

# CTU900 Universal Remote Control



## OVERVIEW

Your new CTU900 universal 4 in 1 remotes operate your Motorola or other manufacturer's cable set-top boxes and up to three other devices.

The CTU900 has the backlighting for the keypad illumination. Backlighting will turn on when you push any keys.

In addition, the CTU900 provides advanced features such as Digital Video Recording (DVR) control and Picture-in-Picture (PIP) support.

## INSTALLING BATTERIES

Your remote requires 2 AA batteries, and should last up to 6 months under normal usage.

1. Remove the battery case cover and the old batteries (if necessary).
2. Follow the diagram inside the battery case to insert the new batteries.

**Note:** Always use new, high quality replacement batteries. Ensure that the batteries are not damaged before inserting them into the remote.

## USING YOUR REMOTE

To select a device to control, simply press one of the device mode keys (TV, AUDIO, DVD/VCR, CABLE) the top of the remote. After you set up the remote to control that device, you may begin using the device. See "Programming Device Control" for more information on identifying a specific device to a device key.

Key	Function
AUDIO, DVD/VCR, TV, CABLE	Turn the selected device ON or OFF Select a device
	Direct access to Video On Demand (VOD), where available
	Direct access to Pay Per View (PPV) Programming (where available)
	Rewind VCR, DVD, VOD, DVR, or HTIB

	Play VCR, DVD, VOD, DVR, or HTIB
	Fast Forward VCR, DVD, VOD, DVR, or HTIB
	Record to VCR or DVR
	Pause VCR, DVD, VOD or DVR
	Stop VCR, DVD, VOD or DVR
	Replay the previous few seconds of a program (only available with DVR models)
	Display a list of programs that you recorded. This will allow you to select one for viewing (only available with DVR models)
	Displays live television programming (only available with DVR models)
	Move up or down through menu screens or the Electronic Program Guide
	Display channel and program information
	Access any OSD for the currently selected device
	Move up through any OSD or cable guide menu
	Move down through any OSD or cable guide menu
	Move left through any OSD or cable guide menu
	Move right through any OSD or cable guide menu
	Select the currently highlighted OSD menu or cable guide choice
	Exit any On-Screen Display (OSD) and return to regular viewing
	Access the cable guide
	View the previous or next day's cable guide
	Increase or decrease volume
	Select the next or previous channel
	Mute current audio feed
	Return to last selected channel
	Jump among pre-selected favorite channels (only available in CABLE mode)  <b>Note:</b> Favorite channels must be pre-selected through the Electronic Programming Guide before this key
	Display the help screen (only available in CABLE mode)
	These functions are set by your cable provider
	These functions are set by your cable provider
	These functions are set by your cable provider

	Enter a channel or device code number. To access channels lower than 100, you may need to enter 3 digits. For example, to access channel 2, press 0-0-2. For channel 22, press 0-2-2.
<b>INPUT</b>	Select the video source
<b>ASPECT</b>	Change the viewing aspect (if available)
<b>PIP ON/OFF</b>	Turn Picture-in-Picture (PIP) on or off (if available)
<b>PIP SWAP</b>	Swap the PIP signal to the main display (if available)
<b>PIP MOVE</b>	Move the position of the PIP display
<b>PIP CH+/-</b>	Select the next or previous channel in the PIP display (the main display does not change)

## PROGRAMMING DEVICE CONTROL

Each of the additional device keys controls a particular type of device. For example, the DVD/VCR key controls your VCR, DVR, or DVD player, but not your TV, unless you specify otherwise. See "Reassigning Device Keys."

Device Key	Control this type of device
TV	TV
DVD/VCR	DVD, VCR, DVR, HTIB, TV/VCR, TV/VCR/DVD, and TV/DVD
CABLE	Cable box only
AUDIO	Amplifier, Tuner

To specify a device

1. Look up the device you want to control in the device code list on the back of this guide.
2. Press and hold a device key (AUDIO, DVD/VCR, or TV) for at least six seconds. The LEDs for each device key light up, then the LED for the device you selected remains on.
3. Enter the four-digit code. The device key LED turns off briefly after each key press.

**Note:** You have 10 seconds to press each digit. If it takes longer than that, the remote "times out" and you must begin again.

4. If the remote recognizes the code, the device key's LED blinks three times. You can now test the remote by pressing POWER. If your device responds (turns off), you have found the right code. If your device does not respond, repeat steps 2-3 with the next code in the list. If the remote does not recognize the code, the LED will turn off. Retry the code (by repeating steps 2-3 using the next code listed for your brand), or search for a device code. See "Searching for Codes".

## SEARCHING FOR CODES

If none of the codes listed under "Device Codes" on the back of this guide match your device, you can search for a set of commands that will work. Your remote will sample all the codes in its system for that device mode to find one that will allow you to control your device.

