



Charter OCAP 4-Device Remote Control



Users Guide

PREPROGRAMMED FOR YOUR SET-TOP BOX

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INTRODUCTION

The Charter OCAP Remote Control by Universal Electronics is our latest generation universal remote control. Its sophisticated technology allows you to consolidate up to five of your original home entertainment remote controls into one easy-to-use product. Moreover, its packed with advanced features such as:

- Preprogrammed control to operate the cable converter supplied by your cable service provider
- Dedicated keys to control popular functions on your DVR/PVR (Digital/Personal Video Recorder)
- Programmable Master Power key for master on/off control of your home entertainment equipment with a single keystroke
- Programmable Macro Key to allow you to activate certain keys in a specific order
- Channel Lock to lock channel selection only to the cable converter
- Volume Lock to lock volume controls to one mode or individual modes
- Device Key Re-Assignment to remotely control a second (duplicate) device
- Code Search to help program control of older or discontinued components
- Color-coded keys to quickly locate popular functions
- Code library for popular video and audio devices

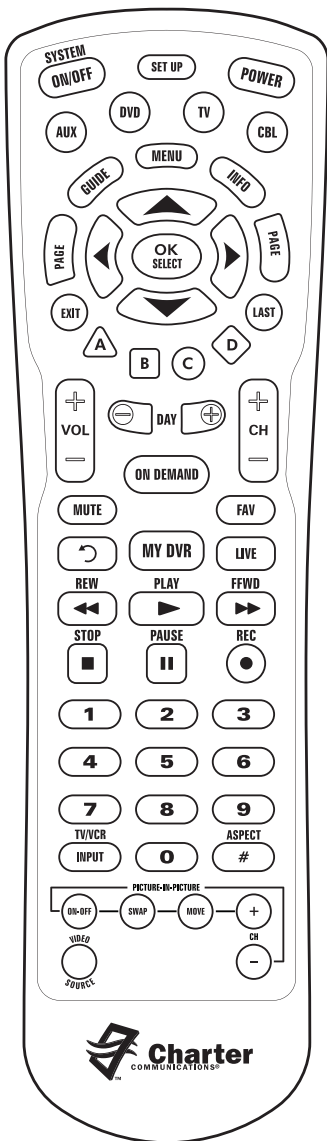
Before using the product, you will need to install the enclosed batteries and also perform some programming to operate the specific home entertainment devices you wish to control.

Please follow the instructions detailed in this manual to set up the unit and then start enjoying your new remote control and cable service.

FEATURES AND FUNCTIONS

Use the illustration below to locate features on the Charter OCAP Remote Control and then study the Key Charts (on the next three pages) to learn how they function.

To find out what type of devices can be controlled by each device key after programming, see “Device Table” on page 7.



Key Charts

Key	Function
-----	----------



Use **SYSTEM ON/OFF** to control the **Master Power** macro. For **MASTER POWER** control, see “Using the System On/Off Key” on page 17.



Use **SET UP** for all programming sequences.



Press **PWR** once to turn on or off a home entertainment device. For **MASTER POWER** control, see “Using the System On/Off Key” on page 17.



Press **AUX**, **DVD**, **TV**, or **CBL** once to select a home entertainment device to control. Also see “Device Table” on page 7.

Each device key has an embedded LED (red light) that blinks upon selection and indicates the remote control is working and (after programming) is sending signals.



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



Press **MENU** once to display available interactive services.



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



Use **DAY+** (or **DAY-**) to move a day forward (or back) on your cable converter's program guide.



Use the Cursor keys to move the cursor in the program guide and menu screens and to navigate within the interactive service.

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




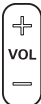
Use **PAGE+** (or **PAGE-**) to page up (or page down) through menu screens and the program guide.




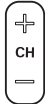
Use **EXIT** to exit out of your cable converters menu and guide.


Key	Function
-----	----------


	Use A, B, C, or D to access additional cable features (see your cable converter's manual).
---	---


	Use VOL+ (or VOL-) to raise (or lower) the audio volume.
---	---

	Use FAV to cycle through your favorite channels stored in your cable converter.
---	--


	Use CH+ (or CH-) to select the next higher (or lower) channel. For DVD players, use these keys to skip forward (or reverse) through chapters. For amplifiers/receivers, use these keys to select the next higher (or lower) preset station.
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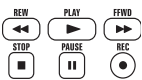
	Press MUTE once to turn the sound off or on.
---	---

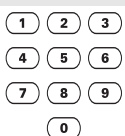
	Press LAST once to recall the last channel.
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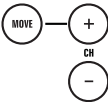

	Press ON DEMAND to access Video on Demand services. This is also a programmable macro key. (See "Programming the On DEMAND MACRO Key" on page 16.)
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	Press MY DVR once to display a list of recorded shows on your PVR/DVR cable box.
---	---

	Press LIVE to command your PVR/DVR cable box to return to watching live TV.
---	--

	In all modes except CBL , use REW , PLAY , FFWD , STOP , and PAUSE to control a VCR, DVD player, or a PVR (after selecting a desired device). To record in the VCR mode, press REC twice. In the CBL mode, use these keys to control the DVR/PVR functions of the set-top box.
---	---





	Use the keypad numbers (1-9 , and 0) to directly tune channels (e.g., 09). For amplifiers/receivers, use the keypad numbers to select inputs 1 through 10.
---	---

Key	Function
	Press ASPECT once to change the aspect ratio of the show you are watching. (Not available on all set-top boxes).
	Use PIP ON-OFF to switch the Picture-In-Picture feature on or off (if available on your TV or cable service). Use PIP SWAP to switch images and sound between the main and window pictures (if available on your TV or cable service).
	Use PIP MOVE to move the window picture to different positions in the main picture (if available on your TV or cable service). Use PIP CH+ (or CH-) to select the next higher (or lower) PIP channel (if available on your TV or cable service).
	In the CBL mode, use VIDEO SOURCE to view other video sources (A or B) instead of cable. In all TV mode, use VIDEO SOURCE to watch TV or video/DVD programs on a desired device. For amplifiers/receivers, use VIDEO SOURCE to select an input source.

