

When finished, press **ENTER** button to highlight Schedule Recording.

Press **ENTER** button again to close the menu. You can see a Record icon for the selected frequency next to the show title.

Highlight Cancel to close the menu, change no information, and return to the highlighted show.



3) Manual Recording

- Highlight the Schedule Service label, and press **MENU** button to display the Schedule Options menu.
- Use the **▲ / ▼ / ◀ / ▶** button to move through the options. Use the number or the **▲ / ▼ / ◀ / ▶** button to change the information, as necessary.
- Highlight New Manual Recording and press **ENTER** button to display the Record Options menu.



- Current information (i.e., date, start and end times, channel, input) is displayed.
- Recorder choice: Please choose the HDD only. This TV does not provide other devices with a recording feature.



- Use the ◀ / ▶ button to choose between Once, Daily, Weekly, and Off, as follows :

Once 	Records the time, channel, input, recorder combination one time.
Daily 	Records the time, channel, input, recorder combination Monday through Friday.
Weekly 	Records the time, channel, input, recorder combination once a week on this selected day of the week.
Off (not cancel) 	Keeps the time, channel, input, recorder combination in the list without recording until the frequency is changed.



When finished, press **ENTER** button to highlight Schedule Recording.

Press **ENTER** button again to close the menu. You can see a Record icon for the selected frequency next to the show title.

* **Note:** Manual recording is listed by channel number.

Highlight Cancel to close the menu, change no information, and return to the highlighted show.



Before a recording begins, a notification screen appears if your TV is On. At that time, you can choose to start or cancel recording. If the TV is not On, the recording occurs as scheduled. If there is no activity for 3 minutes, the notification screen automatically closes and completes the highlighted item.

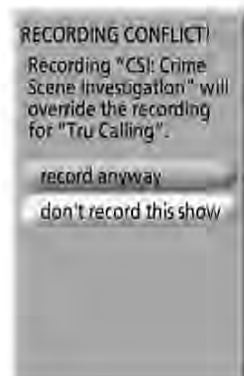
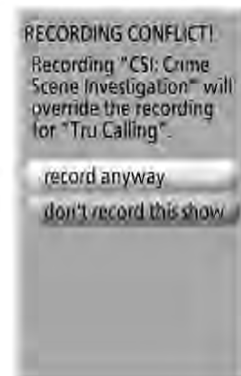
Record Conflict

A conflict message appears for the following reasons:

- A show set to Record overlaps with any part of another show previously set to Record.
- A show set to Record overlaps with a show previously set to auto tune.

Select one of these options:

- Record anyway - This show will override an existing show set to Record or auto-tune.
- Don't record this show - Cancel the Recording.



Remind

You can set a show Reminder in Listings, Search, and Schedule or change Reminder settings for a show in Schedule. There are 2 ways to set a show Reminder:

1) From a Panel Menu

- Highlight a show, and press **MENU** button to display the Episode Options menu.
- Highlight Set Reminder, and press **ENTER** button to display the Remind Options menu.



- Highlight the Frequency option, and use the left and right arrows to choose between:

Once 	Sets a show reminder one time.
Regularly 	Sets a show reminder every time the show airs on the same channel and starts at the same time.
Weekly 	Sets a show reminder each time the show airs on the same day of the week, on the same channel and starts at the same time.
Off 	Keeps the show in the list but will not remind until the frequency is changed.



- Power On the TV, if Off, when a Reminder is scheduled. Choices are Yes and No. (Default = No)
- Automatically tune the TV to the channel (TV must be On), when a Reminder is scheduled. Choices are Yes and No. (Default = No)
- When to display the reminder screen. Choices are 30 seconds to 15 minutes early, to 30 seconds to 15 minutes late, to On time. (Default = 1 min early)

When finished, press **ENTER** button to highlight Schedule Reminder. Press **ENTER** button again to close the menu. You can see a Remind icon for the selected frequency next to the show title. Highlight Cancel to close the menu, change no information, and, return to the highlighted show.



2) Manual Reminder

- Highlight the Schedule Service label, and press the **MENU** button to display the Schedule Options menu.
- Use the **▲ / ▼ / ◀ / ▶** button to move through the options. Use the number or the **▲ / ▼ / ◀ / ▶** button to change the information, as necessary.
- Highlight New Manual Reminder and press the **ENTER** button to display the Remind Options menu.
- Current information (i.e., date, start and end times, channel, input, frequency, etc.) is displayed.
- Highlight the Frequency option, and use the **◀ / ▶** button to choose among Once, Daily, Weekly, and Off, as follows :

Once 	Sets a show reminder for the time, channel, input combination one time.
Daily 	Reminds for the time, channel, input combination Monday through Friday.
Weekly 	Sets a show reminder for the time, channel, input combination once a week on this selected day of the week.
Off (not cancel) 	Keeps the time, channel, input combination in the list without reminding until the frequency is changed.

- Power On the TV, if the TV is Off, when a Reminder is scheduled. Choices are Yes and No.(Default =No)
- Automatically tune the TV to the channel (TV must be On), when a Reminder is scheduled. Choices are Yes and No.(Default = No)

When finished, press **ENTER** button to highlight Schedule Reminder. Press **ENTER** button again to close the menu. You can see a Remind icon for the selected frequency next to the show title.

* **Note:** Manual reminder is listed by channel number.

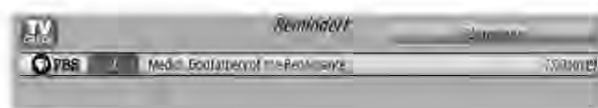
Highlight Cancel to close the menu, change no information, and return to the highlighted show.



Based on your option settings, a notification screen will appear, if your TV is On at the reminder time. Then you can choose to hide the reminder, or highlight the show, and press **ENTER** button to tune to the show. If there is no activity for 3 minutes, the notification screen automatically closes and completes the highlighted item (hide reminders).

If you choose Hide Reminders, the window closes for the show or shows, but does not affect other Reminders you set.

Note: If more than 2 reminders are set for the same time, arrows appear on the Reminder screen. Use the **▲ / ▼** button to view the shows.



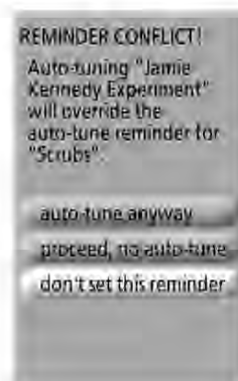
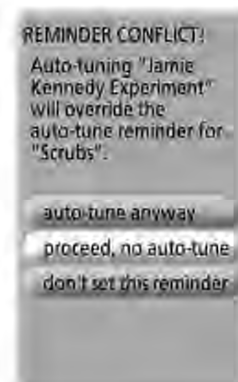
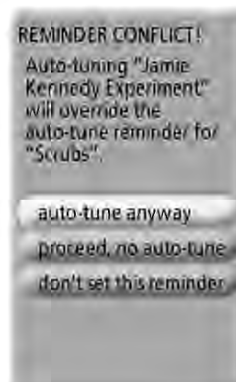
Remind Conflict

A conflict message appears for the following reasons:

- A show set with an Auto-Tune Reminder has the same start time as an existing Auto-Tune Reminder.
- A show set with an Auto-Tune Reminder overlaps with a Recording already scheduled.

Select one of these options:

- Auto-tune anyway - This show will override an existing show set to auto-tune.
- Proceed, no auto-tune - Set the show as a Reminder but do not auto-tune.
- Don't set this reminder - Cancel the Reminder.



PIP (Picture-In-Picture)/POP/Twin Picture (Multiple Screen)

- PIP lets you view 2 different inputs (sources) on your TV screen at the same time. One source will be large, and the other source will show a smaller inset image.
- Twin Picture mode splits the screen into 2, allowing 2 picture sources to be shown on the TV screen at the same time. Each source is given half the screen.

