



MILLENNIUM™ 4

Universal Remote Control



User's Guide

TABLE OF CONTENTS

Introduction	3
Features And Functions	4
Key Charts	5
Installing Batteries	7
Programming TV Control	8
Setup Codes for TVs	8
Programming VCR Control	12
Setup Codes for VCRs	12
Programming TV/VCR Combo Control	16
Setup Codes for TV/VCRs	17
Programming Cable Converter (or DBS Receiver) Control	18
To Unlock the Cable Key	18
To Program the Cable Key	18
To Lock the Cable Key	19
Setup Codes for Cable Converters	19
Setup Codes for DBS Receivers	20
Programming Channel Control Lock	21
To Activate Channel Control Lock	21
To De-Activate Channel Control Lock	21
Programming Audio Control	22
Setup Codes for CD Players	23
Setup Codes for DVD Players	24
Setup Codes for Stereo Receivers	24
Setup Codes for Stereo Amplifiers	25
Setup Codes for DBS Audio Services	25
Searching For Your Code	26
Checking The Codes	27
Programming The Power Key	28
Programming The Tune-In Keys	29
To Program a Tune-In Key	29
To Clear a Tune-In Key	29
Re-Assigning Device Keys	30
Changing Volume Lock	31
To Change Volume Lock to the CABLE Mode	31
To Change Volume Lock to the TV Mode	31
To Change Volume Lock to the VCR Mode	31
To Change Volume Lock to the AUDIO Mode	32
Troubleshooting	33
Additional Information	34

INTRODUCTION

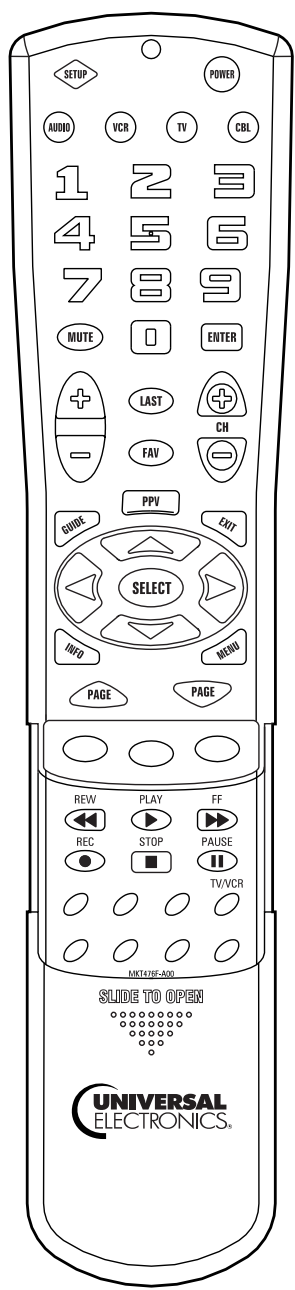
The Universal Electronics Millennium™ 4 is our latest generation universal remote control. It is designed with sophisticated technology that will allow you to finally consolidate the clutter of all of the original remote controls in your home entertainment system. It's packed with easy-to-use features such as:

- Preprogrammed to operate the cable converter supplied by your cable system provider
- Preprogrammed technology for easy setup
- Preprogrammable Power key for master on/off control of all of your equipment with a single keystroke
- Instant "Tune-In" keys for assignment to your favorite channels
- Convenient hide-away sliding door to conceal less-used functions
- Color-coded keys to quickly locate popular functions
- Cable ID Lock to lock your remote control for use only with the cable converter
- Channel Lock to lock channel selection only to the cable converter
- Code library for video and audio components
- Code Search to help program control of older or discontinued components


Before you can use your new remote control, you will need to program it to operate the specific home entertainment components you wish to control. Follow the instructions detailed in this manual to set up your Millennium 4 and enjoy your new remote control.


FEATURES AND FUNCTIONS


Use the illustration below to locate Millennium 4 features and then study the *Key Charts* (on the next two pages) to learn how they function.



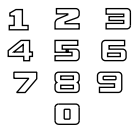
Key Charts

 The LED (red light) blinks to show that the remote control is working and is sending signals.


 Press **AUDIO**, **VCR**, **TV**, or **CBL** once to select a home entertainment component to control.


 Press **POWER** once to turn on or off the selected home entertainment component.


 Use **SETUP** for all programming sequences.


 Use the keypad (**0 ~ 9**) to directly select channels (e.g., 09 or 31).


 Press **MUTE** once to turn sound off or on.


 Press **ENTER** once after entering channel numbers on some TV models.

 Use volume **+** (or volume **-**) to raise (or lower) the sound volume.

 Use **CH +** (or **CH -**) to select the next higher (or lower) channel.

 Press **LAST** once to recall the last channel and to page back one screen in the main menu.

 Use **FAV** to cycle through your favorite channels that are stored in your cable converter.

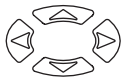
 Use **GUIDE** to display the program guide.

 Press **PPV/LOCK** once to display the pay per view menu or to lock out a specific channel on your cable converter.

 Use **EXIT** to exit out of your cable converter's menu and guide.

continued on next page...

Key Charts (continued)



Use cursor keys to move the cursor in the program guide and menu screens.



Use **SELECT/OK** to choose options, PPV events, and to tune programs from the program guide.



Use **INFO** to display current channel and program information.



Press **MENU** once to display your cable converter's screen menu.