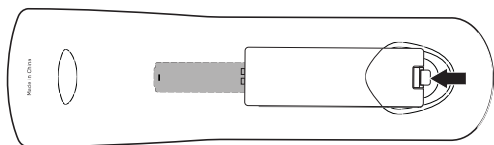
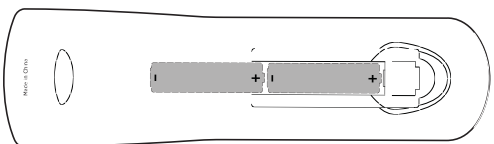
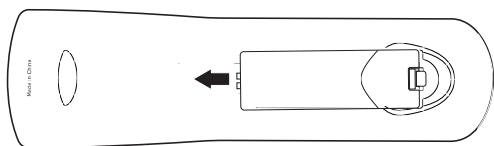
Device Table

NOTE: Please refer to the table below when performing the instructions in “Programming Device Control” on page 8 or “Setting Up a Combo Unit” on page 10.

After programming, the Charter OCAP Remote Control will be able to control the following types of devices:

Device Key	Controls these types of devices
	Television, DVD, VCR, PVR, Audio Receiver, Audio Tuner, Audio Amplifier, Cable Box, Satellite Receiver, Video
	DVD Player, or VCR, PVR, Audio Receiver, Audio Tuner, Audio Amplifier, CBL, SAT, Video
	Television, DVD, VCR, PVR, Audio Receiver, Audio Tuner, Audio Amplifier, Cable Box, Satellite Receiver, Video
	Cable Box (Converter) or Satellite Receiver, or Video Accessories.

INSTALLING BATTERIES



1. On the back of the remote control, push the tab and lift off the battery cover.
2. Locate the two (2) enclosed AA batteries. Match the + and - marks with those in the battery case, then insert them.
3. Align the cover's keys with the case's holes and press the cover back into place. The tab should click when the cover is locked.
4. Test the remote control by pressing any mode key (e.g., **TV**). If the batteries are inserted correctly, the LED (red light) blinks once.



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

PROGRAMMING DEVICE CONTROL

The Charter OCAP Remote Control is preprogrammed to operate the cable box (converter) provided by your cable system, an RCA TV, a Toshiba DVD player, and a Pioneer audio receiver. To control devices other than the default brands, perform the following steps; otherwise skip this section.

NOTES: For control of a Combo device (for example, a TV/VCR combo), skip this section and perform the instructions on “Setting Up a Combo Unit” on page 10. Also refer to “Device Table” on page 7 to find out which devices can be programmed onto each device key.

If you have another brand of cable converter or a satellite receiver you would like to control, you’ll need to unlock the cable ID Lock before changing the converter code (see “Programming Cable ID Lock” on page 15).

1. Turn on a device and, if applicable, insert video media, (e.g., cassette or disc).

NOTE: Please read steps 2 through 4 completely before proceeding. Highlight or write down the codes and device you wish to program before moving on to step 2.

2. On the remote control, press a device key once (i.e., **AUX**, **DVD**, **TV**, or **CBL**); it blinks once. Then press and hold **SET UP** until the selected mode key blinks twice.

SET UP

3. Use the “Manufacturer’s Codes” starting on page 22) to locate the type of device and brand name and then enter the first five-digit code for your device. If performed correctly, the selected mode key blinks twice.

NOTE: If the selected mode key emits a long blink, the entry is invalid. Repeat steps 2 through 3 and try entering the same code again.

4. Aim the remote control at the device and press **PWR** once. The device should turn off. If it does not, repeat steps 2 through 3, trying each code for your brand until you find one that works. If it still does not respond, try searching for the code (see “Searching for Your Code” on page 11).

POWER

NOTE: If the device does not have a **PWR** key, press the ▶ (Play) key.

5. Repeat steps 1 through 4 for each device you want the remote control to operate. For future reference, write down each working device code in the boxes on the following page.

AUX Code

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------

Device Type: _____

DVD Code

--	--	--	--	--

Device Type: _____

CBL Code

--	--	--	--	--

Device Type: _____



TV Code

--	--	--	--	--

Device Type: _____


SETTING UP A COMBO UNIT

If you own a combo unit such as a TV/DVD Combo or a TV/VCR Combo, you need to follow special steps to set it up. Perform the following instructions to control combo device:

1. For a TV/DVD Combo, turn on your TV/DVD Combo and insert a DVD. (For a TV/VCR Combo, insert a videocassette).
2. On the remote control, press **DVD** once; it blinks once. Then press and hold **SET UP** until the **DVD** key blinks twice.


3. Use the “Manufacturer’s Codes” starting on page 22 to locate the brand name and enter the first five-digit code for your combo device (for example, TV/VCR). If you perform this procedure correctly, the **DVD** key blinks twice.

NOTE: If the **DVD** key did not blink twice after entering the codes last digit, repeat steps 2 through 3 and try entering the same code again.

If you’ve located a setup code that works for your combo device (for example, a TV/DVD Combo) and a separate TV code is also listed, you’ll need to program this code into the remote control to access volume control (see “Programming Device Control” starting on page 8).