Watching PIP/POP/Twin Picture

Press the **PIP** button to access the sub picture. Each press of PIP changes the PIP options as shown below.



Selecting an Input Signal Source for PIP/Twin Picture

Use the **PIP INPUT** button to select the input source for the sub picture. Each press of **PIP INPUT** button changes the PIP source. You can also select sources for the **Sub Input** in the **SETUP** menu.

Main Picture Source	Available Sub Picture Sources
DTV/CADTV	Analog, AV1, and AV2
TV/CADTV, AV1, AV2, Component1, Component2, RGB-PC/RGB-DTV, HDMI1/DVI, HDMI2	DTV, Analog, AV1, and AV2

TV Program Selection for PIP

1. Press the **PIP** button.
2. Select the Antenna or Cable option on the Sub input menu or with the **PIP INPUT** button. Use the **PIPCH+** / **PIPCH-** button to select a channel for the sub picture. (You can't select DTV for main and sub picture simultaneously).

Moving the PIP Sub Picture



In PIP mode, press the **▲ / ▼ / ◀ / ▶** button to move the sub picture to a different location on the screen

Adjusting Main and Sub Picture Sizes for Twin Picture

Use the ▲ / ▼ / ◀ / ▶ button to change main and sub picture sizes in Twin Picture mode.

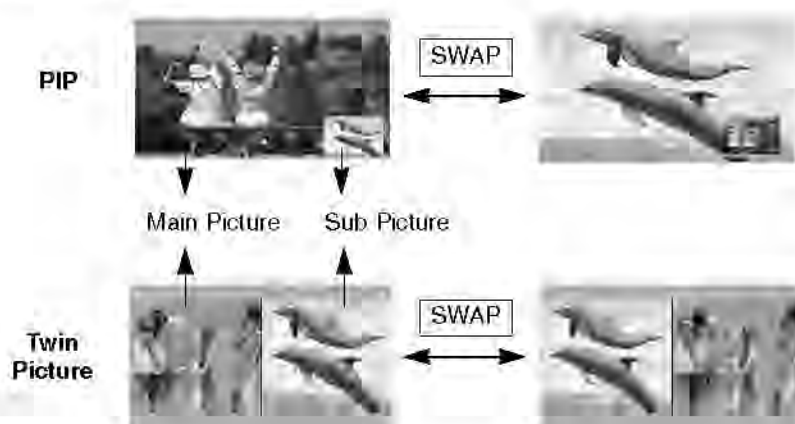


If screen is adjusted to the maximal size, the large screen is filled with entire screen vertically as shown.

Swapping the PIP/Twin Picture

Use the **SWAP** button to switch the main and sub pictures.

- Component 1, Component 2, RGB-PC (or RGB-DTV), HDMI1/DVI or HDMI2 input sources for the main picture can't be used to swap the main and sub pictures.



POP (Picture-out-of-Picture: Channel Scan)

- Use POP to search the programs of all the memorized channels one-by-one on the 3 PIP screen display, (while the main picture source remains the current channel). The pictures of all the programmed channels are searched with the 3 POP screen.
- Run EZ Scan channel search before using POP mode.
- When Sub pictures are changed from the TV/DTV to CATV/CADTV in POP mode, it may make a noise from the Tuner switch.



1. Press the **PIP** button to activate the POP mode while in PIP mode.
 - **Channel selection:** Use ◀ button to enlarge the selected channel being searched on the PIP screen to shift it for viewing on the Main screen.
 - **PIP selection:** Use ▲ / ▼ button to select one of 3 PIP screen pictures in POP mode.
 - When watching TV/CATV on Main picture, TV/DTV/CATV/CADTV on Sub pictures are in channel scanning. However, when watching DTV/CADTV on Main picture, only TV/CATV on Sub picture is in channel scanning.
2. Press the **EXIT** button to cancel POP mode.

TV Menu

On Screen Menus Selection and Adjustment

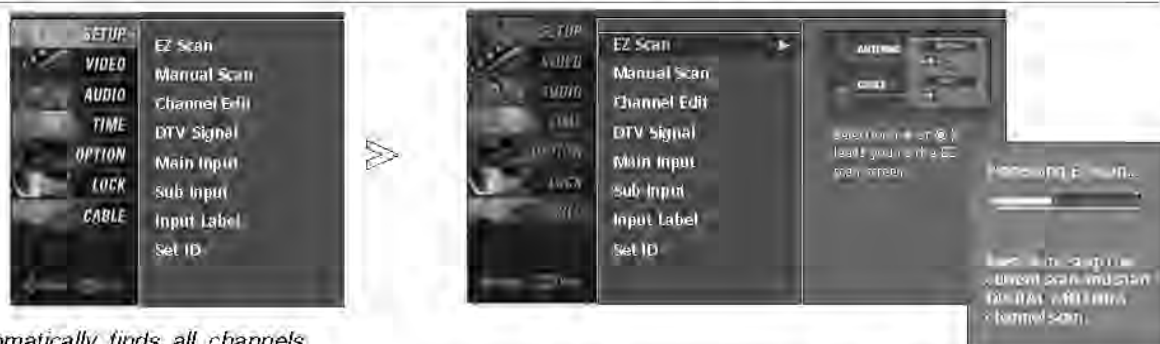
1. Press the **MENU** button and then **▲ / ▼** button to select each menu.
2. Press the **▶** button and then use **▲ / ▼ / ◀ / ▶** button to display the available menus.



♦ Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

Setup (Channel)

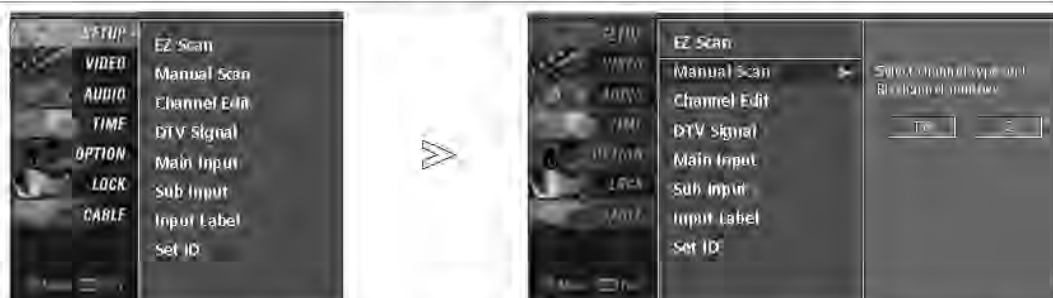
EZ Scan (Auto Channel Search)



- Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.
- Run EZ Scan again after any Antenna/Cable connection changes.
- A password is required to gain access to EZ Scan menu if the Lock System is turned on.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **EZ Scan**.
- 3 Press the **ENTER** button to begin the channel search.
Allow EZ Scan to complete the channel search cycle for ANTENNA, and CABLE.

Manual Scan (Manual Channel Search)



- A password is required to gain access to Manual Scan menu if the Lock System is turned on.
- This channel number is a physical channel number, which is different from normal channel number showed in Channel Edit.
- When inserting the CableCARD™, CATV, CADTV is not working in Manual Scan.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **Manual Scan**.
- 3 Press the **▶** button and then use **▲** / **▼** button to select TV, DTV, CATV, and CADTV.
- 4 Press the **▶** button and then use **▲** / **▼** button to select channel number you want to add or delete.
- 5 Press the **ENTER** button to add or delete for the channel number.
- 6 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Mini Glossary

TV Analog antenna (over-the-air) TV signal
DTV Digital antenna (over-the-air) TV signal

CATV Analog cable TV signal
CADTV Digital cable TV signal

Setup (Channel) continued



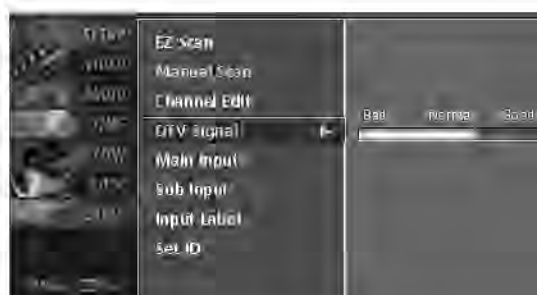
- Create two different types of channel lists in memory: "Custom list" and "Favorite channel list" from the default channel list created from the EZ Scan channel search.