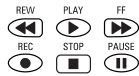
Use **PAGE** Δ (or **PAGE** ∇) to page up (or down) through menu screens and the program guide.



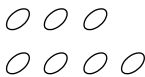
Reserved for use as "Tune-In" keys (see page 29).



Slide the door open to reveal less-often used keys such as VCR transport buttons and cable converter features.



In the **VCR** and **TV** modes, use the **REW**, **PLAY**, **FF**, **REC**, **STOP**, and **PAUSE** keys to control your VCR. To record a program, press **REC** twice.

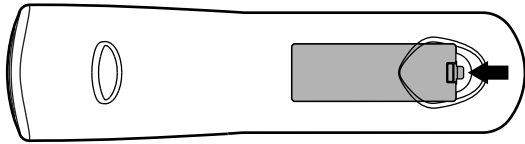


Reserved for cable converter features (see your cable converter manual).

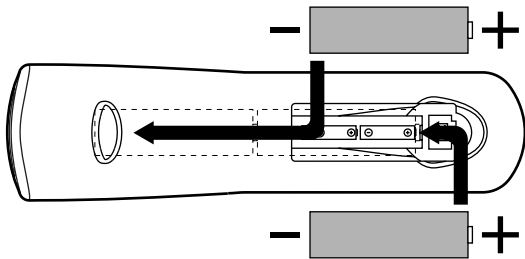


Press **TV/VCR** once to switch the VCR to view TV channels or tape. This key will also control the input select feature on most TVs.

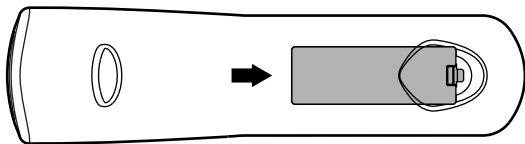
INSTALLING BATTERIES



1



2



3

1. On the back of the Millennium 4, push the tab and lift off the battery cover.
2. Obtain two (2) fully-charged AA alkaline batteries. Match the + and - marks on the batteries to the + and - marks in the battery case, then insert the new batteries.
3. Press the battery cover back into place. The tab should click when the cover is locked.
4. Test the unit by pressing **POWER** and any mode key (e.g. **AUDIO**, **VCR**, **TV**, or **CBL**). If the batteries are inserted correctly, the LED will blink once.

NOTE: Whenever batteries need replacement, the Millennium 4 will blink twice with every key press. Simply replace the batteries and the Millennium 4 will be restored to its full functionality, complete with your favorite settings.



PROGRAMMING TV CONTROL

NOTE: If you own a TV/VCR combination, skip this section and perform "Programming TV/VCR Combo Control" on page 16.


Locate the brand name of your TV in the *Setup Codes For TVs* section below, and write it in the following space.

TV Brand: _____

The brands are listed in alphabetical order with the most popular codes listed first. You will use one of these codes to program the Millennium 4 to operate your TV:

1. Turn on the TV.
2.  On the Millennium 4, press **TV** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Enter the first four-digit code for your TV. If you perform this procedure correctly, the LED will blink twice.

NOTE: If the LED did not blink twice after entering the code's last digit, then repeat steps 2 through 3 and try entering the same code again.

4.  Aim the Millennium 4 at your TV and press **POWER** once. The TV should turn off. If it does not respond, repeat steps 2-3, trying each code for your brand until you find one that works. If it still does not work, try searching for the code (see *Searching For Your Code* on page 26).

5. Write your TV code in the boxes below for future reference.

--	--	--	--

*NOTE: Remember, to use the Millennium 4 to operate your TV, press **TV** first.*

Setup Codes for TVs:

A-Mark	0003
AOC	0030, 0019, 0003, 0052, 0185
Abex	0032
Admiral	0093
Adventura	0046
Aiko	0092
Akai	0030
Alaron	0179
Ambassador	0177

Anam	0180
Anam National	0055
Archer	0003
Audiovox	0451, 0180, 0003, 0092, 0623
Baysonic	0180
Belcor	0019
Bell & Howell	0154, 0016
Bradford	0180
Brockwood	0019
Broksonic	0236, 0463, 0003
CXC	0180
Candle	0030, 0056, 0046, 0186
Carnivale	0030
Carver	0054
Celebrity	0000
Cineral	0451, 0092
Citizen	0060, 0030, 0056, 0039, 0046, 0092, 0186, 0280
Clairtone	0185
Concerto	0056
Contec	0180, 0185
Craig	0180
Crosley	0054
Crown	0180, 0039
Curtis Mathes	0047, 0054, 0154, 0051, 0451, 0093, 0060, 0030, 0145, 0056, 0016, 0039, 0166, 0466
Daewoo	0451, 0019, 0039, 0092, 0623, 0624
Daytron	0019
Denon	0145
Dumont	0017, 0019
Dwin	0720, 0774
Electroband	0000, 0185
Emerson	0154, 0236, 0463, 0180, 0282, 0178, 0019, 0179, 0039, 0038, 0177, 0185, 0280, 0623, 0624
Envision	0030
Fisher	0154, 0159
Fujitsu	0179
Funai	0180, 0179, 0171
Futuretech	0180
GE	0047, 0051, 0451, 0093, 0282, 0178, 0021, 0055, 0027, 0135
Gibraltar	0017, 0030, 0019
GoldStar	0030, 0178, 0019, 0056, 0001, 0032
Gradiente	0053, 0056
Grunpy	0180, 0179
Hallmark	0178
Harley Davidson	0179
Harman/Kardon	0054
Harvard	0180
Hitachi	0145, 0056, 0032, 0038, 0151
Infinity	0054
Inteq	0017
JBL	0054
JCB	0000

continued on next page...