4.  Aim the remote control at your combo device (for example, TV/DVD Combo) and press **PWR** once. The device should turn off. If it does not respond, repeat steps 2 through 3, trying each code listed for your brand until you find one that works. If it still does not respond, try searching for the code (“Searching for Your Code” starting on page 11).
5. For future reference, write down each working device code in the boxes below:

TV/VCR or TV/DVD Code

--	--	--	--	--

TV Code (if used)

--	--	--	--	--

SEARCHING FOR YOUR CODE

If your home entertainment device does not respond to the Charter OCAP 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.

NOTE: Use the following device code digits to control a specific device:

0 = Cable (dedicated to cable only)

1 = TV

2 = DVD/VCR

3 = Audio

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

1. Turn on your TV.
2. On the remote control, press **TV** once; it blinks once. Then press and hold **SET UP** until the **TV** key blinks twice.



3. Enter **9 9 1**. The **TV** key blinks twice.



4. Press **1** (the device code digit for your TV). The **TV** key blinks twice. Aim the remote control at the TV and press **PWR** once.



5. Press and release the **CH+** key continuously, then stop when the TV turns off.



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

6. Press **PWR**. The TV should turn on, then press **SET UP** to lock in the code.



NOTE: If the TV does not turn on during step 6, then slowly press and release **CH-** to go back through the codes, then press **SET UP** when the TV turns on.



7. To search for the codes of your other devices, repeat steps 1 through 5, but substitute the appropriate key (e.g., **AUX**, **DVD**, or **CBL**) for the device you are searching for.

CHECKING THE CODES

If you have set up the Charter OCAP Remote Control by searching for your device code (on the previous page), you may need to find out which five-digit code is operating your equipment.

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

1. On the remote control, press **TV** once; it blinks once. Then press and hold **SET UP** until the **TV** key blinks twice.



2. Enter **9 9 0**. The **TV** key blinks twice.



3. To view the code for the first digit, press **1** once. Count the number of times the **TV** key blinks (e.g., 3 blinks = 3) and write down the number in the leftmost TV Code box on page 10.



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

4. Repeat step 3 three more times for the remaining digits. Use **2** for the second digit, **3** for the third digit, **4** for the fourth digit, and **5** for the fifth digit. Finish writing down the code in the TV Code boxes on page 10.



- To check for other device codes, repeat steps 1 through 4, but substitute the appropriate key (e.g., **AUX**, **DVD**, or **CBL**) for the device you are checking. Write down the codes in the appropriate boxes on page 10.

PROGRAMMING CHANNEL CONTROL LOCK

By default, the remote control's channel-control capabilities are locked to the cable converter. The affected keys* are **1** through **0**, **CH+**, **CH-**, and **LAST**. This guarantees that you do not inadvertently change a channel on your TV or VCR. However, you can deactivate this feature to allow full access to these keys in the **TV** and **VCR** modes.

Unlocking Channel Control

- On the remote control, press **CBL** once; it blinks once. Press and hold **SET UP** until the **CBL** key blinks twice.



- Enter **9 7 3**. The **CBL** key blinks twice.



- Press **CH-** once. The **CBL** key blinks four times.



Now the remote control provides TV and VCR channel-control capabilities while in the TV or VCR mode.

Locking Channel Control to CBL

- On the remote control, press **CBL** once; it blinks once. Press and hold **SET UP** until the **CBL** key blinks twice.



- Enter **9 7 3**. The **CBL** key blinks twice.



- Press **CH+** once. The **CBL** key blinks twice.






Now, regardless of what mode you select, the channel keys only change channels on your cable converter.

CHANGING VOLUME LOCK

Volume Lock allows you to control the volume through the device identified as having your primary speaker(s), regardless of which mode you are using. On the Charter OCAP Remote Control, Global Volume Lock is set to **TV**, so you can control TV volume while in the **AUX, DVD, TV** or **CBL** mode. You can perform Individual Volume Unlock on a selected device to set its volume control for independent operation.




Unlocking Volume Control for a Single Device (Individual Volume Unlock)

1. Assuming Global Volume Lock is active, select a mode on the remote control that you want to unlock (e.g., **CBL**) and press it once. Next, press and hold **SET UP** until the device key blinks twice.

2. Enter **9 9 3**. The last-selected device key blinks twice.

3. Press **VOL-** once. The last-selected device key blinks four times.

4. Repeat steps 1 through 3 for each device you want volume to be unlocked.






Now, after you select a device that has volume unlocked (e.g., **CBL**), pressing **VOL+**, **VOL-**, or **MUTE**, controls only that device's volume.

Unlocking All Volume Control (Global Volume Unlock)

NOTE: Performing these instructions sets independent volume control for all programmed devices.

1. On the remote control, press and hold **SET UP** until the last-selected device key blinks twice.

2. Enter **9 9 3**. The last-selected device key blinks twice.

3. Press **VOL+** once. The last-selected device key blinks four times.









Locking Volume Control To One Mode (Global Volume Lock)

1. On the remote control, press and hold **SET UP** until the last-selected device key blinks twice.

2. Enter **9 9 3**. The last-selected device key blinks twice.



3. Select a mode (e.g., **TV** or **AUX**) which you want to use to control the volume. The selected device key blinks twice.


Now, when you press **VOL+**, **VOL-**, or **MUTE**, the volume of the selected device (e.g., **TV**) is controlled regardless of mode.

PROGRAMMING CABLE ID LOCK

The Charter OCAP Remote Control is locked at the factory to operate your cable provider's set top box. However, if you have another brand or model of cable converter or satellite service that you would like to control, then you'll need to perform the following steps to unlock the ID Lock, enter a new manufacturer's code, and lock the ID Lock again.