1. Press and hold a device mode key (AUDIO, DVD/VCR, or TV) for at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
2. Press a function key (such as Power or Mute). The following function keys are valid for searching (Power is recommended):
  - Power
  - Mute
  - Play
  - CH +
  - Stop
 The device key's LED blinks three times, then turns off.

3. Press **▲**. The remote will send the IR command for the function you pressed in Step 2.
4. If the device performed the function you pressed, press **OK**. The remote will now control the device you selected in Step 1. If the device did not perform the function you pressed, repeat step 3. Press **▼** to retry the previous code.

**Tip:** Note the code set that worked, in case you must re-code your remote:  
**DVD/VCR:**  
**TV:**  
**AUDIO:**

See "Checking Codes" for more information on noting code sets.

## CHECKING CODES

1. Press and hold a device mode key (AUDIO, DVD/VCR, or TV) for at least six seconds. The LEDs for each device key light up, then the key for the device you selected remains on.
2. Enter **990** to tell the remote you are verifying the device code. The LED blinks twice.
3. Press **1**, then count the LED blinks and write down the number. If the LED does not blink, the number is **0**. This is the first digit of the device code. Press **2, 3, and 4** to obtain all four-code digits.

## CHANGING VOLUME LOCK

Locking the volume controls to a single device makes it easier to control volume, without having to guess whether the volume will change. If you lock the remote's volume controls to the TV (for example), you will always be able to change the volume to the level you want, without having to adjust it on multiple device.

1. Press and hold the device mode key (TV, AUDIO, DVD/VCR, or CABLE) corresponding to the device you want to control volume for at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
2. Press **VOL +**.

The device key's LED blinks three times, indicating it has locked the volume control to the device you selected. The **AUDIO** device key always controls its own volume, regardless of the device is locked to volume control.

**Note:** If you reassign AUDIO to another device, such as a second TV, the second TV will always control its own volume.

## Unlocking Volume Control:

1. Press and hold a device mode key (TV, AUDIO, DVD/VCR, or CABLE) corresponding to the device currently locked to the volume controls for at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
2. Press **VOL -**.

The device key's LED blinks three times, indicating it has unlocked the volume control for all devices.

## REASSIGNING DEVICE KEYS

Each device key accesses a specific type of device (for example, the DVD/VCR key can only be programmed to control a DVD player, VCR, DVR, or HTIB system). This makes it easier to search for a code if your device's code does not appear on the list provided. Your new remote allows you to change the type of device that may be assigned to a device key. That way, if you have two TVs, for example, you can control them both by changing the type of device the DVD/VCR or AUDIO key controls.

1. Press and hold the device mode key (TV, AUDIO, DVD/VCR, or CABLE) corresponding to the type of device you want the reassigned key to control (for example, TV) for at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
2. Enter **992**.
3. Press the device mode key you want to reassign (for example, AUDIO). That mode key's LED blinks three times and turns off, indicating that it has been reassigned.

The reassigned key automatically uses the same device code as the key you selected in Step 1. If your second device uses a different code, you may program it for the new code. See "Programming Device Control".

**Note:** You may not reassign the CABLE device key to another type of device.

## Assigning a key back to its Original Device Type:

1. Press and hold the device mode key (TV, AUDIO, DVD/VCR, or CABLE) you want to reset to its original type (for example, AUDIO) for at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
2. Enter **992**. The mode key's LED blinks three times and turns off.
3. Press the device mode key you selected in Step 1 again. The mode key's LED blinks three times and turns off.
4. Program the restored mode key to control a device. See "Programming Device Control".

## THE PRE-PROGRAMMED MACRO POWER KEY

Using the pre-programmed macro feature, the user is enabled to turn on and off the cable set top box and TV while the remote is set in Cable mode, with a single press of the power button.

## TROUBLESHOOTING

If you have trouble with your remote, try the following steps in order.

### My remote is not responding

- ◆ Review the information in "Using Your Remote" to make sure that the key you pressed is active for the device you are controlling.
- ◆ Make sure you are controlling the device you think you are. See "Using Your Remote" for more information on choosing a device to control.
- ◆ Make sure your batteries are good. If battery power is low, your remote enters a "Low Battery Condition" to conserve battery power for retaining your settings. See "Installing Batteries" for more information on changing the batteries.
- ◆ Reset all settings:
  - Press and hold a device mode key (TV, AUDIO, DVD/VCR, or CABLE) or at least six seconds. The LED for each device key lights up, then the key for the device you selected remains on.
  - Enter **981**.
 The LED blinks twice to indicate that your remote is returned to its factory settings. You will need to reset all device code settings. See "Programming Device Control."