- A custom list can be created by toggling each channel on or off with **ENTER** button. The channels in the Custom List are displayed in black color, and the channels deleted from the Custom List are displayed in gray color. Once a channel is highlighted you can add or delete the channel by referring to the small window at the top-left corner of the screen.

- You can create your own favorite channel list. Use the **FAV** button on the remote control when a channel is highlighted and then you can add or delete the channel to/from the Favorite List.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **Channel Edit**.
- 3 Press the **▶** button. You will now see a screen filled with channel numbers and a preview picture.
- 4 Use **▲** / **▼** / **◀** / **▶** button to select a channel and then use the **ENTER** button to add or delete it. Press **FAV** button to add the channel to the Favorite List. The heart-mark will appear in front of that channel number.
- 5 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

DTV Signal Strength

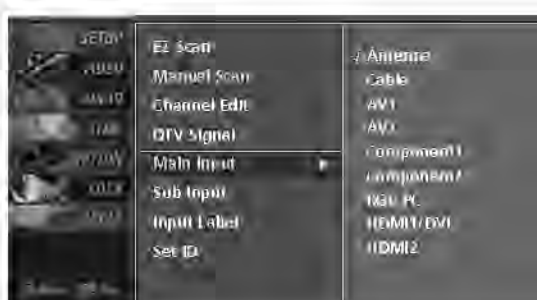
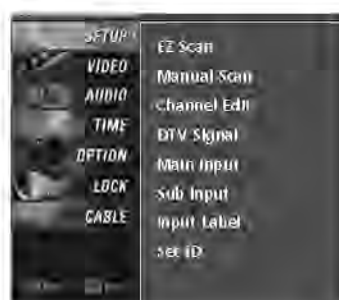


- Shows how strong your DTV signal is and whether you need to adjust your antenna or digital cable input. The higher the signal strength, the less likely you are to experience picture degradation.

- DTV Signals: Only when the input signal is DTV or CADTV, this function is available.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **DTV Signal**.
- 3 View the on-screen signal strength monitor to see the quality of the signal being received.
- 4 Press **EXIT** button to return to TV viewing, or press **MENU** button to return to the previous menu.

Main Input Source Selection



- Changes the picture source so you can watch your TV, cable TV, VCR, DVD, or any other devices that are connected to your TV.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **Main Input**.
- 3 Press the **▶** button and then use **▲** / **▼** button to select the source: Antenna, Cable, AV1, AV2, Component1, Component2, RGB-PC, HDMI1/DVI or HDMI2.
 - To toggle RGB-DTV and RGB-PC, select RGB-DTV(or RGB-PC) and press **▶** button.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Setup (Channel) continued

Sub Input Source Selection

Select sources for the **Sub Input** in the **SETUP** menu.

See Page 70 for selecting the input source for the sub picture by pressing the **PIP INPUT** button.

Input Label



- Sets a label to each input source which is not in use when you press **INPUT** button

- 1 Press the **MENU** button and then use **▲/▼** button to select the **SETUP** menu.
- 2 Press the **▶** button and then use **▲/▼** button to select **Input Label**.
- 3 Press the **▶** button and then use **▲/▼** button to select the source: AV1, AV2, Component1-2, RGB, HDMI1/DVI or HDMI2.
- 4 Press the **◀/▶** button to select the label.
- 5 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Video Adjustment

EZ Picture

- EZ Picture adjusts the TV for the best picture appearance. Select the preset value in the EZ Picture menu based on the program category.
 - **Daylight**, **Normal**, **Night Time**, **User 1**, and **User 2** settings are preset for optimum picture quality at the factory and are not adjustable.
 - In the **User 1**, and **User 2** modes only, user can directly adjust the contrast, brightness, color, sharpness, tint.
- 1 Press the **EZ PIC** button repeatedly to select the picture appearance setup option as shown below: **Daylight**, **Normal**, **Night Time**, **User 1**, and **User 2** (your own settings).
 - You can also adjust **EZ Picture** in the **VIDEO** menu.
 - 2 Press the **EXIT** button to save and return to TV viewing.

APM (Adaptive Picture Mode)

- Allows a viewer to select their preferred picture mode after comparing the four different picture (**Daylight**, **Normal**, **Night Time**, **User 1** and **User 2**) settings.



A.

1. Press the **APM** button at once. As shown below, the screen is divided to 4-split.
2. Use the **▲ / ▼ / ◀ / ▶** button to navigate 4 EZ Pictures. By pressing the **ENTER** button, you can select the desired mode.
3. Press the **EXIT** button to return to TV viewing.

B.

1. Press the **APM** button twice times. The 4-same screens are displayed. You can easily compare with 4 modes.
2. Use the **▲ / ▼ / ◀ / ▶** button to navigate 4 EZ Pictures. By pressing the **ENTER** button, you can select the desired mode.
3. Press the **EXIT** button to return to TV viewing.



Video Adjustment Continued

Manual Picture Control (EZ Picture- User option)



- Adjust the picture appearance to suit your preference and viewing situations.

- 1 Press the **MENU** button and then use $\blacktriangle$ / $\blacktriangledown$ button to select the **VIDEO** menu.
- 2 Press the $\blacktriangleright$ button and then use $\blacktriangle$ / $\blacktriangledown$ button to select **EZ Picture**.
- 3 Press the $\blacktriangleright$ button and then use $\blacktriangle$ / $\blacktriangledown$ button to select **User 1** or **User 2**.
- 4 Press the $\blacktriangleright$ button and then use $\blacktriangle$ / $\blacktriangledown$ button to select the desired picture option (**Contrast**, **Brightness**, **Color**, **Sharpness**, or **Tint**).
- 5 Press the $\blacktriangleright$ button and then use $\blacktriangleleft$ / $\blacktriangleright$ button to make appropriate adjustments.
- 6 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Color Temperature Control



- Choose one of three automatic color adjustments. Set to warm to enhance hotter colors such as red, or set to cool to see less intense colors with more blue.
- You can also adjust the detailed settings (Red, Green, Blue) by selecting the **User** menu.

- 1 Press the **MENU** button and then use $\blacktriangle$ / $\blacktriangledown$ button to select the **VIDEO** menu.
- 2 Press the $\blacktriangleright$ button and then use $\blacktriangle$ / $\blacktriangledown$ button to select **Color Temperature**.
- 3 Press the $\blacktriangleright$ button and then use $\blacktriangle$ / $\blacktriangledown$ button to select either **Cool**, **Medium**, **Warm** or **User**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

XD



- XD is LG Electronic's unique picture improving technology to display a real HD source through an advanced digital signal processing algorithm.
- When selecting EZ Picture options (Daylight, Optimum and Night time), XD is automatically change to Auto.
- But when selecting EZ Picture options (User 1 and User 2), you can choose the Auto / Manual and when selecting the Manual, you can adjust the XD Contrast, XD color and XD Noise.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **VIDEO** menu.
- 2 Press the **▶** button and then use **▲ / ▼** button to select **XD**.
- 3 Press the **▶** button and then use **▲ / ▼** button to select **Auto** or **Manual**.

* Selecting the Manual

1. Press the **▶** button and then use **◀ / ▶** button to select **XD Contrast**, **XD Color** or **XD Noise**.
 2. Use the **▲ / ▼** button to make appropriate adjustments.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Advanced



• Cinema Mode

- Set up the TV for the best picture appearance for viewing movies.
- When you operate Cinema (3.2 Pull-Down Mode or Cinema Correction Mode), the TV will adjust 24 fps video from movies to 30 fps video for display (This function is only available in Component 480i mode.) This feature operates only in 480i mode.