1. Turn on the cable converter.
2. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.


3. Enter **9 8 2**. The **CBL** key blinks four times, indicating ID Lock is unlocked.



4. Perform the instructions under "Programming Device Control" on page 8 to program device control for the desired cable converter or satellite receiver.
When you are done, perform steps 5 and 6 on this page to again lock the cable ID Lock.
5. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.



6. Enter **9 8 2**. The **CBL** key blinks twice, indicating ID Lock is again locked.

9

8

2

PROGRAMMING THE ON DEMAND MACRO KEY

The Charter OCAP Remote Control includes one macro key (the **ON DEMAND** key). The **ON DEMAND** key allows you to set up key macros to activate certain keys in a specific order. For example, you can set up a key macro to change the channels on your TV, raise or lower the volume, and start recording on your VCR, all with the touch of one key. If you want to change the macros previously stored in the **ON DEMAND** macro key, you'll need to clear the key first (see "Clearing the ON DEMAND Macro Key" on page 17).

Programming the ON DEMAND Macro Key

1. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.

SET UP

2. Enter **9 9 5**. The **CBL** key blinks twice.

9

9

5

3. Press and release **ON DEMAND** once.

4. Press the key sequence you want to program into the macro. For example, to turn on your TV and raise its volume, press **TV** followed by **VOL+**.

TV

NOTE: You can program up to 15 key presses into one macro.

5. Press and hold **SET UP**. The **CBL** key blinks twice.

SET UP

6. To add another macro, repeat steps 1 through 5, substituting the new key sequence to be added in step 4.

NOTE: Programming more than five macros on the **ON DEMAND** macro key overwrites previous settings.

Clearing the ON DEMAND Macro Key

1. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.
2. Enter **9 9 5**. The **CBL** key blinks twice.

9

9

5

3. Press and release the **ON DEMAND** key once.
4. Press and hold **SET UP**. The **CBL** key blinks twice.

SET UP

The **ON DEMAND** key is now clear and ready for reprogramming (see “Programming the ON DEMAND Macro Key” on page 16). If desired, repeat these to clear another Tune-In key.

USING THE SYSTEM ON/OFF KEY

The Charter OCAP Remote Control has a unique feature that allows you to sequentially turn up to four of your home entertainment devices on or off with a single key press.

NOTE: **SYSTEM ON/OFF** is not programmable. It turns your devices on or off in a pre-programmed sequence. The pre-programmed sequence is: **CBL Power**, **TV Power**, **DVD Power**, and **AUX Power**. See “Programming Device Control” on page 8.

Using the **SYSTEM ON/OFF** Key

1. Press **SYSTEM ON/OFF** once. Your devices turn on or off in the pre-programmed sequence.

**SYSTEM
ON/OFF**

NOTE: Only devices you have programmed the remote to control turn on or off sequentially. For example, if you have programmed control of your TV, but not your DVD player, **SYSTEM ON/OFF** does not turn your DVD player on or off.

USING KEYMOVER

The Charter OCAP Remote Control includes a *Keymover* feature that allows you to map (or copy) keys from one mode (i.e., source mode) to another mode (i.e., destination mode).

Programming Keymover

For example, if your DVD player does not have volume control, you can map those keys (i.e., **VOL+**, **VOL-**, and **MUTE**) from the TV mode to DVD mode as follows:

1. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.



2. Enter **9 9 4**. The **CBL** key blinks twice.



3. For the source mode, press a desired device key once (i.e., **AUX**, **TV**, **DVD**, or **CBL**). For this example, press **TV** once.



4. For the source key, press a key to be moved once. For this example press **VOL-** once.



5. For the destination mode, press a desired device key once (i.e., **AUX**, **TV**, **DVD**, or **CBL**). For this example, press **DVD** once.



6. For the destination key, press a key to be moved once. For this example press **VOL+** once.








7. Repeat steps 1 to 6 to move additional keys. For this example, repeat steps 1 to 6 two more times to map the remaining volume control keys, substituting **VOL-** and **MUTE** as source and destination keys in steps 4 and 6.








Upon completion of the above procedure, you can now use your Charter OCAP Remote Control to control the TV's volume and mute in the DVD mode, as well as in the TV mode.

Restoring All Keymover Keys in a Single Mode

1. On the remote control, press **CBL** once; it blinks once. Then press and hold **SET UP** until the **CBL** key blinks twice.

2. Enter **9 9 4**. The **CBL** key blinks twice.



3. Press and release the mode key you want to clear twice. For example, to clear all Keymover keys for the TV mode, press and release **TV** twice.






Restoring a Single Keymover Key

1. On the remote control, press the mode key once.
1. Press and hold **SET UP** until the last-selected mode key blinks twice (for example, **TV**).

2. Enter **9 9 4**. The mode key blinks twice.



3. Press and release the device key twice. For example, to clear the CH+ key in TV mode, press and release **CH+** twice.


CLEARING CUSTOM PROGRAMMING

The Charter OCAP Remote Control contains a *Custom Programming Reset* program. You can use it to remove all custom programming, except your setup codes and reassigned device keys.

IMPORTANT: Executing this program erases all custom settings for Volume Lock, Learned Keys, Tune-In Keys, and Channel Lock. However, your device programming remains.

1. On the remote control, press and hold **SET UP** until the last-selected device key blinks twice.

2. Enter **9 8 0**. The last-selected device key blinks twice, pauses, and blinks twice again to confirm that all custom programming is cleared.