Setup Codes for TVs (continued):

JVC	0053
Janeil	0046
KEC	0180
KTV	0180,0030,0039,0185,0280
Kaypani	0052
Kenwood	0030,0019
Kloss	0024,0046
LG	0056
LXI	0047,0054,0154,0156,0178
Logik	0016
Luxman	0056
MEI	0185
MGA	0150,0030,0178,0019
MTC	0060,0030,0019,0056,0185
Magnavox	0054,0030,0179,0020,0024,0096,0186,0187,0386
Majestic	0016
Marantz	0054,0030
Matsushita	0250
Megatron	0178,0145,0003
Memorex	0154,0250,0150,0178,0056,0016
Midland	0047,0017,0051,0039,0032,0135
Minutz	0021
Mitsubishi	0093,0150,0178,0019
Motorola	0093,0055
Multitech	0180
NAD	0156,0178,0166
NEC	0030,0019,0056,0497
NTC	0092
Nikko	0030,0178,0092
Noshi	0018
Onwa	0180
Optimus	0154,0250,0166
Optonica	0093,0165
Orion	0236,0463,0179
Panasonic	0051,0250,0055
Penney	0047,0156,0051,0060,0030,0178,0021,0019,0018,0056, 0039,0003,0027,0032,0135
Philco	0054,0463,0030,0145,0019,0020,0096
Philips	0054
Pilot	0030,0019,0039
Pioneer	0038,0166
Portland	0019,0039,0092
Prism	0051
Proscan	0047
Proton	0178,0003,0052,0466
Pulsar	0017,0019
Quasar	0051,0250,0165,0055
RCA	0047,0051,0093,0019,0018,0038,0090,0135
Radio Shack	0047,0154,0165,0180,0030,0178,0019,0056,0039,0032
Realistic	0154,0165,0180,0030,0178,0019,0056,0039,0032

Rhapsody	0185
Runco	0017,0030,0497
SSS	0180,0019
Sampo	0030,0039,0032,0052
Samsung	0060,0030,0178,0019,0056,0032
Samsux	0039
Sansei	0451
Sansui	0463
Sanyo	0154,0146,0159
Scimitsu	0019
Scotch	0178
Scott	0236,0180,0178,0019,0179
Sears	0047,0054,0154,0156,0178,0179,0056,0146,0159,0171
Semivox	0180
Semp	0156
Sharp	0093,0165,0039,0386
Shogun	0019
Signature	0016
Simpson	0186,0187
Sony	0000,0080
Soundesign	0180,0178,0179,0186
Spectricon	0003
Squareview	0171
Starlite	0180
Supre-Macy	0046
Supreme	0000
Sylvania	0054,0030,0020,0096
Symphonic	0171
TMK	0178,0056,0177
Tandy	0093
Tatung	0055,0003
Technics	0051,0250
Technol Ace	0179
Techwood	0051,0056,0003
Teknika	0054,0180,0150,0060,0019,0179,0056,0016,0039, 0092,0186
Telefunken	0056
Toshiba	0154,0156,0060
Tosomic	0185
Totevision	0039
Universal	0027
Vector Research	0030
Victor	0053
Vidikron	0054
Vidtech	0178,0019
Viking	0046
Wards	0054,0165,0030,0178,0021,0019,0179,0056,0016,0020, 0027,0080,0096
White Westinghouse	0623,0624
Yamaha	0030,0019
Zenith	0017,0016,0092
Zonda	0003



PROGRAMMING VCR CONTROL

NOTE: If you own a TV/VCR combination, skip this section and perform "Programming TV/VCR Combo Control" on page 16.



Locate the brand name of your VCR in the *Setup Codes For VCRs* section below, and write it in the following space.

VCR Brand: _____

The brands are listed in alphabetical order with the most popular codes listed first. You will use one of these codes to program the Millennium 4 to operate your VCR:

1. Turn on your VCR and insert a video cassette.
2.  On the Millennium 4, press **VCR** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Enter the first four-digit code for your VCR. If you perform this procedure correctly, the LED will blink twice.

NOTE: If the LED did not blink twice after entering the code's last digit, then repeat steps 2 through 3 and try entering the same code again.

4.  Aim the Millennium 4 at your VCR and press **POWER** once. The VCR should turn off. If your VCR remote control does not have a POWER key, press **PLAY**. If the VCR does not respond, repeat steps 2-3, trying each code listed for your brand until you find one that works. If the VCR still does not work, try searching for the code (see *Searching For Your Code* on page 26).