• Black level

- This feature operates only in HDMI1/DVI, HDMI2 or AV1, AV2 mode.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **VIDEO** menu.
- 2 Press the **▶** button and then use **▲ / ▼** button to select **Advanced**.
- 3 Press the **▶** button and then use **▲ / ▼** button to select **Cinema Mode** or **Black level**.
- 4 Press the **▶** button and then use **▲ / ▼** button to select **Off** or **On / Auto**, **Low** or **High**.
- 5 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



- Use to quickly reset all the Video menu options to their original factory preset values.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **VIDEO** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **Video Reset**.
- 3 Press the **▶** button to reset the Video menu options to original values.

Audio Adjustment



- Other languages may be available if a digital signal is provided by the broadcasting station.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **Audio Language**.
- 3 Press the ► button and then use ▲ / ▼ button to select: English, Spanish, or French.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



- Scans for changes in sound level during commercials, then adjusts the sound to match the specified audio level. EZ SoundRite makes sure that the volume level remains consistent whether you are watching a commercial or a regular TV program.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **EZ SoundRite**.
- 3 Press the ► button and then use ▲ / ▼ button to select **Off** or **On**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

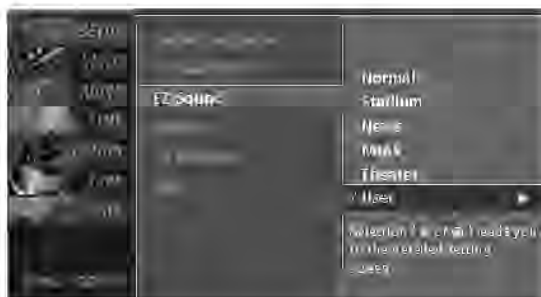
Audio Adjustment continued

EZ Sound

- EZ Sound lets you enjoy the best sound without any special adjustment because the TV sets the appropriate sound options based on the program content.
- **Normal, Stadium, News, Music, and Theater** are preset for good sound quality at the factory and are not adjustable.

- 1 Press the **EZ SOUND** button repeatedly to select the appropriate sound setup as shown below: **User** (your own settings), **Normal**, **Stadium**, **News**, **Music**, and **Theater**.
+ You can also adjust **EZ Sound** in the **AUDIO** menu.
- 2 Press **EXIT** button to save and return to TV viewing.

Manual Sound Control (EZ Sound-User option)



- Adjust the sound to suit your taste and room situations.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **AUDIO** menu.
- 2 Press the **▶** button and then use **▲ / ▼** button to select **EZ Sound** menu.
- 3 Press the **▶** button and then use **▲ / ▼** button to select **User**.
- 4 Press the **▶** button and then use **▲ / ▼** button to select the desired sound option (**Treble**, **Bass**, or **Front Surround**).

- TruSurround XT technology is incorporated under license from SRS Labs, Inc.
- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

- 5 Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.

*** Selecting the Front Surround**

- Press the ► button and then use ▲ / ▼ button to select **Off**, **3D EchoSound System** or **SRS** (Sound Retrieval System) **TruSurround XT**.



- 6 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Mini Glossary

SRS TruSurround XT

Takes advantage of any multi-channel format without needing to add extra speakers or equipment. Dialog clarity, bass enrichment, and the addition of stereo audio enhancement that produces an immersive sound experience from standard stereo material.

3D EchoSound System

Creates a stunning simulated stereo effects from any mono sound and a realistic three-dimensional sound with a very wide and deep sound stage from stereo sound.

Balance



- Adjust the left/right sound of speaker to suit your taste and room situations.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **Balance**.
- 3 Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Audio Adjustment Continued



- Turn TV speakers off if using external audio equipment. Feature turns the TV Speakers option On or Off.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **TV Speaker**.
- 3 Press the ► button and then use ▲ / ▼ button to select **Off** or **On**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



- BBE High Definition Sound restores clarity and presence for better speech intelligibility and music realism.

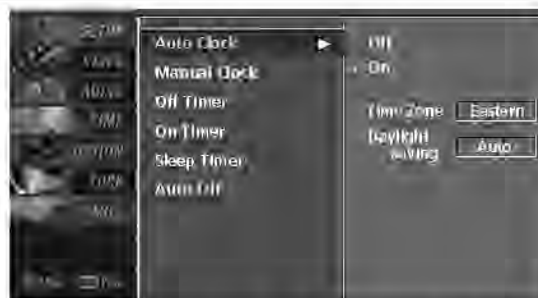
- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **BBE**.
- 3 Press the ► button and then use ▲ / ▼ button to select **Off** or **On**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Stereo/SAP Broadcasts Setup

- This TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program; if the station transmits an additional sound signal as well as the original one.
 - When having selected Stereo or SAP button on the remote control, this TV can only receive the signal in case that the TV station transmits the proper signals.
 - Mono sound is automatically received if the broadcast is only in Mono; even though Stereo or SAP has been selected.
 - Select Mono if you want to listen to the mono sound in remote fringe areas during stereo/SAP broadcasting.
 - Stereo or SAP can be received in Analog channel.
- 1** Use the **SAP** button to select your desired MTS mode in analog signal. Each time you press the **SAP** button, **Mono**, **Stereo**, or **SAP** appear in turn.
 - If other languages available on the digital signal, select them with the **SAP** button.
 - 2** Press **EXIT** button to return to TV viewing.

Time Setting

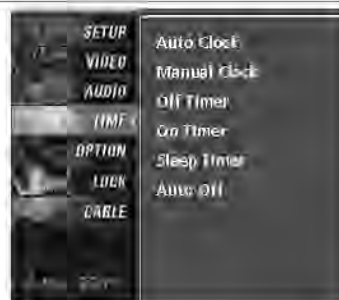
Auto Clock Setup



- The time is set automatically from a digital channel signal.
- The digital channel signal includes information for the current time provided by the broadcasting station.
- Set the clock manually, if the current time is set incorrectly by the auto clock function.
- When you set up TV Guide On Screen system, **Auto Clock** menu is not selected.

- 1 Press the **MENU** button and then use **▲/▼** button to select the **TIME** menu.
- 2 Press the **▶** button and then use **▲/▼** button to select **Auto Clock**.
- 3 Press the **▶** button and then use **▲/▼** button to select **On**.
- 4 Press the **▶** button and then use **▲/▼** button to select your viewing area time zone.
 - U.S.A: **Eastern, Central, Mountain, Pacific, Alaska**, or **Hawaii**.
 - Canada: **Eastern, Central, Mountain, Pacific, Nfld**, or **Atlantic**.
- 5 Press the **▶** button and then use **▲/▼** button to select **Auto, Off, On**, depending on whether or not your viewing area observes Daylight Saving time.
- 6 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Manual Clock Setup



- If current time setting is wrong, reset the clock manually.
- When you set up TV Guide On Screen system, **Manual Clock** menu is not selected.

- 1 Press the **MENU** button and then use **▲/▼** button to select the **TIME** menu.
- 2 Press the **▶** button and then use **▲/▼** button to select **Manual Clock**.
- 3 Press the **▶** button and then use **◀/▶** button to select either the year, date, or time option. Once selected, use the **▲/▼** button to set the year, date, and time options.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

On/Off Timer Setup



- Timer function operates only if current time has been set.
- Off-Timer function overrides On-Timer function if they are set both set to the same time.
- The TV must be in standby mode for the On-Timer to work.
- If you do not press any button within 2 hours after the TV turns on with the On Timer function, the TV will automatically revert to standby mode.