TROUBLESHOOTING

PROBLEM: Device key does not blink when you press a key.

SOLUTION: Replace the batteries with two (2) new AA batteries (see “Installing Batteries” on page 8).

PROBLEM: Device key blinks when you press a key, but home entertainment device does not respond.

SOLUTION: Make sure you are aiming the remote control at your home entertainment device and that you are within 15 feet of the device you are trying to control.

PROBLEM: The remote control does not control home entertainment devices or commands are not performing properly.

SOLUTION: Try all listed codes for the device brand being set up. Make sure all devices 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 10).

PROBLEM: No volume on a second TV.

SOLUTION: Follow instructions under “Changing Volume Lock” on page 14.

PROBLEM: **PLAY** and **STOP** keys do not work on a Motorola DCT-2000 cable converter.

SOLUTION: Re-program the CBL key for cable code 0476 (see “Programming Device Control” on page 8).

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 remote control. For Sony, use TV code 0000 and VCR code 0032. For Sharp, use TV code 0093 and VCR code 0048.

FCC NOTICE

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 off and on, the user is encouraged to try to correct the interference by one or 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.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

ADDITIONAL INFORMATION

This product does not have any user-serviceable parts. Opening the case, except for the battery cover, may cause permanent damage to your Charter OCAP Remote Control.

- For help via the Internet, visit us at:
www.urcsupport.com

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US Patents

6,014,092 5,515,052 5,959,751 4,959,810 5,228,077
5,255,313

MANUFACTURER'S CODES

Setup Codes for Audio Amplifiers

GE	30078
JVC	30331
Soundesign	30078
Victor	30331
Wards	30078
Yamaha	30354

Setup Codes for Audio Receivers

ADC	30531
Aiwa	30158, 30189, 30405
Bose	31229, 31933
Capetronic	30531
Carver	30189
Denon	31360, 31104
Harman/Kardon	30110, 30189
Integra	30135
JBL	30110
JVC	30074
Kenwood	31313, 31570, 30027, 31027
Linn	30189
Magnavox	30189, 30531
Marantz	30189
Onkyo	30135, 30842
Optimus	31023, 30531
Panasonic	31308, 31518
Philips	30189, 31266
Pioneer	31023, 30014, 30531, 31384
Polk Audio	30189
Proscan	31254
RCA	31023, 31254, 30531
Sansui	30189
Sony	31759, 30158, 31758
Stereophonics	31023
Sunfire	31313
Technics	31308, 31518
Victor	30074
Wards	30158, 30189, 30014
Yamaha	30176, 31176

Setup Codes for Audio Accessories

Apple	31115, 31644
NaviPod	31644

Setup Codes for Cable Boxes/Converters

ABC	00003, 00008
Americast	00899
Bell South	00899
Comcast	01982
Digeo	01187
Director	00476
General Instrument	00476, 00810, 00276, 00003
GoldStar	00144
Hamlin	00009, 00273
Jerrold	00476, 00810, 00276, 00003
Memorex	00000
Motorola	01376, 00476, 00810, 00276, 01187, 01254
Pace	01877, 00237, 00008
Panasonic	00000, 00107, 01982
Paragon	00000
Philips	01305, 00317
Pioneer	01877, 00877, 00144, 00533
Pulsar	00000
Quasar	00000
Regal	00279, 00273
Runco	00000
Samsung	00144
Scientific Atlanta	01877, 00877, 00477, 00008
Sony	01006
Starcom	00003
Supercable	00276
Torx	00003
Toshiba	00000
Zenith	00000, 00525, 00899

Setup Codes for Cable/DVR/PVR Combos

Americast	00899
Comcast	01982
Digeo	01187
General Instrument	00810
Jerrold	00810
Motorola	01376, 00810, 01187
Pace	01877, 00237
Panasonic	01982
Pioneer	01877, 00877
Scientific Atlanta	01877, 00877
Sony	01006
Supercable	00276
Zenith	00899

Setup Codes for DVD Players

Accurian	21416
Aiwa	20641
Akai	20695, 20899, 21089
Alco	20790
Allegro	20869
Amphion Media Works	21245
AMW	21245
Apex Digital	20672, 20830, 21056, 21061
Arrgo	21023
Aspire Digital	21168
Audiovox	20790, 21121, 21122
Blue Parade	20571
Broksonic	20695, 20868, 21419
Cinea	20831
Cinego	21399
CineVision	20876, 20833, 20869
Citizen	20695, 21277
Coby	20778, 21086, 21107, 21351
Craig	20831
CyberHome	20816, 20874, 21023, 21129
Daewoo	20705, 20833, 20869, 21169, 21172, 21234, 21242, 21441
Denon	20490, 20634
Disney	20675, 21270

Durabrand	21127
DVD2000	20521
Emerson	20591, 20675, 20821, 21268
Enterprise	20591
ESA	20821, 21268
Funai	20675, 21268, 21334
Gateway	21073
GE	20522, 20815
Go Video	20744, 20715, 20741, 20783, 20833, 20869, 21044, 21075, 21099, 21304
GoldStar	20741
Harman/Kardon	20582, 20702
Hitachi	20573, 20664, 21247
Hiteker	20672
iLo	21348, 21472
Initial	21472
Insignia	21268
Integra	20627
JBL	20702
JVC	20558, 20623, 20867, 21164, 21602
Kawasaki	20790
Kenwood	20490, 20534
KLH	20790
Koss	20651
Lenoxx	21127
LG	20591, 20741, 20869
LiteOn	21058, 21416, 21440
Loewe	20511
Magnavox	20503, 20539, 20646, 20675, 20821, 21268, 21472, 21506
Marantz	20539
Memorex	20695, 20831, 21270
Microsoft	20522, 21708
Mintek	20839, 21472
Mitsubishi	21521, 20521
NAD	20741
NEC	20785
Norcent	21107

