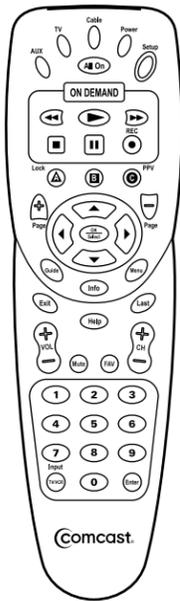


Comcast
ON DEMAND
Custom 3-Device
Universal Remote Control



User Guide

OVERVIEW

The Comcast Custom 3-Device universal remote will control up to three home entertainment devices, including a Cable Box (used by Comcast Systems), a TV, a VCR, an Audio Amplifier or Receiver, a DVD player, or a PVR.

The remote control requires installing two (2) new AA batteries (included) and some easy programming to control your devices. For best results, please read and perform all instructions listed here. Also, keep this guide for future reference.

INSTALLING BATTERIES

1. Pull back the remote control's battery cover and remove it.
2. Insert the two (2) supplied AA batteries according to the + and - marks in the battery case.
3. Push the battery cover back into place.
4. Test the unit by pressing any mode key (i.e., **AUX**, **TV**, or **Cable**). If batteries are inserted correctly, the selected mode key will light.

NOTE: When batteries need replacement, the remote control will stop operating. Replace the old batteries and the unit will be restored to its full functionality, complete with your favorite settings.

FEATURES AND FUNCTIONS

Use the remote control's mode keys (i.e., **AUX**, **TV**, or **Cable**) to control a specific device. When pressed, the selected mode key will light, confirming your choice. Use the other keys to perform desired actions (see the following key chart).

NOTE: The selected mode will remain active until you press another mode key.

	Press AUX , TV , or Cable once to select and control a device.
	Press Power once to turn on or off the selected home entertainment device.
	Use Setup for all programming sequences.
	Press All On once to turn on or off all programmed devices in this order: Cable , TV , and AUX . After all devices are on, Cable is the active mode.
	Press ON DEMAND once to access Comcast's ON DEMAND menu.
	In the AUX or TV mode, use the transport keys to control a VCR, PVR, or DVD player. To record a program on a VCR, press REC twice.
	In the Cable mode, use the keys to control ON DEMAND programs.
	Use A , B , or C to access interactive program guide functions on your Scientific Atlanta Explorer, Pioneer Voyager, or Pace Cable Box.
	Use Lock to restrict viewing of selected programs (Parental Control) on your Motorola (GI or Jerrold) Cable Box.
	Use PPV to access information on available Pay-Per-View movies and events on your Motorola (GI or Jerrold) Cable Box.
	Use Page+ (or Page-) to page up (or down) through menu screens and the interactive program guide.
	Use Guide to display the interactive program guide.



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

Use **OK (Select)** to select menu options, PPV events, and programs from the interactive program guide.

	Use Info to display current channel and program information.
	Use Menu to display the Quick Menu (on a Motorola, GI, or Jerrold Cable Box), or to access settings (on a Scientific Atlanta Explorer, Pioneer Voyager, or Pace Cable Box).
	Use Exit to exit the menu or guide.
	Use Help to access digital cable help.
	Use Last to recall the last channel or go back one screen in the menu.
	Use VOL+ (or VOL-) to raise (or lower) the sound volume. Also see <i>Changing Volume Lock</i> .
	Press Mute once to turn sound off or on.
	In the Cable mode, press FAV once to display programmed favorite cable channels.
	Use CH+ (or CH-) to select the next higher (or lower) channel.
	When controlling a DVD player, use CH+ (or CH-) to skip forward (or skip reverse) through video.
	Use the keypad (0 ~ 9) to directly select the channels (e.g., 09 or 031).
	In the TV mode, use this key to switch the TV's input to view TV or video programs.
	In the AUX mode, use this key to switch the VCR, PVR (or DVR), or DVD player to view TV or video. For an audio device, use it to switch to an input source.
	Use Enter to enter channels on some TV models or information on menu screens.