5. Write your VCR code in the boxes below for future reference.

--	--	--	--

*NOTE: Remember, to use the Millennium 4 to operate your VCR, press **VCR** first.*

Setup Codes for VCRs:

Admiral	0048
Adventura	0000
Aiko	0278
Aiwa	0037, 0000, 0307
Akai	0041, 0061, 0106
American High	0035
Asha	0240

Audiovox	0037
Beaumarck	0240
Bell & Howell	0104
Broksonic	0184, 0121, 0209, 0002, 0479
CCE	0072, 0278
Calix	0037
Canon	0035
Capehart	0020
Carver	0081
Cineral	0278
Citizen	0037, 0278
Colt	0072
Craig	0037, 0047, 0240, 0072, 0271
Curtis Mathes	0060, 0035, 0041, 0162
Cybernex	0240
Daewoo	0045, 0278, 0020, 0561
Daytron	0020
Denon	0042
Dynatech	0000
Electrohome	0037
Electroponic	0037
Emerex	0032
Emerson	0037, 0184, 0000, 0121, 0043, 0209, 0002, 0278, 0061, 0208, 0212, 0479, 0561
Fisher	0047, 0104, 0054, 0066
Fuji	0035, 0033
Funai	0000
GE	0060, 0035, 0048, 0240, 0202
Garrard	0000
Go Video	0526
GoldStar	0037, 0038
Gradiente	0000, 0008
HI-Q	0047
Harley Davidson	0000
Harman/Kardon	0081, 0038
Harwood	0072
Headquarter	0046
Hitachi	0000, 0042, 0041, 0105
JVC	0067, 0041, 0008
Jensen	0041
KEC	0037, 0278
KLH	0072
Kenwood	0067, 0041, 0038
Kodak	0035, 0037
LXI	0037
Lloyd's	0000, 0208
Logik	0072
MEI	0035
MGA	0240, 0043, 0061
MGN Technology	0240
MTC	0240, 0000
Magnasonic	0278

continued on next page...

Setup Codes for VCRs (continued):

Magnavox	0035,0039,0081,0000,0149
Magnin	0240
Marantz	0035,0081
Marta	0037
Matsushita	0035,0162
Memorex	0035,0037,0048,0039,0047,0240,0000,0104,0162,0046,0307
Minolta	0042,0105
Mitsubishi	0048,0067,0043,0061
Motorola	0035,0048
Multitech	0000,0072
NEC	0104,0067,0041,0038
Nikko	0037
Nikon	0034
Noblex	0240
Olympus	0035
Optimus	0037,0048,0104,0162
Optonica	0062
Orion	0184,0002,0479
Panasonic	0035,0162,0077,0225
Penney	0035,0037,0240,0042,0038,0054
Pentax	0042,0105
Philco	0035,0209,0479
Philips	0035,0081,0062
Pilot	0037
Pioneer	0067
Portland	0020
Profitronic	0240
Proscan	0060,0202
Protec	0072
Pulsar	0039
Quarter	0046
Quartz	0046
Quasar	0035,0162,0077
RCA	0060,0035,0048,0240,0042,0149,0077,0105,0106,0202
Radio Shack	0000
Radix	0037
Randex	0037
Realistic	0035,0037,0048,0047,0000,0104,0062,0046,0066
Ricoh	0034
Runco	0039
STS	0042
Samsung	0240,0045
Sanky	0048,0039
Sansui	0000,0067,0041,0271,0479
Sanyo	0047,0240,0104,0046
Scott	0184,0045,0121,0043,0212
Sears	0035,0037,0047,0000,0042,0104,0046,0054,0066,0105
Semp	0045
Sharp	0048,0062



Shintom	0072
Shogun	0240
Singer	0072
Sony	0035,0032,0000,0033,0034
Sylvania	0035,0081,0000,0043
Symphonic	0000
TMK	0240,0208
Tatung	0041
Teac	0000,0041
Technics	0035,0162
Teknika	0035,0037,0000
Thomas	0000
Toshiba	0045,0043,0066,0212
Totevision	0037,0240
Unitech	0240
Vector	0045
Vector Research	0038
Video Concepts	0045,0061
Videosonic	0240
Wards	0060,0035,0048,0047,0081,0240,0000,0042,0072,0149, 0062,0212
White Westinghouse	0278
XR-1000	0035,0000,0072
Yamaha	0038
Zenith	0039,0000,0033,0034

PROGRAMMING TV/VCR COMBO CONTROL


Locate the brand name of your TV/VCR Combo in the *Setup Codes For TV/VCR Combos* section below, and write it in the following space.

TV/VCR Combo Brand: _____

The brands are listed in alphabetical order with popular codes listed first. You will use one of these codes to program the Millennium 4 to operate your TV/VCR Combo:




1. Turn on your TV/VCR Combo and insert a video cassette.
2.  On the Millennium 4, press **VCR** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Enter the first four-digit code for your TV/VCR Combo. If you perform this procedure correctly, the LED will blink twice.

NOTE: If the LED did not blink twice after entering the code's last digit, then repeat steps 2 through 3 and try entering the same code again.

4.  Aim the Millennium 4 at your TV/VCR Combo and press **POWER** once. The unit should turn off. If it does not respond, repeat steps 2-3, trying each code listed for your brand until you find one that works. If it still does not work, try searching for the code (see *Searching For Your Code* on page 26).

5. If you've located a TV/VCR setup code that works your TV/VCR Combo and a separate TV code is also listed, you'll need to program this code into the Millennium 4 to access volume control (see *Programming TV Control* on page 8).

If there is no separate TV code listed, you will need to perform the following steps to access volume control:

- a.  Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
- b.  Enter **9 - 9 - 3**. The LED will blink twice.
- c.  Press **VCR** once. The LED will blink twice.