Onkyo	20503, 20627
Oritron	20651
Panasonic	20490, 20703, 21362, 21462, 21490, 21762
Philips	20503, 20539, 20646, 20675, 20854, 21260, 21267, 21354
Pioneer	20525, 20571, 20631
Polaroid	21061, 21086, 21245
Polk Audio	20539
Presidian	20675
Proscan	20522
ProVision	20778
Qwestar	20651
RCA	20522, 20571, 20790, 20822, 21022, 21132, 21769
Rio	20869
Rotel	20623
Sampo	20698, 20752
Samsung	20490, 20573, 20199, 20820, 20899, 21044, 21075, 21470
Sansui	20695
Sanyo	20695, 20873
Sharp	20630, 20675, 20752, 21256
Shinsonic	20533, 20839
Sonic Blue	20869, 21099
Sony	20533, 21533, 20864, 21033, 21070, 21431, 21536
Sova	21122
Superscan	20821
Sylvania	20675, 20821, 21268
Symphonic	20675, 20821
Teac	20790
Technics	20490, 20703
Theta Digital	20571
Tivo	21503
Toshiba	20503, 20695, 21045, 21154, 21503, 21769
Urban Concepts	20503
US Logic	20839
Venturer	20790

Vizio	21064, 21226
Xbox	20522, 21708
Yamaha	20490, 20539, 20545
Zenith	20503, 20591, 20741, 20869

Setup Codes for DVD Recorders

Accurian	21416
Apex Digital	21056
Aspire Digital	21168
Broksonic	21419
Coby	21086
CyberHome	21129
Funai	20675, 21334
Gateway	21073
Go Video	20741, 21304
iLo	21348
JVC	21164
LG	20741
LiteOn	21416, 21440
Magnavox	20000, 20646, 20675, 21506
Panasonic	20490
Philips	20646
Pioneer	20631
Polaroid	21086
RCA	20522
Samsung	20490, 21470
Sharp	20675
Sony	21033, 21070, 21431, 21536
Sylvania	20675
Zenith	20741

Satellite Receivers and DVR/PVR Systems

Setup Codes for Satellite Receivers

Chaparral	00216
Crossdigital	01109
DirecTV	01377, 00392, 00566, 00639, 01639, 01142, 00247, 00749, 01749, 00819, 01856, 01076, 01108, 01109, 01392, 01442, 01609, 01640

Dish Network System	01505, 01005, 00775, 01170, 01775
Dishpro	01505, 01005, 00775, 01775
Echostar	01505, 01005, 00775, 01170, 01775
Expressvu	00775, 01775
GE	00566
General Instrument	00869
GOI	00775, 01775
Hitachi	00819, 01250
HTS	00775, 01775
Hughes Network Systems	01142, 00749, 01749, 01442
JVC	00775, 01170, 01775
Magnavox	00722
Mitsubishi	00749
Motorola	00869
Next Level	00869
Panasonic	00247, 00701
Philips	01142, 00749, 01749, 01076, 00722, 01442
Proscan	00392, 00566
RadioShack	00869
RCA	00566, 00855, 00143, 01392
Samsung	01377, 01276, 01108, 01109, 01442, 01609
Sony	00639, 01639, 01640
Star Choice	00869
Tivo	01142, 01442
Toshiba	00749, 01749, 00790, 01285
UltimateTV	01392, 01640
Uniden	00722
Voom	00869
Zenith	01856

Setup Codes for DVR/PVR Systems

DirecTV	01377, 00392, 00639, 01142, 01076, 01392, 01442, 01640
Dish Network System	01505, 00775
Dishpro	01505, 00775
Echostar	01505, 00775, 01170
Expressvu	00775
Hughes Network Systems	01142, 01442, 20739
JVC	01170
Motorola	00869
Philips	01142, 01442, 20739
Proscan	00392
RCA	01392
Samsung	01442, 20739
Sony	00639, 01640
Star Choice	00869

Setup Codes for TVs

Admiral	10093, 10463
Advent	10761, 10783, 10815, 10817, 10842, 11933
Aiko	10092
Akai	10812, 10702, 10030, 10672, 11903
Albatron	10700, 10843
America Action	10180
Anam	10180
Anam National	10055
AOC	10030
Apex Digital	10748, 10879, 10765, 10767, 10890
Audiovox	10451, 10180, 10092, 10623, 10802, 10875
Aventura	10171
Bell & Howell	10154
BenQ	11032
Bradford	10180
Broksonic	10236, 10463
Candle	10030
Carnivale	10030
Carver	10054

Celebrity	10000
Celera	10765
Changhong	10765
Citizen	10060, 10030, 10092
Clarion	10180
Commercial Solutions	11447, 10047
Contec	10180
Craig	10180
Crosley	10054
Crown	10180
Curtis Mathes	10047, 10054, 10154, 10451, 10093, 10060, 10702, 10030, 10145, 10166, 10466, 11147, 11347
CXC	10180
Daewoo	10451, 10092, 11661, 10623, 10661, 10672
Dell	11080, 11178
Denon	10145
Denstar	10628
Dumont	10017
Durabrand	10463, 10180, 10178, 10171, 11034
Electroband	10000
Electrograph	11755
Electrohome	10463
Emerson	10154, 10236, 10463, 10180, 10178, 10171, 10623, 11963
Envision	10030, 10813
ESA	10812, 10171, 11963
Fisher	10154, 10159
Fujitsu	10683, 10809, 10853
Funai	10180, 10171, 11271, 11963
Futuretech	10180
Gateway	11755, 11756
GE	11447, 10047, 10051, 10451, 10178, 10055, 11347
Gibralter	10017, 10030
Go Video	10886
GoldStar	10178, 10030
Grunpy	10180