PROGRAMMING DEVICE CONTROL

The Comcast Custom 3-Device universal remote control is preprogrammed at the factory to operate the Cable Box supplied by your Comcast system, an RCA TV, and an RCA VCR (in the **AUX** mode). To control devices other than default brands (excluding the Cable Box), perform the below steps; otherwise skip this section:

1. Turn on a device (e.g., VCR or DVD Player) and, if applicable, insert media. (e.g., video cassette or disc).
2. On the remote control, press a device key once (i.e., **AUX** or **TV**).
3. Press and hold **Setup** until the selected mode key blinks twice, then release **Setup**.
4. Locate the code for your device in *Manufacturer's Codes* on the back of this user guide. Brands are listed in alphabetical order with the most popular codes listed first.

5. Enter the first four-digit code for your device. If you perform this procedure correctly, the selected mode key will blink twice.

NOTE: If you enter an invalid code, the selected mode key will display one long blink and exit the programming mode. Repeat steps 2 to 5 with a valid code.

6. Aim the remote control at your device and press **Power** once. The device should turn off. If it does not respond, repeat steps 2 to 6, trying each code listed for your brand until you find one that works. If it still does not work, try *Searching For Your Code*.

NOTE: If the device does not have a Power key, press the ► (Play) key.

7. For future reference, write your device code in the appropriate boxes below:

AUX Code:

 Device Type: _____

TV Code:

8. Repeat steps 1 to 7 for another device you want to control.

SEARCHING FOR YOUR CODE

If your home entertainment device does not respond to the remote control 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, after trying all of the codes for your TV, you still cannot get the remote control to operate your TV, then:

1. Turn on your TV.
2. On the remote control, press **TV** once. Then press and hold **Setup** until the **TV** key blinks twice, then release **Setup**.
3. Enter **9 - 9 - 1**. The **TV** key 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. A working code has been found.

NOTE: In the search mode, the remote control will send IR codes from its library to the selected device, starting with the most popular code first.

5. Press **Setup** once to lock in the code. The **TV** key will blink twice.
6. To search for the codes of another device, repeat steps 1 to 5, but substitute the **AUX** key for the auxiliary device you are searching for.

CHECKING THE CODES

If you have set up the remote control using the *Searching For Your Code* procedure, you may need to find out which four-digit code is operating your equipment. Perform the following steps after setting up your devices to find out which four-digit code operates your equipment. For example, to find out which code is operating your TV:

1. Turn on your TV.
2. On the remote control, press **TV** once. Then press and hold **Setup** until the **TV** key blinks twice, then release **Setup**.
3. Enter **9 - 9 - 0**. The **TV** key will blink twice.
4. To view the code for the first digit, press 1 once. Wait 3 seconds and count the number of times the TV key blinks (e.g., 3 blinks = 3) and write down the number in the left-most TV Code box (at end of this section).
5. Repeat step 4 three more times for the 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 (at end of this section).

NOTE: If a code digit is "0", the selected mode key will not blink.

6. To check another device code, repeat steps 1 to 5, but substitute the **AUX** key for the auxiliary device you are checking. Write down the codes in the appropriate boxes below:

AUX Code:

 Device Type: _____

TV Code:

CHANGING VOLUME LOCK

The Comcast Custom 3-Device universal remote control is set at the factory to control the TV volume in all modes.

However, you may change the Volume Lock setting to *Individual Volume Unlock* to unlock a specific device's volume controls for independent operation in its own mode (e.g., Audio Receiver volume controls in the **AUX** mode).

Or, if desired, you can perform *Global Volume Unlock* so that the volume controls of all devices can be independently operated in their own modes.

Unlocking Volume Control For A Single Device (Individual Volume Unlock):

1. Press a desired mode key where you want volume to be unlocked (e.g., **AUX**) and controlled within its own mode.
2. Press and hold **Setup** until the selected mode key blinks twice, then release **Setup**.
3. Enter **9 - 9 - 3** and then press **VOL-** once. The mode key will blink four times confirming unlock.
4. If desired, repeat steps 1 to 3 (of this section) for each device that you want volume to be unlocked.
5. Now, after you select a device that has volume unlocked (e.g., **AUX**), pressing **VOL+**, **VOL-**, or **Mute**, will control the device's volume only in its own mode.