**TV/VCR Combination Devices**  
**Controlled by the TV key**  
**TV / VCR combinación de dispositivos**  
**Controlado por la tecla TV**

America Action	0180
Audiovox	0180
Emerson	0236

**Controlled by the VCR key**  
**Controlado por la tecla VCR**

Broksonic	1479
Citizen	1278
Curtis Mathes	1035
Daewoo	1278
Emerson	1278,1479
Funai	0000
GE	0807,1035,1060
GoldStar	1237
Harley Davidson	0000
Hitachi / Lloyd's	0000
Magnasonic	1278
Magnavox	0000,1781
Memorex	0162,1237
Mitsubishi	0807
Optimus	0162
Orion	1479
Panasonic	0162,1035
Penney	1035,1237
Quasar	0162,1035
RadioShack	0000
RCA	0807,1035,1060
Samsung	1014
Sansui	0000,1479
Sears	0000,1237
Sony	1232,0000
Sylvania	1781
Symphonic / Thomas	0000
Toshiba	1145
Zenith	0000,1479

**TV/VCR/DVD Combination Devices**  
**Controlled by the VCR key**  
**TV / VCR / DVD Dispositivos de**  
**Combinación Controlado por la tecla VCR**

Sharp	0807
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**Controlled by the DVD key**  
**Controlado por la tecla DVD**

Akai	0899
Broksonic	0868
Emerson / ESA	0821
Magnavox	0821
Panasonic	1362
Sharp	0630
Superscan / Sylvania	0821
Symphonic	0821
Toshiba	1045

**VCRs**

A-Mark / Accurian	0000
Admiral	0060,0039
Adventura / Aiwa	0000
Allegro	0039
Amstrad / Avis	0000
Bell & Howell	0039,0000
Broksonic	0184,1479
Citizen	0000,1278
Colortyme	0060
Colt / Criterion / Crosley	0000
Curtis Mathes	0060,0162,0000,1035
Daewoo	1278
Denon	0042
DirecTV	0739
Dual	0000
Durabrand	0039
Dynatech	0000
Electrohome	0060,0000,0043
Emerald	0184
Emerson	0184,0000,0043,1278
Fisher	0039,0000
Fuji	0033
Fujitsu / Funai / Garrard	0000
GE	0060,0000,0807,1035
Gemini	0060
Genexxa	0000
Go Video	0614
GoldStar	0039,0000,1237
Goodmans / Gradiente	0000
Granada	0042
Harley Davidson / HI-Q	0000
Hitachi	0000,0042
Hughes Network Systems	0739,0042
Humax	0739
HYTEK	0000
Jensen / JVC / Kenwood	0067
KTV / Lloyd's / Logik	0000
LXI	0000,0042,0067
Magnasonic	0000,1278
Magnavox	0039,0000,0618,1781

Matsushita	0162
Memorex	0162,0039,0000,1237
MGA	0060,0043
Minolta	0042
Mitsubishi	0060,0000,0042,0067
	0043,0807
MTC / MTX	0000
Multitech	0039,0000
NEC	0067
Olympus	0162
Optimus	0162,0000
Orion	0184,0000,1479
Panasonic	0162,0000,0225,0614
	0616,1035
Penney	0162,0000,0042,0067
	1035,1237
Pentax	0042
Philco	0000
Philips	0739,0162,0000,0616
	0618
Pioneer	0162,0042,0067
Proscan	0060,1060
Protec	0000
Pulsar	0039
Quasar	0162,1035
RadioShack	0162,0000
RCA	0060,0000,0042,0807
	0880,1035,1060
Realistic	0162,0000
ReplayTV	0614,0616
Runco	0039
Samsung	0739,0060,0000,1014
Sanky	0039
Sansui	0000,0067,1479
Sanyo	0000
Scott	0184,0043
Sears	0060,0162,0039,0033
	0000,0042,0067,0043
	1237
Sharp	0000,0807
Shintom	0039,0000
Signature	0060,0000
Sonic Blue	0614,0616
Sony	1232,0033,0000,0067
	0636
Soundmaster	0000
STS	0042
SV2000 / SVA	0000
Sylvania	0000,0043,1781
Symphonic / Tandy	0000
Tatung / Teac	0000,0067
Technics	0162,0000
Teknika / Thomas	0000
Thomson	0060
Tivo	0739,0618,0636
TMK	0000
Toshiba	0000,0043,1145
Vector Research	0184
Victor	0067
Videersonic / Villain	0000
Wards	0060,0033,0000,0042
	0043
White Westinghouse	0000
/ XR-1000	
Zenith	0039,0033,0000,1479

**DVD/VCR Combination Devices**  
**Controlled by the VCR key**  
**DVD / VCR combinación de dispositivos**  
**Controlado por la tecla VCR**