6. Write your TV/VCR Combo code in the boxes below for future reference.

--	--	--	--

*NOTE: Remember, to use the Millennium 4 to operate your TV/VCR Combo, press **VCR** first.*





Setup Codes for TV/VCR Combos:

American High	0035 (for TV use 0051)
Brocksonic	0002, 0294,
Colt	0072
Curtis Mathis	0035 (for TV use 0051)
Daewoo	0278
Emerson	0002, 0294, 0479
Funai	0000
GE	0035 (for TV use 0051), 0060 (for TV use 0047), 0048 (for TV use 0093), 0240
Hitachi	0035 (for TV use 0051), 0000
HQ	0000
Lloyds	0000
MGA	0240
Magnavox	0081 (for TV use 0054), 0035 (for TV use 0051), 0000
Magnin	0240
Memorex	0037, 0162 (for TV use 0250)
Mitsubishi	0048 (for TV use 0093)
Orion	0002, 0294, 0479
Panasonic	0035 (for TV use 0051), 0162 (for TV use 0250)
Penney	0035 (for TV use 0051), 0240, 0162 (for TV use 0250)
Quasar	0035 (for TV use 0051), 0162 (for TV use 0250)
RCA	0060 (for TV use 0047), 0035 (for TV use 0051), 0048 (for TV use 0093)
Sansui	0000, 0479
Sanyo	0240
Sears	0000, 0037
Sharp	0048 (for TV use 0093)
Sony	0032 (for TV use 0000)
Symphonic	0000
Zenith	0000

PROGRAMMING CABLE CONVERTER (OR DBS RECEIVER) CONTROL

The Millennium 4 is preprogrammed at the factory to operate the cable converter given to you by your cable company. However, if you have another brand or model of cable converter or satellite receiver that you would like to control, then you'll need to perform the following instructions to unlock the cable key, enter in a new code, and lock the cable key again.

To unlock the Cable key:

1. Turn on the Cable Converter or DBS Receiver.
2.  On the Millennium 4, press **CBL** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3.  Enter **9 - 9 - 7**. The LED will blink twice.
4.  Press **CH** — once. The LED will blink twice.

To program the Cable key:



1. Locate the brand name of your Cable Converter (or Direct Broadcast Satellite Receiver) in the *Setup Codes For Cable Converters* (or *Setup Codes For DBS Receivers*) section starting on the next page, and write it in the appropriate space.

Cable Converter Brand: _____


or

DBS Receiver Brand: _____

The brands are listed in alphabetical order with the most popular codes listed first. You will use one of these codes to reprogram the Millennium 4 to operate your Cable Converter or DBS Receiver.

2.  On the Millennium 4, press **CBL** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Enter the first four-digit code for your Cable Converter or DBS Receiver. If you perform this procedure correctly, the LED will blink twice.





NOTE: If the LED did not blink twice after entering the code's last digit, then repeat steps 2 through 3 and try entering the same code again.

4.  Aim the Millennium 4 at your Cable Converter or DBS Receiver and press **POWER** once. The unit should turn off. If it does not respond, repeat steps 2-3, trying each code listed for your brand until you find one that works. If it still does not work, try searching for the code (see *Searching For Your Code* on page 26).
5. Write your Cable Converter or DBS Receiver code in the boxes below for future reference.

--	--	--	--

*NOTE: Remember, to use the Millennium 4 to operate your Cable Converter or DBS Receiver, press **CABLE** first.*

To lock the Cable key:

1.  On the Millennium 4, press **CBL** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

2.  Enter **9 - 9 - 7**. The LED will blink twice.
3.  Press **CH +** once. The LED will blink twice.

Setup Codes for Cable Converters:

ABC	0003,0008,0017,0013
ABC Cable	0033
Americast	0899
Contec	0019
General Instrument	0476,0276,0810
GoldStar	0144
Hamlin	0020,0259
Jerrold	0003,0012,0476,0276,0810
Macom	0033
Memorex	0000
Movie Time	0063
NSC	0063
Oak	0019
Optimus	0021
Panasonic	0000,0107,0021
Paragon	0000
Pioneer	0144,0533
Pulsar	0000
Quasar	0000
RCA	0021
Regal	0020,0259
Runco	0000

continued on next page...

Setup Codes for Cable Converters (continued):

Samsung	0144
Scientific Atlanta	0008, 0477, 0017, 0277, 0774, 0877
Sprucer	0021
Starcom	0003
TV86	0063
Tocom	0012, 0013
Toshiba	0000
Viewstar	0063
Zenith	0000, 0525, 0899




Setup Codes for DBS Receivers:

AlphaStar	0772
Echostar	0775
Expressvu	0775
General Instrument	0627, 0361, 0869
HTS	0775
Hitachi	0819
Hughes	0749
JVC	0775
Jerrold	0627, 0361
Magnavox	0724, 0722
Memorex	0724
Next Level	0869
Panasonic	0701
Philips	0724, 0722
Primestar	0627, 0361
RCA	0566
Sony	0639
Star Choice	0869
Toshiba	0790
Uniden	0724, 0722
Zenith	0856

PROGRAMMING CHANNEL CONTROL LOCK




By activating this feature, the Millennium 4 will only allow access to the channel control capabilities of your cable converter. This will guarantee that you do not inadvertently change the channel on your TV or VCR.