Unlocking All Volume Controls (Global Volume Unlock):

1. Press and hold **Setup** until the selected mode key blinks twice, then release **Setup**.
2. Enter **9 - 9 - 3** and then press **VOL+** once. The mode key will blink four times confirming unlock.
3. Now, volume controls for all devices can be independently controlled in their own modes.

Locking Volume Control To TV Mode (Restoring Global Volume Lock To The Default Mode):

1. Press **TV** once. Then, press and hold **Setup** until the **TV** key blinks twice, then release **Setup**.
2. Enter **9 - 9 - 3** and then press **TV** once. The mode key will blink twice confirming global lock.
3. Now, when you press **VOL+**, **VOL-**, or **Mute**, the volume of the selected device (e.g., **TV**) will be controlled regardless of the mode you have selected.

REASSIGNING DEVICE KEYS

The Comcast Custom 3-Device universal remote control can be set up to control a second device.

For example, to have the unit control a TV, a Cable Box, and second TV, you will need to reassign the unused **AUX** key to operate the second TV as follows:

1. On the remote control, press **AUX** once. Then press and hold **Setup** until the **AUX** key blinks twice, then release **Setup**.
2. Enter **9 - 9 - 2**. The **AUX** key will blink twice.
3. Press **TV** once, then press **AUX** once. The **AUX** key will blink twice.
4. The **AUX** key is now ready to be programmed for your second TV. See *Programming Device Control* for instructions.

PROGRAMMING CHANNEL CONTROL LOCK

By default, the remote control's channel-control capabilities are locked to the Cable Box. The affected keys are **0 ~ 9**, **CH+**, **CH-**, **Enter**, and **Last**.

This will guarantee that you do not inadvertently change a channel while in the TV mode. However, you can turn off this feature to allow full access to these keys in the **TV** and **Cable** modes.

NOTE: This feature does not affect the AUX mode.

De-Activating Channel Control Lock

1. On the remote control, press **Cable** once. Then press and hold **Setup** until the **Cable** key blinks twice, then release **Setup**.
2. Enter **9 - 7 - 3**. Press **CH-** once. The **Cable** key will blink four times.
3. Now, the remote control will provide TV or cable channel control capabilities while in the **TV** or **Cable** mode.

Re-Activating Channel Control Lock

1. On the remote control, press **Cable** once. Then press and hold **Setup** until the **Cable** key blinks twice, then release **Setup**.
2. Enter **9 - 7 - 3**. Press **CH+** once. The **Cable** key will blink twice.
3. Now, regardless of if you select the **TV** or **Cable** mode, only the channel control capability of your cable box will be accessible.

TROUBLESHOOTING

PROBLEM:	A mode key does not blink when you press a key.
SOLUTION:	Replace the batteries with two (2) new AA batteries.
PROBLEM:	During programming, a mode key displays one long blink.
SOLUTION:	An invalid entry has occurred. Check the key to be entered and try programming again.
PROBLEM:	A mode key blinks when you press a key, but home entertainment component does not respond.
SOLUTION:	Make sure the remote control is aimed at your home entertainment device and is not farther than 15 feet away.
PROBLEM:	The remote control does not control home entertainment devices or the commands are not working properly.
SOLUTION:	Try all listed codes for the device brands being set up. Make sure they can be operated with an infrared remote control.

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, also press **Enter** on this remote control after entering the channel number.

MANUFACTURER'S CODES

Setup Codes For Audio Amplifiers

Carver	0269
GE	0078
JVC	0331
Linn	0269
Luxman	0165
Magnavox	0269
Marantz	0321, 0269
Nakamichi	0321
Philips	0269
Polk Audio	0269
Sansui	0321
Soundesign	0078
Victor	0331
Wards	0078
Yamaha	0354