Accurian / Hitachi	0000
/ Magnavox	
RCA	0060
Sylvania / Symphonic	0000

**Controlled by the DVD key**  
**Controlado por la tecla DVD**

Accurian	0675
Allegro	0869
Apex Digital	1061
Broksonic	0695
CineVision / Daewoo	0833,0869
Emerson / Funai / GFM	0675
Go Video	0715,0741,0833,0869
	1075
GoldStar	0741
Hitachi	0664
JVC	0867
LG	0741
Magnavox	0675
Memorex	0695
Panasonic	1762
Philips	0675
Polaroid	1061
Presidian	0675
RCA	0522,0822
Samsung	0820,1075
Sansui	0695
Sanyo	0670,0873
Sharp	0630
Sony	0864,1033,1431
Sylvania / Symphonic	0675

Toshiba	0503
Zenith	0741,0869

**DVR Devices**  
**Dispositivos de DVR**

DirecTV	0739
Go Video	0614
Hughes Network Systems	0739
Humax	0739
Panasonic	0614,0616
Philips	0739,0618
RCA	0880
ReplayTV	0614,0616
Samsung	0739
Sonic Blue	0614,0616
Sony	0636
Tivo	0739,0618,0636

**DVDs**

3D LAB	0503,0539
Accurian	0675
Aiwa	0533
Akai	0695,0899
Alba	0672
Allegro	0869
Apex Digital	0533,0672,1061
Audiovox	0790
Blue Parade	0571
Blue Sky	0695
Bose	1895
Broksonic	0695,0868
California Audio Labs	0490
Centrex	0672
CineVision	0833,0869
Citizen	0695
Clairtone	0571
Creative	0503,0539
Curtis Mathes	1087
CyberHome	0816
Daewoo	0784,0833,0869
Denon	0490,2258
Digitrex	0672
Disney	0675,1270
Dual	0675
DVD2000	0521
Electrohome	1003
Emerson	0591,0675,0821,1268
Enterprise	0591
Entivo	0503,0539
ESA	0821,1268
Fisher	0670
Funai	0675,1268
GE	0522,0815
GFM	0675,1268
Go Video	0573,0715,0741,0783
	0833,0869,1075
GoldStar	0741,0869
Goodmans	0790
Gradiente	0490
Grundig	0539
Hitachi	0573,0664
Hiteker	0672
iLo	1348
Insignia	1268
Integra	0571,1769
IRT	0783
JMB	0695
JVC	0558,0623,0867
Kawasaki	0790
Kenwood	0490,0534
KLH	0790
Kloss	0533
Koss	1061
Lecson	1533
LG	0591,0741,0869
LiteOn	1058
Loewe	0741
Logix	0783
Magnasonic	0675
Magnavox	0503,0539,0646,0675
	0821,1268,1354
Marantz	0503,0539,0675
McIntosh	1533
Memorex	0695,1270
Microsoft	0522,2083
Mitsubishi	1521,0521
NAD	0741
NEC	0869
Norcent	1003
Onkyo	0503,1769
Optimus	0571
Palsonic	0672
Panasonic	0490,0503,0571,0632
	1362,1641,1762,1907
	1990
Philco	0675
Philips	0503,0539,2056,2084
	0646,0675,0854,1354
Pioneer	0525,0571,0142,0631
	0632
Polaroid	1061
Polk Audio	0539

Presidian	0675
Proceed	0672
Proscan	0522
Radionette	0741
RadioShack	0571
RCA	0522,0571,1769,0790
	0822,1022
Realistic	0571
Rio	0869
Rotel	0623
Samsung	0490,0573,0199,0820
	0899,1075,1932
Sansui	0695
Sanyo	0670,0675,0695,0873
Schneider	0783
Sharp	0630,0675,1256,2250
Shinasonic	0533
Slim Art	0784
Sonic Blue	0573,0715,0783,0869
Sony	1533,0533,0864,1033
	1431,1516,1903,1934
Superscan	0821
Sylvania	0675,0821,1268
Symphonic	0675,0821,1268
Teac	0571,0790
Technics	0490
Theta Digital	0571
Thomson	0522
Tivo	1503
Toshiba	0503,0573,0539,1769
	0695,1045,1503
Universum	0591
Urban Concepts	0503,0539
Venturer	0790
Xbox	0522,2083
Yamaha	0490,0539,0646,0545
Zenith	0503,0591,0741,0869
Zeus	0784

**HD DVD**

Denon	2258
Integra	1769
LG	0741
Microsoft	2083
Onkyo	1769
Panasonic	1641
Philips	2084
Pioneer	0142
RCA	1769
Samsung	0199
Sharp	2250
Sony	1516
Toshiba	1769
Xbox	2083