To Activate Channel Control Lock:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 6**. The LED will blink twice.
3.  Press **CH +** once. The LED will blink twice.
4. Now, regardless of what mode you select (i.e., **TV**, **VCR**, or **CBL**), only the channel control capability of your cable converter will be accessible.

NOTE: This feature does not affect the Audio mode.

To De-Activate Channel Control Lock:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 6**. The LED will blink twice.
3.  Press **CH -** once. The LED will blink twice.
4. The Millennium 4 will again provide TV and VCR channel control capabilities while in the TV or VCR mode.

PROGRAMMING AUDIO CONTROL

Using the Millennium 4's Audio mode, you can also control an audio component, such as CD or DVD player, a stereo receiver, a stereo amplifier, or a DBS audio service.

Locate the brand name of your audio component in the one of accompanying code lists (starting on the next page). Write it in the appropriate space.

CD Player Brand: _____

or

DVD Player Brand: _____

or

Stereo Receiver Brand: _____



or

Stereo Amplifier Brand: _____


or

DBS Audio Brand: _____

The brands are listed in alphabetical order with popular codes listed first. You will use one of these codes to program the Millennium 4 to operate your audio component:

1. Turn on the audio component (or DBS receiver to control its audio service).
2.  On the Millennium 4, press **AUDIO** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

3. Enter the first four-digit code for your audio component. If you perform this procedure correctly, the LED will blink twice.

NOTE: If the LED did not blink twice after entering the code's last digit, then repeat steps 2 through 3 and try entering the same code again.

4.  Aim the Millennium 4 at your audio component and press **POWER** once. The unit should turn off. If it does not respond, repeat steps 2-3, trying each code listed for your brand until you find one that works. If it still does not work, try searching for the code (see *Searching For Your Code* on page 26).
5. Write your audio component code in the boxes below for future reference.

--	--	--	--

NOTE: Remember, to use the Millennium 4 to operate your audio component, press **AUDIO** first.

Setup Codes for CD Players:

Aiwa	0157,0124
Burmester	0420
California Audio Lab	0029
Carver	0157,0179
DKK	0000
Denon	0003,0873
Emerson	0305
Fisher	0179
Garrard	0420,0393
Genexxa	0032,0305
Harman/Kardon	0173
Hitachi	0032
JVC	0072
Kenwood	0028,0037,0190,0826,0681
Krell	0157
LXI	0305
Linn	0157
MCS	0029
MTC	0420
Magnavox	0157,0305
Marantz	0029,0157,0180
Mission	0157
NSM	0157
Onkyo	0101,0868
Optimus	0000,0032,0179,0305,0037,0420,0145,0468
Panasonic	0029,0303
Parasound	0420
Philips	0157
Pioneer	0032,0305,0468
Proton	0157
QED	0157
Quasar	0029
RCA	0179,0305,0053
Realistic	0179,0420,0180
Rotel	0157,0420
SAE	0157
Sansui	0157,0305
Sanyo	0179
Scott	0305
Sears	0305
Sharp	0037,0180
Sherwood	0180
Sony	0000,0185,0490
Soundesign	0145
Tascam	0420
Teac	0420,0393,0180
Technics	0029,0303

continued on next page...

Setup Codes for CD Players (continued):

Victor	0072
Wards	0157,0053
Yamaha	0036,0187
Yorx	0461

Setup Codes for DVD Players:

JVC	0558
Kenwood	0534
Magnavox	0503
Mitsubishi	0521
Onkyo	0503
Panasonic	0490
Philips	0503,0539
Pioneer	0525,0571
Proscan	0522
RCA	0522
Samsung	0573
Sony	0533
Technics	0490
Toshiba	0503
Yamaha	0490
Zenith	0503

Setup Codes for Stereo Receivers:

ADC	0531
Aiwa	0158,0189,0121
Capetronic	0531
Carver	0189
Curtis Mathes	0080
Denon	0004
Garrard	0463
Harman/Kardon	0110,0189
JBL	0110
JVC	0074
Kenwood	0027,0186
Linn	0189
MCS	0039
Magnavox	0531,0189
Marantz	0039,0189
Onkyo	0135
Optimus	0531,0670,0186
Panasonic	0039,0309
Philips	0189
Pioneer	0531,0014,0150,0630,0080
Quasar	0039

RCA	0531
Sansui	0189
Sharp	0186
Sony	0158
Soundesign	0670
Teac	0463
Technics	0039,0309
Victor	0074
Wards	0158,0014,0189,0080
Yamaha	0176,0186

Setup Codes for Stereo Amplifiers:

Carver	0269
Curtis Mathes	0300
Denon	0160
JVC	0331
Linn	0269
Magnavox	0269
Marantz	0269
Panasonic	0308
Philips	0269
Pioneer	0013,0300
Sony	0689
Technics	0308
Victor	0331
Wards	0013
Yamaha	0354





Setup Codes for DBS Audio Services:

Jerrold	0459,0520
Scientific Atlanta	0460
Starcom	0459


SEARCHING FOR YOUR CODE

If your TV, VCR, Cable Converter or Audio Component does not respond to the Millennium 4 after trying all of the codes listed for your brand, or if your brand is not listed at all, try searching for your code.

For example, to search for a code for your TV:

1. Turn on your TV.
2.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
3.  Enter **9 - 9 - 1**. The LED will blink twice.
4.  Aim the remote control at the the TV and slowly alternate between pressing **POWER** and **TV**.
 Stop when the TV turns off.