Setup Codes For Audio Receivers

ADC	0531
Aiwa	0158, 0189, 0405
Bose	1229
Capetronic	0531
Carver	0189
Denon	1104, 1360
Harman/Kardon	0110, 0189
Integra	0135
JBL	0110
JVC	0074
Kenwood	1313, 1027, 1570, 1569, 0027
Linn	0189
MCS	1039
Magnavox	0189, 0531
Marantz	1039, 0189
Onkyo	0135, 0842
Optimus	1023, 0531
Panasonic	1518, 1039
Philips	0189, 1266
Pioneer	1023, 0014, 0531, 1384
Polk Audio	0189
Proscan	1254
Quasar	1039
RCA	1023, 1254, 0531
Sansui	0189
Sony	0158, 1758
Stereophonics	1023
Sunfire	1313
Technics	1308, 1309, 1518, 1039
Victor	0074
Wards	0014, 0158, 0189
Yamaha	0176, 1176

Setup Codes For Cable Boxes

ABC	0003, 0008, 0017
Director	0476
General Instrument	0476, 0003, 0276
GoldStar	0144
Hamlin	0009
Jerrold	0476, 0003, 0276, 0012
Memorex	0000
Motorola	0476, 0276
Panasonic	0000
Paragon	0000
Pioneer	0877, 0144, 0533, 1877
Pulsar	0000
Quasar	0000
Rumco	0000
Samsung	0144
Scientific Atlanta	0877, 0008, 0017, 0277, 0477, 1877
Starcom	0003
Supercable	0276
Tocom	0012
Torx	0003
Toshiba	0000
Zenith	0000

Setup Codes For DVD Players

Anam	1913
Apex Digital	0672, 0717, 0755, 0794, 0796, 0797, 1915
Blaupunkt	0717
Blue Parade	0571
Broksonic	0695
DVD2000	0521
Denon	0490, 0634
Emerson	0591
Enterprise	0591
Fisher	0670
GE	0522, 0717
Go Video	0715, 0783
Gradiente	0651
Greenhill	0717
Harman/Kardon	0582
Hitachi	0573, 0664
Hiteker	0672
IRT	0783
JVC	0558, 0623, 0867
KLH	0717
Kenwood	0490, 0534, 0682
Koss	0651
Lasonic	0798
Magnavox	0503, 0675, 1914
Marantz	0539
Microsoft	0522
Mintek	0717
Mitsubishi	0521
Nesa	0717
Onkyo	0503
Oritron	0651
Panasonic	0490, 0632, 1490, 1907
Philips	0503, 0539, 0854, 1914
Pioneer	0525, 0571, 0632
Polk Audio	0539
Proscan	0522
Qwestar	0651
RCA	0522, 0571, 0717, 0822, 1022, 1913
Rotel	0623
Sampo	0698
Samsung	0573, 0820, 1932
Sansui	0695
Sanyo	0670, 0695
Sharp	0630
Shinsonic	0533
Sony	0533, 0864, 1903, 1904
Sylvania	0675, 0821
Technics	0490
Theta Digital	0571
Toshiba	0503, 0695, 1045
Urban Concepts	0503
XBox	0522
Yamaha	0490, 0539, 0545
Zenith	0503, 0591

Setup Codes For Home-Theater-In-A-Box Devices

Anam	1913
Apex Digital	1915
Panasonic	1907
Philips	1914
RCA	1913
Samsung	1932
Sony	1903, 1904

Setup Codes For PVRs (or DVRs)

Panasonic	0616
Philips	0618
ReplayTV	0614, 0616
Sonic Blue	0614, 0616
Sony	0636
Tvo	0618, 0636

Setup Codes For TVs

A-Mark	0003
AOC	0030, 0003
Admiral	0093, 0463
Advent	0761
Adventura	0046
Aiko	0092
Aiwa	0701
Akai	0030, 0702
Alaron	0179
Ambassador	0177
America Action	0180
Ampro	0751
Anam	0180
Apex Digital	0748, 0765, 0767
Archer	0003
Audiovox	0451, 0180, 0003, 0092
Baysonic	0180
Bell & Howell	0154, 0016
Bradford	0180
Broksonic	0236, 0463, 0003
CXC	0180
Candle	0030, 0056, 0046, 0186
Carnivale	0030
Carver	0054
Celebrity	0000
Celera	0765
Changhong	0765
Cineral	0451, 0092
Citizen	0060, 0030, 0056, 0046, 0092, 0186, 0280