- 1 Press the **MENU** button and then use **▲** / **▼** button to select the **TIME** menu.
- 2 Press the **▶** button and then use **▲** / **▼** button to select **Off Timer** or **On Timer**.
- 3 Press the **▶** button and then use **▲** / **▼** button to select **On**.
• To cancel **On/Off Timer** function, select **Off**.
- 4 Press the **▶** button and then use **▲** / **▼** button to set the hour.
- 5 Press the **▶** button and then use **▲** / **▼** button to set the minutes.
- 6 **For only On Timer function**
Press the **▶** button and then use **▲** / **▼** button to select the channel at turn-on.
Press the **▶** button and then use **▲** / **▼** button to set the sound level at turn-on.
- 7 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Sleep Timer

- The Sleep Timer turns the TV off at the preset time. Note that this setting is cleared when the TV is turned off.
- You can also set up the **Sleep Timer** in the **TIME** menu.

- 1 Press the **TIMER** button repeatedly to select the number of minutes. First the **off** option appears on the screen, followed by the following sleep timer options: 10, 20, 30, 60, 90, 120, 180, and 240 minutes.
- 2 When the number of minutes you want is displayed on the screen, press the **ENTER** button. The timer begins to count down from the number of minutes selected.
- 3 To check the remaining minutes before the TV turns off, press the **TIMER** button once.
- 4 To cancel the Sleep Timer, press the **TIMER** button repeatedly to select **off**.

Auto Off



- If set to on and there is no input signal, the TV turns off automatically after 10 minutes.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **TIME** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **Auto Off**.
- 3 Press the ► button and then use ▲ / ▼ button to select **Off** or **On**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Optional Features

Aspect Ratio Control

- Lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV with a 16:9 ratio picture format. When you receive an analog picture with a 4:3 aspect ratio on your 16:9 TV, you need to specify how the picture is to be displayed.
- If you are viewing a picture with a 16:9 aspect ratio, you can't use the Horizon aspect ratio option.
- Horizon aspect ratio is not available for Component 1-2 (480p/720p/1080i)/RGB-DTV (480p/720p/1080i)/HDMI1/DVI-DTV(720p/1080i), HDMI2-DTV(720p/1080i) input source.
- RGB-PC/DVI-PC input source use 4:3 or 16:9 aspect ratio.
- If a fixed image is displayed on the screen for a long time, that fixed image may become imprinted on the screen and remain visible.

- 1 Press the **RATIO** button repeatedly to select the desired picture format. You can also adjust **Aspect Ratio** in the **OPTION** menu.

• Set By Program

Selects the proper picture proportion to match the source's image. (4:3 → 4:3, 16:9 → 16:9)



• 4:3

Choose **4:3** when you want to view a picture with an original 4:3 aspect ratio, with gray bars appearing at both the left and right sides.



• 16:9

Choose **16:9** when you want to adjust the picture horizontally, in a linear proportion to fill the entire screen.



• Horizon

Choose **Horizon** when you want to adjust the picture in a non-linear proportion, that is, more enlarged at both sides, to create a spectacular view.



• Zoom 1

Choose **Zoom 1** when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.



• Zoom 2

Choose **Zoom 2** when you want the picture to be altered, both vertically extended and cropped. The picture taking a halfway trade off between alteration and screen coverage.



• Cinema Zoom

Choose **Cinema Zoom** when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted. You can adjust the enlarge proportion of Cinema Zoom using **▲** / **▼** button. The adjustment range is 1~16.



Caption/Text

* Analog Broadcasting System Captions



- Select a caption mode for displaying captioning information if provided on a program.
- Analog caption displays information at any position on the screen.
- Text displays information, usually at the bottom position and is used for a data service.
- Caption/Text, if provided by the broadcaster, would be available for both digital and analog channels on the Antenna/Cable.
- This TV is programmed to remember the caption/text mode it was last set to, when you turn the power off.

- 1 Use the **CC** button repeatedly to select Caption **Off**, **CC1**, **CC2**, **CC3**, **CC4**, **Text1**, **Text2**, **Text3**, or **Text4**.
- 2 Press **EXIT** button to save and return to TV viewing.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **OPTION** menu.
- 2 Press the **▶** button and then use **▲ / ▼** button to select **Caption/Text**.
- 3 Press the **▶** button and then use **▲ / ▼** button to select caption: **Off**, **CC1**, **CC2**, **CC3**, **CC4**, **Text1**, **Text2**, **Text3**, or **Text4**.

* **CAPTION**

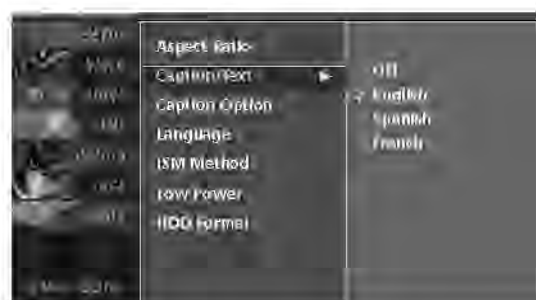
The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.

* **TEXT**

The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

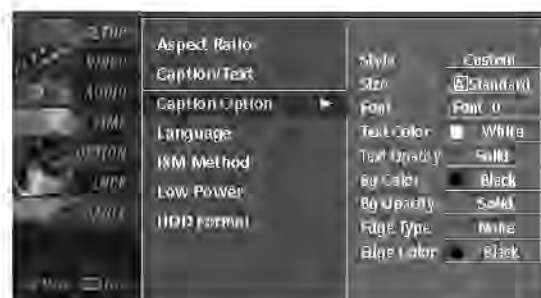
* Digital Broadcasting System Captions



- Choose the language you want the DTV/CADTV Captions to appear in.
- Other languages can be chosen for digital sources only if they are included on the program.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **OPTION** menu.
- 2 Press the **▶** button and then use **▲ / ▼** button to select **Caption/Text**.
- 3 Press the **▶** button and then use **▲ / ▼** button to select available caption languages: **English**, **Spanish**, or **French**.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

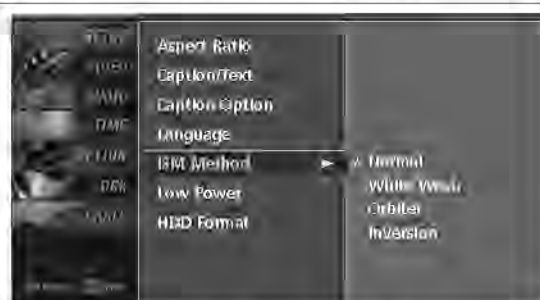
Caption Option



- Customize the DTV/CADTV captions that appear on your screen.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **OPTION** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **Caption Option**.
- 3 Press the ► button and then use ◀ / ▶ button to select **Custom**.
- 4 Use ▲ / ▼ button to customize the Style, Font, etc., to your preference. A preview icon is provided at the bottom of the screen, use it to see the caption language.
 - **Size:** Set the size the words will appear in.
 - **Font:** Select a typeface for the words.
 - **Text Color:** Choose a color for the text.
 - **Text Opacity:** Specify the opacity for the text color.
 - **Bg (Background) Color:** Select a background color.
 - **Bg (Background) Opacity:** Select the opacity for the background color.
 - **Edge Type:** Select an edge type.
 - **Edge Color:** Select a color for the edges.
- 5 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

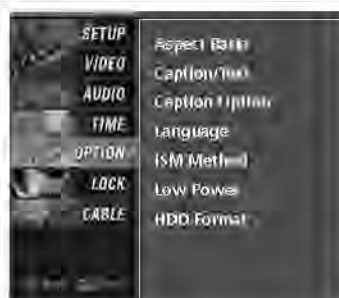
ISM (Image Sticking Minimization) Method (42PC1DA only)



- A frozen still picture from a PC/video game displayed on the screen for prolonged periods will result in a ghost image; even though the image is changed. Use our unique method to minimize any fixed image on the screen.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **OPTION** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **ISM Method**.
- 3 Press the ► button and then use ▲ / ▼ button to select either **Normal**, **White wash**, **Orbiter** or **Inversion**.
 - **Normal**
If image sticking is never a problem, ISM is not necessary - set to Normal.
 - **White wash**
White Wash removes permanent images from the screen.
Note: An excessive permanent image may be impossible to clear entirely with White Wash. To return to normal viewing, press the any button.
 - **Orbiter**
Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the image will move once per minute: Left → Right → Upside → Downside → Right → Left → Downside → Upside.
 - **Inversion**
Inversion will automatically invert the plasma display panel color every 30 minutes.
- 4 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Low Power (42PC1DA only)



- Low power reduces the plasma display power consumption.