NOTE: In the search mode, the Millennium 4 will send IR codes from its library to the selected component, starting with the most popular code first.

5.  Press **SETUP** once to lock in the code.
6. To search for the codes of your other components, repeat steps 1 through 5, but substitute the appropriate key (i.e., **VCR**, **CBL**, or **AUDIO**) for the (VCR, Cable, or Audio) component you are searching for.



CHECKING THE CODES

If you have set up the Millennium 4 using the *Searching For Your Code* procedure, you may need to find out which four-digit code is operating your equipment:

For example, to find out which code is operating your TV:

1. Turn on your TV.
2.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
3.  Enter **9 - 9 - 0**. The LED will blink twice.
4.  To view the code for the first digit, press **1** once. Wait 3 seconds and count the number of LED blinks (e.g., 3 blinks = 3) and write down the number in the leftmost TV Code box below.

NOTE: If a code digit is "0", the LED will not blink.

5.  Repeat step 4 three more times for remaining digits. Use **2** for the second digit, **3** for the third digit, and **4** for the fourth digit. Finish writing down the code in the TV Code boxes below.
6.  To check for the codes of your other components, repeat steps 1 through 5, but substitute the appropriate key (i.e., **VCR**, **CBL**, or **AUDIO**) for the (VCR, Cable, or Audio) component you are checking. Write down the codes in the appropriate boxes below.

TV Code

--	--	--	--

VCR Code

--	--	--	--

CABLE Code















--	--	--	--

AUDIO _____ Code

--	--	--	--

PROGRAMMING THE POWER KEY FOR ALL ON/OFF (CABLE MODE ONLY)

With the Millennium 4, you can program the **POWER** key to turn all of your equipment on and off with the press of one button in the Cable mode. In other modes, individual power control is retained, so you can still power on or off your TV, VCR, or audio component independently.

1.  On the Millennium 4, press **CBL** once. Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.

2.  Enter **9 - 9 - 5**. The LED will blink twice.
3.  Press **POWER** once.
4. Enter the following sequence*:
 - a.   Press **CBL** once, then **POWER** once.
 - b.   Press **TV** once, then **POWER** once.
 - c.   Press **VCR** once, then **POWER** once.
 - d.   Press **AUDIO** once, then **POWER** once.
 - e. Finally, press  **CBL** once.
5.  Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
6. Now, when you press **CBL** once and then press **POWER** once, the Millennium 4 will direct power to your cable converter, TV, VCR, and audio component and leave the remote control in the Cable mode.

* *NOTE: If you do not want all of your equipment to power up all of the time, you can shorten step 4 to include only those devices you want to turn on or off. For example, to just power up your TV and Cable Converter, enter the following sequence for step 4:*







- a. Press **CABLE** once, then **POWER** once.
- b. Press **TV** once, then **POWER** once.
- c. Finally, press **CABLE** once.

*Now when you press **CABLE** once and then press **POWER** once, the Millennium 4 will only direct power to your Cable converter and TV, and still leave the remote control in the Cable mode.*


PROGRAMMING THE TUNE-IN KEYS FOR SPECIFIC CHANNELS

The Millennium 4 includes three “Tune-In” keys (located directly below the **PAGE** keys). Each can be programmed to remember three of your favorite channel settings for a total of nine channels. If you want to change the channels in a previously-programmed “Tune-In” key, you’ll need to clear the key first (see below).

To program a “Tune-In” key:







1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 5**. The LED will blink twice. Then    select a “Tune-In” key and press it once.
3.  Press **CBL** once followed by the channel number to be programmed (e.g., **3 - 9**).

*NOTE: If you are programming a channel for a Digital Cable Converter, you need to enter all channels in a 3-digit channel format. For example, if the desired channel is 39, then enter it as **0 - 3 - 9**.*

4.  Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
5. To add another channel, repeat steps 1-4 substituting the new channel to be added in step 3.





NOTE: Programming more than three channels onto the same “Tune-In” key will overwrite previous settings.

To clear a “Tune-In” key:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 5**. The LED will blink twice. Then    select a “Tune-In” key you want cleared and press it once.
3.  Press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
4. This “Tune-In” key is now clear and ready for reprogramming (see above – *Programming The Tune-In Keys For Specific Channels*).
5. If desired, repeat steps 1 through 4 to clear another “Tune-In” key.

RE-ASSIGNING DEVICE KEYS

The Millennium 4 can be set up to control a second TV or VCR, or any combination of four home entertainment components. For example, to have the Millennium 4 control a TV, a Cable Converter, and *two* VCRs, you will need to re-assign the unused **AUDIO** key to operate the second VCR as follows:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 2**. The LED will blink twice.
3.   Press **VCR** once, then press **AUDIO** once.
4. The **AUDIO** key is now ready to be programmed for your second VCR. See *Programming VCR Control* on page 12.