Clarion	0180
Concerto	0056
Contec	0180
Craig	0180
Crosley	0054
Crown	0180
Curtis Mathes	0047, 0054, 0154, 0451, 0093, 0060, 0030, 0145, 0056, 0016, 0166, 0466, 0702
Daewoo	0451, 0092
Denon	0145
Dumont	0017
Dwin	0720, 0774
Electroband	0000
Emerson	0154, 0236, 0463, 0180, 0282, 0178, 0179, 0038, 0177, 0280
Envision	0030
Fisher	0154
Fujitsu	0179, 0683, 0809
Funai	0180, 0179, 0171
Futuretech	0180
GE	0047, 0051, 0451, 0282, 0178, 0021, 0027

Gibraltar	0017, 0030
GoldStar	0030, 0178, 0001
Gradiente	0053, 0056
Grumpy	0180, 0179
Hallmark	0178
Harley Davidson	0179
Harman/Kardon	0054
Harvard	0180
Havermy	0093
Hitachi	0145, 0056, 0016, 0038, 0151
IRT	0628
Infinity	0054
Inteq	0017
JBL	0054
JCB	0000
JVC	0463, 0053
Janeil	0046
Jensen	0761
KEC	0180
KTV	0180, 0030, 0280
Kenwood	0030
Kloss	0046
Konka	0628, 0632, 0638, 0703, 0707
LG	0056
LXI	0047, 0054, 0154, 0156, 0178
Logik	0016
Luxman	0056
MGA	0150, 0030, 0178
MTC	0060, 0030, 0056
Magnavox	0054, 0030, 0179, 0186
Majestic	0016

Marantz	0054, 0030
Matsushita	0250
Megatron	0178, 0145, 0003
Memorex	0154, 0250, 0463, 0150, 0178, 0179, 0016

Mercury	0001
Midland	0047, 0017, 0051
Minutz	0021
Mitsubishi	0093, 0150, 0178
Motorola	0093
Multitech	0180
NAD	0156, 0178
NEC	0030, 0056, 0497
NTC	0092
Nikko	0030, 0178, 0092
Norcent	0748
Omwa	0180
Optimus	0154, 0250, 0166
Optonica	0093, 0165
Orion	0236, 0463, 0179
Panasonic	0250, 0051
Penney	0047, 0156, 0051, 0060, 0030, 0178, 0021, 0003, 0027

Philco	0054, 0463, 0030, 0145
Philips	0054
Pilot	0030
Pioneer	0038, 0166
Portland	0092
Prima	0761
Princeton	0717
Prism	0051
Proscan	0047
Proton	0178, 0003, 0466
Pulsar	0017
Quasar	0250, 0051, 0165
RCA	0047, 0038, 0090
RadioShack	0047, 0154, 0165, 0180, 0030, 0178, 0056

Realistic	0154, 0165, 0180, 0030, 0178, 0056
Rumco	0017, 0030, 0497, 0603
SSS	0180
Sampo	0030
Samsung	0060, 0030, 0178, 0056, 0702
Sansei	0451
Sansui	0463
Sanyo	0154
Scotch	0178
Scott	0236, 0180, 0178, 0179
Sears	0047, 0054, 0154, 0156, 0178, 0179, 0056, 0171

Semivox	0180
Semp	0156
Sharp	0093, 0165
Signature	0016
Simpson	0186
Sony	0000, 0111
Soundesign	0180, 0178, 0179, 0186
Squareview	0171
Starlite	0180
Supre-Macy	0046
Supreme	0000
Sylvania	0054, 0030, 0171
Symphonic	0180, 0171
TMK	0178, 0056, 0177
TNCi	0017
TVS	0463
Tandy	0093
Tatung	0003
Technics	0250, 0051
Technol Ace	0179
Techwood	0051, 0056, 0003
Teknika	0054, 0180, 0150, 0060, 0179, 0056, 0016, 0092, 0186