- 1 Press the **MENU** button and then use ▲ / ▼ button to select the **OPTION** menu.
- 2 Press the ► button and then use ▲ / ▼ button to select **Low Power**.
- 3 Press the ► button and then use ▲ / ▼ button to select **Off** or **On**. Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

Lock Adjustment

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password
3. Enable the lock

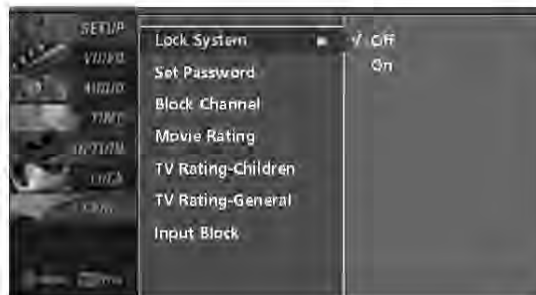
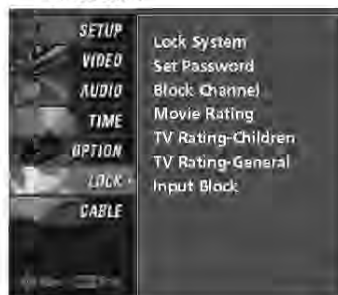
V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

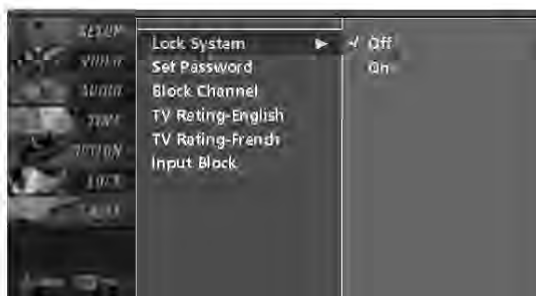
For USA	For Canada
Ratings for Movies previously shown in theaters: Movie Ratings : • Blocking Off (Permits all programs) • G (General audience) • PG (Parental guidance suggested) • PG-13 (Parents strongly cautioned) • R (Restricted) • NC-17 (No one 17 and under admitted) • X (Adult only) If you set PG-13 : G and PG movies will be available, PG-13, R, NC-17 and X will be blocked. Ratings for Television programs including made-for-TV movies : • TV-G (General audience) • TV-PG (Parental guidance suggested) • TV-14 (Parents strongly cautioned) • TV-MA (Mature audience only) • TV-Y (All children) • TV-Y7 (Children 7 years older) TV Rating-Children: • Age (applies to TV-Y, TV-Y7) • Fantasy Violence (applies to TV-Y7) TV Rating-General: • Age (applies to TV-G, TV-PG, TV-14, TV-MA) • Dialogue- sexual dialogue (applies to TV-PG, TV-14) • Language- adult language (applies to TV-PG, TV-14, TV-MA) • Sex- sexual situations (applies to TV-PG, TV-14, TV-MA) • Violence (applies to TV-PG, TV-14, TV-MA) Input Block • AV 1, 2 (On, Off) • Component 1, 2 (On, Off) • RGB and HDMI1/DVI, HDMI2 (On, Off)	TV Rating-English: • E (Exempt) • C (Children) • C8+ (8 years and up) • G (General programming. Suitable for all audiences) • PG (Parental guidance suggested) • 14+ (Viewers 14 years and up) • 18+ (Adult programming) • Blocking off (Permits all programming) TV Rating-French: • E (Exempt) • G (General) • 8 ans+ (8 years and up) • 13 ans+ (13 years and up) • 16 ans+ (16 years and up) • 18 ans+ (Adults only) • Blocking off (Permits all programming) Input Block • AV 1, 2 (On, Off) • Component 1, 2 (On, Off) • RGB and HDMI1/DVI, HDMI2 (On, Off)

Parental Lock Setup

* For U.S.A.



* For Canada



- Set up blocking schemes to block specific channels, ratings, and external viewing sources.
- A password is required to gain access to this menu if the Lock System is turned on.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **LOCK** menu. Then, press the **►** button.
 - Enter the password as requested.
 - The TV is set up with the initial password "0-0-0-0".
- 2 Use the **▲ / ▼** button to choose from the following Lock Menu options. Once the option is selected, change the settings to your preference.
 - **Lock System:** Activates or disables the blocking scheme you set up previously.
 - **Set Password:** Change the password by inputting a new password twice.
 - **Block Channel:** Select a channel number that you wish to block.
 - **Input block:** Enables you to select a source to block from the external source devices you have hooked up.

◆ For USA

- **Movie Rating (MPPA):** Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.
- **TV Rating-Children:** Prevents children from watching certain children's TV programs, according to the ratings limit set. The children rating does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating - sub menu, your children can view those programs.
- **TV Rating-General:** Based on the ratings, blocks certain TV programs that you and your family do not want to view.

◆ For Canada

- **TV Rating-English / TV Rating-French:** Selecting canadian English /French language rating system.

- 3 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

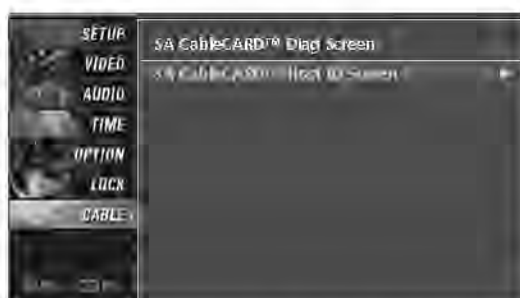


• If you ever forget your password, key in '7', '7', '7', '7' on the remote control.

CableCARD™ Function

- Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

Cable Menu Options



(In case of Scientific Atlanta CableCARD™)



(i.e) CableCARD™/ Host ID Screen

As shown, the pairing number means your TV and CableCARD™ ID. For further information regarding cable TV service, contact your local cable TV service provider(s).

- The Cable sub menu displays when inserting the CableCARD™ to the TV.
- The CableCARD™ type is Motorola, Scientific Atlanta (SA), or SCM etc. The OSD (On screen display) is different from your TV according to your CableCARD™ type.

- 1 Press the **MENU** button and then use **▲ / ▼** button to select the **CABLE** menu.
- 2 Press the **►** button and then use **▲ / ▼** button to select your desired item.
- 3 Press the **►** button.
- 4 Press **EXIT** button to return to TV viewing.