To re-assign other device keys, repeat steps 1 through 4 by substituting the key sequence from the following chart for a desired component:

To Re-Assign	Perform Key Sequence
TV as 2nd VCR key:	SETUP - 9 - 9 - 2 - VCR - TV
TV as 2nd Audio key:	SETUP - 9 - 9 - 2 - AUDIO - TV
TV as 2nd Cable key:	SETUP - 9 - 9 - 2 - CBL - TV
TV back to TV :	SETUP - 9 - 9 - 2 - TV - TV
VCR as 2nd TV key:	SETUP - 9 - 9 - 2 - TV - VCR
VCR as 2nd Audio key:	SETUP - 9 - 9 - 2 - AUDIO - VCR
VCR as 2nd Cable key:	SETUP - 9 - 9 - 2 - CBL - VCR
VCR back to VCR :	SETUP - 9 - 9 - 2 - VCR - VCR
AUDIO as 2nd TV key:	SETUP - 9 - 9 - 2 - TV - AUDIO
AUDIO as 2nd VCR key:	SETUP - 9 - 9 - 2 - VCR - AUDIO
AUDIO as 2nd Cable key:	SETUP - 9 - 9 - 2 - CBL - AUDIO
AUDIO back to AUDIO :	SETUP - 9 - 9 - 2 - AUDIO - AUDIO



Upon completion of a re-assignment, the LED will blink twice to confirm your selection. At that time, you will also need to program the Millennium 4 to control the new component (see previous sections on *Programming TV Control*, *Programming VCR Control*, *Programming Cable Control*, or *Programming Audio Control*).

CHANGING VOLUME LOCK



The Millennium 4 is set to control volume of a component through your TV while in the TV, VCR, or Cable mode. However, in the Audio mode, you have separate control of your audio component's volume.

If your TV is not remote controllable, or if you would like the volume to be controlled by a different component, you can change the Volume Lock setting to control a volume through a non-associated mode (e.g., through the *cable* in the TV mode).



To change Volume Lock to the CABLE mode:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 3** and then press **CBL** once. The LED will blink twice.
3. Now, whenever you press Volume **+**, Volume **-**, or **MUTE** on the Millennium 4, volume will be controlled by your Cable Converter.

To change Volume Lock to the TV mode:

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 3** and then press **TV** once. The LED will blink twice.
3. Now, whenever you press Volume **+**, Volume **-**, or **MUTE** on the Millennium 4, volume will be controlled by your TV.

To change Volume Lock to the VCR mode:




1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 3** and then press **VCR** once. The LED will blink twice.
3. Now, whenever you press Volume **+**, Volume **-**, or **MUTE** on the Millennium 4, volume will be controlled by your VCR.

continued on next page...

CHANGING VOLUME LOCK (CONTINUED)

To change Volume Lock to the AUDIO mode:

NOTE: Performing these steps will allow you to access the volume control of your audio component in all modes.

1.  On the Millennium 4, press and hold **SETUP** until the LED blinks twice, then release **SETUP**.
2.  Enter **9 - 9 - 3** and then press **AUDIO** once. The  LED will blink twice.
3. Now, whenever you press Volume **+**, Volume **-**, or **MUTE** on the Millennium 4, volume will be controlled by your audio component.

TROUBLESHOOTING

- PROBLEM:** LED does not blink when you press a key.
- SOLUTION:** Replace the batteries with two (2) new AA alkaline batteries (see page 7).
-
- PROBLEM:** LED blinks when you press a key, but home entertainment component does not respond.
- SOLUTION:** Make sure you are aiming the Millennium 4 at your home entertainment component and that you are within 15 feet of the component you are trying to control.
-
- PROBLEM:** The Millennium 4 does not control home entertainment components or commands are not performing properly.
- SOLUTION:** Try all listed codes for the component brand being set up. Make sure all components can be operated with an infrared remote control.
-
- PROBLEM:** TV/VCR combo does not respond properly.
- SOLUTION:** Use the VCR codes for your brand. Some combo units may require both a TV code and a VCR code for full operation (see page 16).
-
- PROBLEM:** No volume on a second TV.
- SOLUTION:** Follow instructions in *Changing Volume Lock* (see page 31).
-
- PROBLEM:** **CH+**, **CH-**, and **LAST** do not work for your RCA TV.
- SOLUTION:** Due to RCA design (1983-1987), only the original remote control will operate these functions.
-
- PROBLEM:** Changing channels does not work properly.
- SOLUTION:** If original remote control required pressing ENTER to change channels, press **ENTER** on the Millennium 4 after entering a channel number.
-
- PROBLEM:** Tried "Search Method" and still could not find a working code.
- SOLUTION:** Try the "Search Method" again after clearing out the device key as follows: Press and hold **ENTER** until red light blinks twice, then release. Next enter **9 - 9 - 2**. Then press and release the device key to be cleared twice.
-
- PROBLEM:** Remote control does not turn on Sony or Sharp TV/VCR Combo.
- SOLUTION:** For power on, these products require programming TV codes on the Millennium 4. For Sony, use TV code 0000 and VCR code 0032. For Sharp, use TV code 0093 and VCR code 0048.

ADDITIONAL INFORMATION

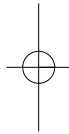
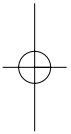
The Millennium 4 does not have any user-serviceable parts. Opening the case, except for the battery cover, may cause permanent damage to your Millennium 4.

For help via the Internet, visit us at:

cable.rcinfo.com
(do not type in *http://* or *www* before the address)

For help via e-mail, contact us at:

CableHelp@ueic.com



Copyright 1999 by Universal Electronics Inc. No part of this publication may be reproduced, transmitted, transcribed, stored in any retrieval system, or translated to any language, in any form or by any means, electronic, mechanical, magnetic, optical, manual, or otherwise, without the prior written permission of Universal Electronics Inc.

M4090

4/99

