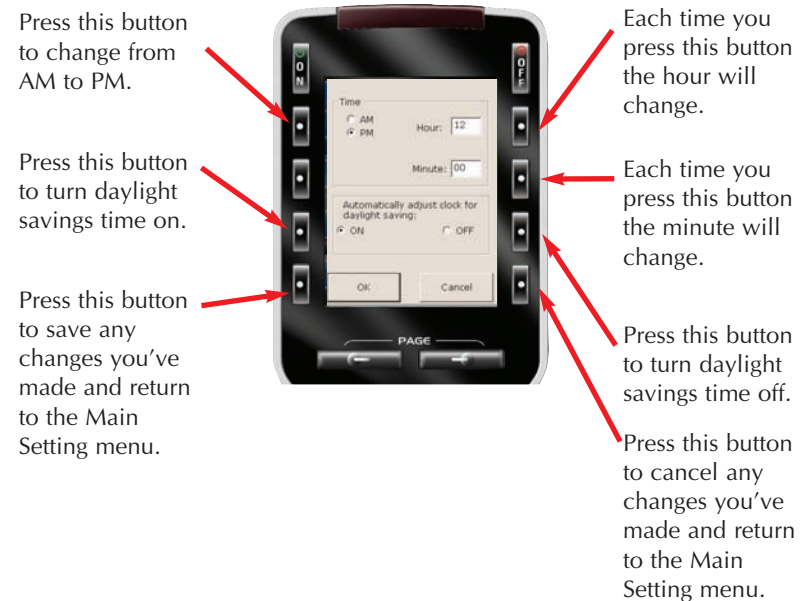
## System Settings Menu



## Information Menu



## Setting Time





## USA 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.UniversalRemote.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 workmanship 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.

## Specifications

Microprocessor: ARM9 32bit 202MHz

LCD - 2.4" TFT (QVGA) 262,144 Colors

Memory - 64 Megabytes of SDRAM & 32 Megabytes of Nand Flash  
Devices - Supports up to 255 Devices with text, less with heavy graphics usage

Pages - Supports up to 255 Pages on each Device with text, less with heavy graphics usage

Learning Capability - Standard frequencies (15kHz to 455kHz)

Macro Capability - Up to 255 steps each, however nesting is allowed

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: 433.92MHz

Batteries: 1070mAh, 3.7 Volt Lithium Ion battery pack included

Battery Life: 120 minutes continuous use, 6000 minutes in standby mode.

Weight: 7 oz. (with battery)

Size: 2.4" x 9.2 x 1"

## Regulatory Information to the user

### ■ FCC Compliance 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 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.

### ■ Caution

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.

### ■ CE conformity Notice

Products with "CE" marking comply with the R&TTE Directive 1995/5/EC, EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EEC issued by the commission of the European Community.

### 1) R&TTE Directive

- Safety : EN 60950-1
- EMC : ETSI EN 301 489-1,3
- RF : ETSI EN 300 220-1,2

### 2) EMC Directive

- Emission : EN 55022
- Immunity : EN 55024
- Power : EN-61000-3-2, 3

### 3) Low Voltage Directive

- Product safety : EN 60950-1

### ■ Safety instruction for charging internal rechargeable battery of remote control Caution

Use only with EN60950-1 approved as Limited power source and double insulation(□) marked power adaptor & same ratings described on the product label (5Vdc, 1.0A).

## Precautions and Information Concerning Rechargeable Lithium-Ion Batteries

- ◆ If you will not be using your remote control for an extended period of time, be sure to remove the battery
- ◆ Do not attempt to disassemble, alter or apply heat to the battery.
- ◆ Use care to avoid dropping the battery or subjecting it to severe impact that could damage the case.
- ◆ The battery should not be immersed in water.
- ◆ Lithium Ion batteries are recyclable. For the address of a recycle drop-off location near you call toll Free 1-800-822-8837 or visit <http://www.rbr.com>





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