Scrambled Channel

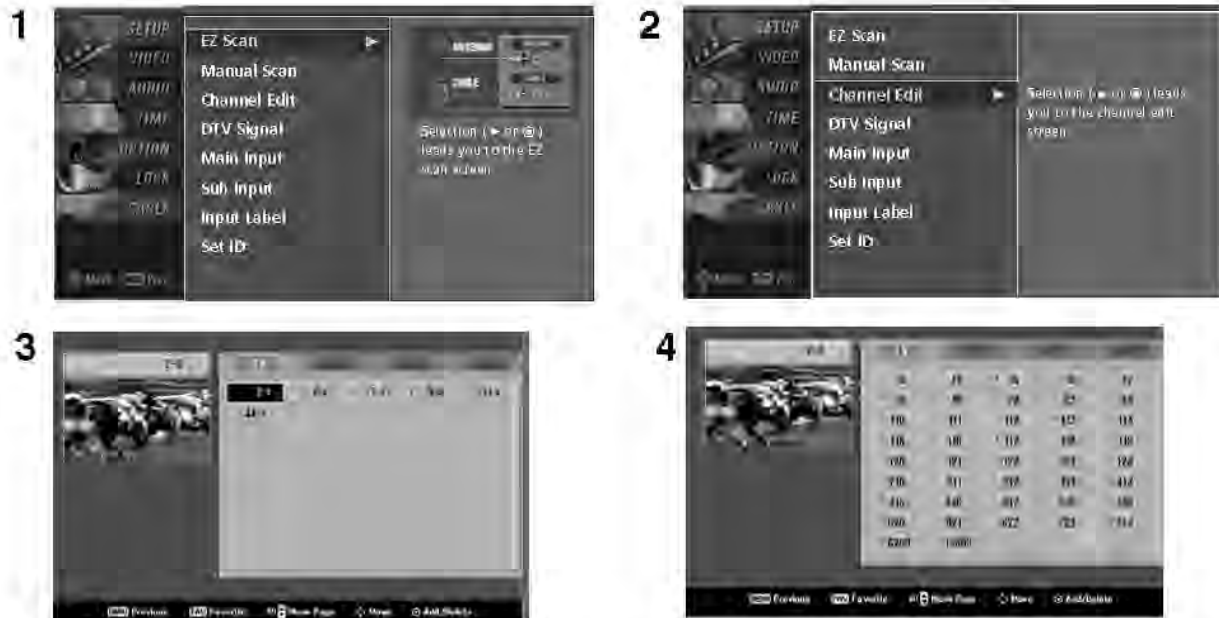
- Insert the CableCARD™. It takes about 1 minute to exchange the data between the TV and the CableCARD™. Then the screen displays as shown to the right.
- Let your cable TV service provider know your CableCARD ID and Host ID.
- Once the card is registered with the cable TV service provider, you can watch the premium or high value channel without a message.



- If the certificate doesn't match between the TV and the CableCARD™, the OSD (On screen display) displays as shown left.

CableCARD™ Function continued

Cable Channel List



- 1 If you enter the **Channel Edit** after running the EZ Scan without CableCARD™, you can see the cable channel list as the picture 3 above.
- 2 Insert the CableCARD™. Then, the TV receive a new cable channel list which is usually one part channel. It takes about 2~3 minutes to gather the cable channel list after inserting the CableCARD™ as the picture 4 above. (Occasionally more than that time)

Emergency Alert Message

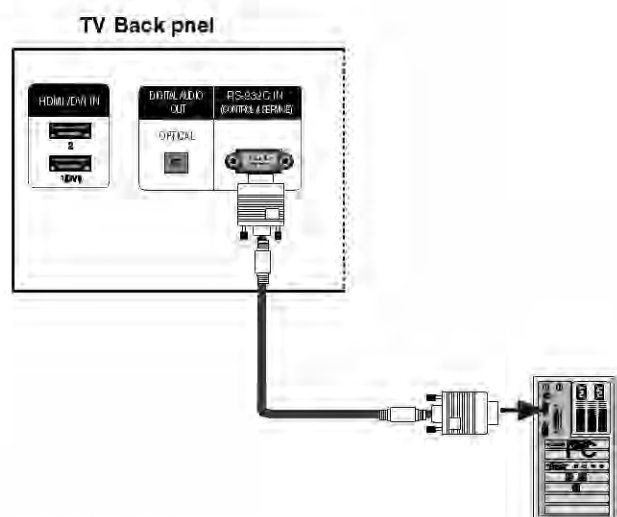
- If an emergency situation occurs while watching TV/DTV/CATV/CADTV, you will receive a message from the cable TV service provider(s).
- When receiving an emergency message, the message is displayed on the screen as shown or the channel is changed automatically to a channel for more information. The message will automatically disappear after a short time and return to the last channel.



External Control Device Setup

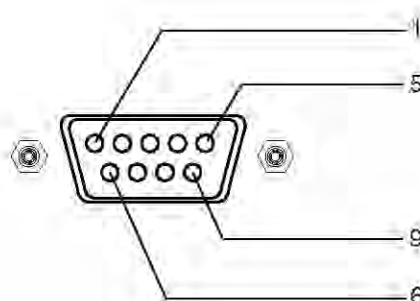
- Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the TV back panel.
- RS-232C connection cables are not supplied with the TV.

RS-232C Setup



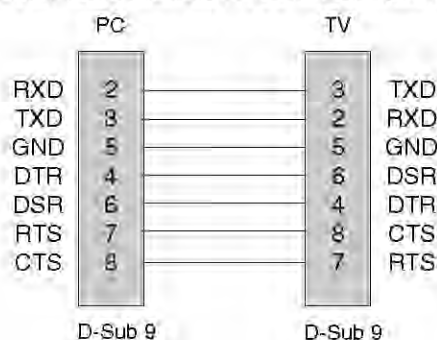
Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

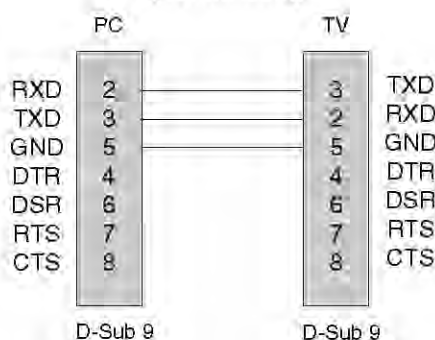


RS-232C Configurations

7-Wire Configurations (Serial female-female NULL modem cable)



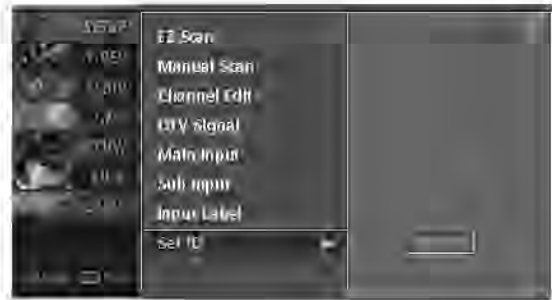
3-Wire Configurations (Not standard)



Set ID

- Use this function to specify a TV ID number.

- Press the **MENU** button and then use **▲** / **▼** button to select the **SETUP** menu.
- Press the **►** button and then use **▲** / **▼** button to select **SET ID**.
- Press the **►** button and then use **▲** / **▼** button to adjust **SET ID** to choose the desired TV ID number. The adjustment range of **SET ID** is 1 ~ 99.
- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code

* Use a crossed (reverse) cable

Command Reference List

	COMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	a	0 ~ 1
02. Input Select	k	b	0 ~ 9
03. Aspect Ratio	k	c	*
04. Screen Mute	k	d	0 ~ 1
05. Volume Mute	k	e	0 ~ 1
06. Volume Control	k	f	0 ~ 64
07. Contrast	k	g	0 ~ 64
08. Brightness	k	h	0 ~ 64
09. Color	k	i	0 ~ 64
10. Tint	k	j	0 ~ 64
11. Sharpness	k	k	0 ~ 64
12. OSD Select	k	l	0 ~ 1
13. Remote Control Lock/Key Lock	k	m	0 ~ 1
14. PIP/Twin	k	n	0, 1, 2, 5
15. PIP Position	k	q	0 ~ 3
16. Treble	k	r	0 ~ 64
17. Bass	k	s	0 ~ 64
18. Balance	k	t	0 ~ 64
19. Color Temperature	k	u	0 ~ 3
20. Red adjustment	k	v	0 ~ C8
21. Green adjustment	k	w	0 ~ C8
22. Blue adjustment	k	x	0 ~ C8
23. PIP Input Source	k	y	0 ~ 3
24. ISM Method	j	p	*
25. Low Power	j	q	0 ~ 1
26. Orbiter Time Setting	j	r	1 ~ FE
27. Orbiter Pixel Setting	j	s	1 ~ 3