Haier	11034, 10768
Hallmark	10178
Harman/Kardon	10054
Harvard	10180
Havermy	10093
Helios	10865
Hello Kitty	10451
Hewlett Packard	11494, 11502
Hisense	10748
Hitachi	11145, 10145, 10151, 11960
HP	11494, 11502
Hyundai	10849
iLo	11990
Infinity	10054
Initial	11990
Insignia	10171, 11204, 11963, 12002
Inteq	10017
JBL	10054
JCB	10000
Jensen	10761, 10815, 10817, 11933
JVC	10053, 10731, 11253
KEC	10180
Kenwood	10030
KLH	10765, 10767
Konka	10628, 10707
Kost	11262
KTV	10180, 10030
LG	11265, 10178, 10700, 10856, 11178, 11758, 11993
Loewe	10136
LXI	10047, 10054, 10154, 10156, 10178
Magnavox	11454, 10054, 10030, 10706, 10187, 10386, 10802, 11198, 11254, 11963, 11990
Marantz	10054, 10030, 10704, 10855
Matsushita	10250, 10650
Maxent	11755
Megapower	10700
Megatron	10178, 10145

Memorex	10154, 10463, 10150, 10178
MGA	10150, 10178, 10030
Midland	10047, 10017, 10051
Mintek	11990
Mitsubishi	10093, 11250, 10150, 10178, 10836
Monivision	10700, 10843
Motorola	10093, 10055
MTC	10060, 10030
Multitech	10180
NAD	10156, 10178, 10866
NEC	10030, 11704
NetTV	11755
Nikko	10178, 10030, 10092
Norcent	10748, 10824
NTC	10092
Olevia	11144, 11240, 11331
Onwa	10180
Optimus	10154, 10250, 10166, 10650
Optoma	10887
Optonica	10093, 10165
Orion	10236, 10463, 11463
Panasonic	10250, 10051, 10055, 10650, 11291, 11941
Penney	10047, 10156, 10051, 10060, 10178, 10030, 11347
Petters	11523
Philco	10054, 10030
Philips	11454, 10054, 10690
Pilot	10030
Pioneer	10166, 10679, 10866
Polaroid	10765, 10865, 11262, 11276, 11314, 11341, 11523, 11991
Portland	10092
Prima	10761, 10783, 10815, 10817, 11933
Princeton	10700, 10717
Prism	10051
Proscan	11447, 10047, 11347
Proton	10178, 10466
Pulsar	10017

Quasar	10250, 10051, 10055, 10165, 10650
RadioShack	10047, 10154, 10180, 10178, 10030, 10165
RCA	11447, 10047, 10090, 10679, 11047, 11147, 11247, 11347, 11547, 11958, 12002
Realistic	10154, 10180, 10178, 10030, 10165
Runco	10017, 10030
Sampo	10030, 11755
Samsung	10060, 10812, 10702, 10178, 10030, 10766, 10814, 11060, 11903
Sansui	10463
Sanyo	10154, 10088, 10159
Scotch	10178
Scott	10236, 10180, 10178
Sears	10047, 10054, 10154, 10156, 10178, 10171, 10159
Sharp	10093, 10165, 10386, 11602
Sheng Chia	10093
Signet	11262
Simpson	10187
Sony	11100, 10000, 11317
Soundesign	10180, 10178
Squareview	10171
SSS	10180
Starlite	10180
Studio Experience	10843
Superscan	10093, 10864
Supreme	10000
SVA	10748, 10587, 10768, 10865, 10870, 10871, 10872
Sylvania	10054, 10030, 10171, 11271, 11314, 11963
Symphonic	10180, 10171
Syntax	11144, 11240, 11331
Tandy	10093
Tatung	10055, 11756
Technics	10250, 10051
Techview	10847

Techwood	10051
Teknika	10054, 10180, 10150, 10060, 10092
Telefunken	10702
TMK	10178
TNCi	10017
Toshiba	10154, 11256, 10156, 11265, 10060, 10650, 10845, 11156, 11356, 11656, 11704
TVS	10463
Vector Research	10030
Victor	10053
Vidikron	10054
Vidtech	10178
Viewsonic	10857, 10864, 10885, 11330, 11578, 11755
Vizio	10864, 10885, 11756, 11758
Wards	10054, 10178, 10030, 10165, 10866, 11156
Waycon	10156
Westinghouse	10885, 10889, 10890, 11282, 11577
White Westinghouse	10463, 10623
Yamaha	10030
Zenith	10017, 10463, 11265, 10178, 10092

Setup Codes for TVs (DLP)

Hewlett Packard	11494
HP	11494
LG	11265
Mitsubishi	11250
Optoma	10887
Panasonic	11291
RCA	11447
Samsung	10812, 11060
SVA	10872
Toshiba	11265

Setup Codes for TVs (HDTV)

Advent	10842
Hitachi	11960
Mitsubishi	10150
Panasonic	10250, 10650, 11291
Pioneer	10679
Princeton	10717
RCA	11447
Samsung	10812, 10702
Toshiba	11256

Setup Codes for TVs (LCD)