Telefunken	0056, 0702
Toshiba	0154, 0156, 0060
Universal	0027
Vector Research	0030
Victor	0053
Vidikron	0054
Vidtech	0178
Viking	0046
Wards	0054, 0165, 0030, 0178, 0021, 0179, 0056, 0016, 0027, 0111

Waycon	0156
White Westinghouse	0463

Yamaha	0030
Zenith	0017, 0463, 0178, 0016, 0092
Zonda	0003

Setup Codes For VCRs And TV/VCR Combos

Admiral	0048, 0209
Adventura	0000
Aiwa	0037, 0000
American High	0035
Asha	0240
Audiovox	0037
Beaumarck	0240
Bell & Howell	0104
Broksonic	0184, 0121, 0209, 0479, 1479
Calix	0037
Canon	0035
Carver	0081
Citizen	0037, 1278
Craig	0037, 0047, 0240
Curtis Mathes	0060, 0035, 0162, 0760, 1035
Cybernex	0240
Daewoo	0045, 1278
Denon	0042
Dynatech	0000
Electrohome	0037
Electroponic	0037
Emerex	0032
Emerson	0037, 0184, 0000, 0121, 0043, 0209, 0479, 1278, 1479

Fisher	0047, 0104
Fuji	0035
Funai	0000
GE	0060, 0035, 0240, 0760, 0807, 1035, 1060

Garrard	0000
Go Video	0432
GoldStar	0037, 1237
Gradiente	0000
HI-Q	0047
Harley Davidson	0000
Harman/Kardon	0081
Hitachi	0000, 0042
Hughes Net. Sys.	0042
JVC	0067
KEC	0037
Kenwood	0067
Kodak	0035, 0037
LXI	0037
Lloyd's	0000
MEI	0035
MGA	0240, 0043
MGN Technology	0240
MTC	0240, 0000
Magnasonic	1278
Magnavox	0035, 0039, 0081, 0000, 1781
Magnin	0240
Marantz	0035, 0081
Marta	0037
Matsushita	0035, 0162
Memorex	0035, 0162, 0037, 0048, 0039, 0047, 0240, 0000, 0104, 0209, 0479, 1237

Minolta	0042
Mitsubishi	0067, 0043, 0807
Motorola	0035, 0048
Multitech	0000
NEC	0104, 0067
Nikko	0037
Noblex	0240
Olympus	0035
Optimus	0162, 0037, 0048, 0104, 0432
Orion	0184, 0209, 0479, 1479
Panasonic	0035, 0162, 0225, 0616, 1035
Penney	0035, 0037, 0240, 0042, 1035, 1237
Pentax	0042
Philco	0035, 0209, 0479
Philips	0035, 0081, 0618
Pilot	0037
Pioneer	0067
Polk Audio	0081
Profronic	0240
Proscan	0060, 0760, 1060
Pulsar	0039

Quasar	0035, 0162, 1035
RCA	0060, 0240, 0042, 0760, 0807, 1035, 1060

RadioShack	0000
Radix	0037
Randex	0037
Realistic	0035, 0037, 0048, 0047, 0000, 0104
ReplayTV	0614, 0616
Rumco	0039
STS	0042
Samsung	0240, 0045
Sanky	0048, 0039
Sansui	0000, 0067, 0209, 0479, 1479
Sanyo	0047, 0240, 0104
Scott	0184, 0045, 0121, 0043
Sears	0035, 0037, 0047, 0000, 0042, 0104, 1237

Semp	0045
Sharp	0048, 0807, 0848
Shogun	0240
Sonic Blue	0614, 0616
Sony	0035, 0032, 0000, 0636, 1232
Sylvania	0035, 0081, 0000, 0043, 1781
Symphonic	0000
Cybernex	0240
Teac	0000
Technics	0035, 0162
Teknika	0035, 0037, 0000
Thomas	0000
Tivo	0618, 0636
Toshiba	0045, 0043, 0845
Totevision	0037, 0240
Unitech	0240
Vector	0045
Video Concepts	0045
Videomagic	0037
Videosonic	0240
Villain	0000
Wards	0060, 0035, 0048, 0047, 0081, 0240, 0000, 0042, 0760