Apex Digital	10890
Audiovox	10180, 10802, 10875
Dell	11080, 11178
Envision	10813
Funai	10171
Go Video	10886
Hyundai	10849
iLo	11990
Initial	11990
Insignia	11204, 12002
Kost	11262
LG	10856, 11178, 11993
Magnavox	11454, 10802, 11198, 11990
Marantz	10855
Maxent	11755
Mintek	11990
Mitsubishi	11250
Olevia	11144, 11240, 11331
Panasonic	10650, 11941
Petters	11523
Philips	11454
Polaroid	11262, 11276, 11341, 11523
RCA	10047, 11958
Sampo	11755
Samsung	10812, 10766, 10814
Sharp	10093, 11602
Signet	11262
Superscan	10864

SVA	10587, 10870, 10871
Sylvania	10171, 11271, 11314
Symphonic	10171
Syntax	11144, 11240, 11331
Techview	10847
Toshiba	10845, 11656
Viewsonic	10857, 10864, 10885, 11330, 11578
Vizio	10864, 10885, 11756, 11758
Westinghouse	10885, 10889, 10890, 11282, 11577
Zenith	11265

Setup Codes for TV/DVD Combos

Controlled by the TV

Advent	11933
Emerson	11963
ESA	11963
Funai	11963
Hitachi	11960
iLo	11990
Initial	11990
Insignia	11963, 12002
Jensen	11933
LG	11993
Magnavox	11963, 11990
Mintek	11990
Panasonic	11941
Polaroid	11991
Prima	11933
RCA	11958, 12002
Samsung	11903
Sylvania	11963

Controlled by the DVD

Akai	20695
Apex Digital	20830
Audiovox	21121, 21122
Broksonic	20695

Cinego	21399
Citizen	20695
Emerson	20675, 21268
ESA	21268
Funai	21268
Hitachi	21247
iLo	21472
Initial	21472
Insignia	21268
Magnavox	21268, 21472
Mintek	21472
Panasonic	21490
Philips	20854, 21260
RCA	21022
Samsung	20899
Sansui	20695
Sova	21122
Sylvania	20675, 21268
Toshiba	20695

Setup Codes for TV/VCR Combos

Controlled by the TV

America Action	10180
Audiovox	10180
Emerson	10236

Controlled by the VCR

Broksonic	21479
Citizen	21278
Curtis Mathes	21035
Daewoo	21278
Emerson	20593, 21278, 21479
Funai	20000
GE	20807, 21035, 21060
GoldStar	21237
Harley Davidson	20000
Hitachi	20000
Lloyd's	20000
Magnasonic	20593, 21278
Magnavox	20000, 20593, 21781
Memorex	20162, 21237
Mitsubishi	20807
Optimus	20162, 20593
Orion	21479
Panasonic	20162, 21035
Penney	21035, 21237
Quasar	20162, 21035
RadioShack	20000
RCA	20807, 21035, 21060
Samsung	21014
Sansui	20000, 21479
Sears	20000, 21237
Sony	20000, 21232
Sylvania	21781
Symphonic	20000, 20593
Thomas	20000
Toshiba	20845, 21145
Zenith	20000, 21479

Setup Codes for TV/VCR/DVD Combos

Controlled by the TV

Akai	11903
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Controlled by the DVD

Akai	20899
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Broksonic	20868
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Emerson	20821
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ESA	20821
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Funai	21334
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Magnavox	20821
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Panasonic	21362, 21462
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RCA	21132
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Sharp	20630
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Superscan	20821
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Sylvania	20821
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Symphonic	20821
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Toshiba	21045
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Controlled by the VCR

Sharp	20807
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Setup Codes for VCRs

ABS	21972
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Admiral	20048
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Adventura	20000
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Aiwa	20037, 20000
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Alienware	21972
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American High	20035
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Audiovox	20037
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Broksonic	20184, 20121, 21479
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Calix	20037
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Canon	20035
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Carver	20081
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Citizen	20037, 21278
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Craig	20037, 20047
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Curtis Mathes	20060, 20035, 20162, 21035
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CyberPower	21972
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Daewoo	20045, 21278
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Dell	21972
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Denon	20042
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DirecTV	20739
Durabrand	20039
Dynatech	20000
Electrohome	20037
Electroponic	20037
Emerex	20032
Emerson	20037, 20184, 20000, 20121, 20043, 20593, 21278, 21479, 21593
Fisher	20047
Fuji	20035, 20033
Funai	20000, 20593, 21593
Garrard	20000
Gateway	21972
GE	20060, 20035, 20807, 21035, 21060
Go Video	20614
GoldStar	20037, 21237
Gradiente	20000
Harley Davidson	20000
Harman/Kardon	20081
Hewlett Packard	21972
HI-Q	20047
Hitachi	20000, 20042, 20089
Howard Computers	21972
HP	21972
Hughes Network Systems	20042, 20739
Humax	20739
Hush	21972
iBUYPOWER	21972
JVC	20067
KEC	20037
Kenwood	20067
Kodak	20035, 20037
Linksys	21972
Lloyd's	20000
LXI	20037
Magnasonic	20593, 21278
Magnavox	20035, 20039, 20081, 20000, 20149, 20593, 21593, 21781

Marantz	20035, 20081
Marta	20037
Matsushita	20035, 20162
Media Center PC	21972
MEI	20035
Memorex	20035, 20162, 20037, 20048, 20039, 20047, 20000, 21237
MGA	20043
Microsoft	21972
Mind	21972
Minolta	20042
Mitsubishi	20067, 20043, 20807
Motorola	20035, 20048
MTC	20000
Multitech	20000
NEC	20067
Nikko	20037
Niveus Media	21972
Northgate	21972
Olympus	20035
Optimus	21062, 20162, 20037, 20048, 20593
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