	COM- MAND 1	COM- MAND 2	DATA 0 (Hexadecimal)	DATA 1 (Hexadecimal)	DATA 2 (Hexadecimal)	DATA 3 (Hexadecimal)	DATA 4 (Hexadecimal)	DATA 5 (Hexadecimal)
28. Channel Tuning	m	a	physical/program high		major/program low	major low	minor high	minor low
29. Channel Add/Del	m	b	0 ~ 1					attribute
30. Key	m	c	key code					
31. Input Select	x	b	*					
32. PIP Input Select	x	y	*					

Transmission / Receiving Protocol

Transmission

[Command1][Command2][][Set ID][][Data][Cr]

- * [Command 1]: First command to control the set (j,k,m or x)
- * [Command 2]: Second command to control the set.
- * [Set ID]: You can adjust the set ID to choose desired TV ID number in 'Setup' menu. Adjustment range is 1 ~ 99. When selecting 'Set ID '0', every connected the TV is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x68) on transmission/receiving protocol.
- * [DATA]: To transmit command data.
Transmit 'FF' data to read status of command.
- * [Cr]: Carriage Return
ASCII code '0x0D'
- * []: ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][][Set ID][][OK][Data][x]

- * The TV transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][][Set ID][][NG][Data][x]

- * The TV transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

- Data :
- 1: Illegal Code
 - 2: Not supported function
 - 3: Wait more time

09. Color (Command2:i)

- ▶ To adjust the screen color.
You can also adjust color in the Video menu.

Transmission

[k][i][][Set ID][][Data][Cr]

Data Min : 0 ~ Max : 64

- Refer to 'Real data mapping'. See page 87.

Acknowledgement

[i][][Set ID][][OK/NG][Data][x]

10. Tint (Command2:j)

- ▶ To adjust the screen tint.
You can also adjust tint in the Video menu.

Transmission

[k][j][][Set ID][][Data][Cr]

Data Red : 0 ~ Green : 64

- Refer to 'Real data mapping'. See page 87

Acknowledgement

[j][][Set ID][][OK/NG][Data][x]

11. Sharpness (Command2:k)

- ▶ To adjust the screen sharpness.
You can also adjust sharpness in the Video menu.

Transmission

[k][k][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64.

- Refer to 'Real data mapping'. See page 87

Acknowledgement

[k][][Set ID][][OK/NG][Data][x]

12. OSD Select (Command2:l)

- ▶ To select OSD (On Screen Display) on/off.

Transmission

[k][l][][Set ID][][Data][Cr]

Data: 0: OSD off 1: OSD on

Acknowledgement

[l][][Set ID][][OK/NG][Data][x]

13. Remote Control Lock Mode (Command2:m)

- ▶ To lock the remote control and the front panel controls on the set.

Transmission

[k][m][][Set ID][][Data][Cr]

Data: 0: Lock off 1: Lock on

Acknowledgement

[m][][Set ID][][OK/NG][Data][x]

- ▶ If you're not using the remote control and front panel controls on the TV, use this mode. When main power is on/off, remote control lock is released.

14. PIP / POP / Twin Picture (Command2:n)

- ▶ To control the PIP (Picture-in-Picture)/POP/Twin picture.
You can also control the PIP/POP/Twin picture using the PIP button on the remote control.

Transmission

[k][n][][Set ID][][Data][Cr]

 Data 0: Off 2: DW1
 1: PIP 5: POP4(POP Scan)
Acknowledgement

[n][][Set ID][][OK/NG][Data][x]

15. PIP Position (Command2:q)

- ▶ To select sub picture position for PIP.

Transmission

[k][q][][Set ID][][Data][Cr]

 Data 0: Right down on screen
 1: Left down on screen
 2: Left up on screen
 3: Right up on screen
Acknowledgement

[q][][Set ID][][OK/NG][Data][x]

16. Treble (Command2:r)

- ▶ To adjust treble.
You can also adjust treble in the Audio menu.

Transmission

[k][r][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

- Refer to 'Real data mapping'. See page 87.

Acknowledgement

[r][][Set ID][][OK/NG][Data][x]

17. Bass (Command2:s)

- ▶ To adjust bass.
You can also adjust bass in the Audio menu.

Transmission

[k][s][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

- Refer to 'Real data mapping'. See page 87.

Acknowledgement

[s][][Set ID][][OK/NG][Data][x]

18. Balance (Command2:t)

- ▶ To adjust balance.
You can also adjust balance in the Audio menu.

Transmission

[k][t][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

- Refer to 'Real data mapping'. See page 87.

Acknowledgement

[t][][Set ID][][OK/NG][Data][x]

19. Color Temperature (Command2:u)

- To adjust color temperature.
You can also adjust color temperature in the Video menu.

Transmission

[k][u][][Set ID][][Data][Cr]

Data 0: Medium 1: Cool 2: Warm 3: User

Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

20. Red adjustment(Command:v)

- To adjust red in color temperature

Transmission

[k][v][][Set ID][][Data][Cr]

Data Min:0 ~ Max:C8
*Refer to "Real data mapping 2"Acknowledgement

[v][][Set ID][][OK/NG][Data][x]

21. Green adjustment(Command:w)

- To adjust green in color temperature.

Transmission

[k][w][][Set ID][][Data][Cr]

Max: C8
*Refer to "Real data mapping 2".Acknowledgement

[w][][Set ID][][OK/NG][Data][x]

22. Blue adjustment(Command:\$)

- To adjust blue in color temperature

Transmission

[k][\$][][Set ID][][Data][Cr]

Data Min:0 ~ Max:C8
*Refer to "Real data mapping 2".Acknowledgement

[\$][][Set ID][][OK/NG][Data][x]

- Real data mapping 2

0 : -20
5 : -19
A : -18
⋮
5F: -1
64: 0
69: +1
⋮
C3 : +19
C8 : +20

23. PIP Input Select (Command2:y)

- To select input source for sub picture in PIP/Twin picture mode.

Transmission

[k][y][][Set ID][][Data][Cr]

Data 0: DTV 1: Analog
2: AV1 3: AV2Acknowledgement

[y][][Set ID][][OK/NG][Data][x]

24. ISM Method/Orbiter (Command2:p)

- To avoid having a fixed image remain on screen

Transmission

[i][p][][Set ID][][Data][Cr]

Data 1: Inversion 2: Orbiter
4: White Wash 8: NormalAcknowledgement

[p][][Set ID][][OK/NG][Data][x]

25. Low Power (Command2:q)

- To control the low power function on/off.

Transmission

[i][q][][Set ID][][Data][Cr]

Data 0: low power off
1: low power onAcknowledgement

[q][][Set ID][][OK/NG][Data][x]

26. Orbiter Time Setting (Command2:r)

- To adjust orbiter operation time term.

Transmission

[i][r][][Set ID][][Data][Cr]

Data Min: 1 ~ Max: FE(*transmit by Hexadecimal code),
Unit: SecondAcknowledgement

[r][][Set ID][][OK/NG][Data][x]

27. Orbiter Pixel Setting (Command2:s)

- To adjust pixel number in orbiter function

Transmission

[i][s][][Set ID][][Data][Cr]

Data Min: 1 ~ Max: 3

Acknowledgement

[s][][Set ID][][OK/NG][Data][x]

28. Tune Command (Command: m a)

- To tune channel to following physical/major/minor number
Transmission

[m][a][Set ID][Data0][Data1][Data2][Data3][Data4][Data5][Cr]

Data 0: Physical Channel Number(Transmit by Hexadecimal code)

NTSC air:02~45

NTSC cable: 01, 0E~7D

ATSC air:01~45

ATSC cable:01~87

Data1,Data2: Major Channel Number (two part)/ Channel Number (One part)

Data1: High byte

Data2: Low byte

Two part channel number: Major number-Minor number

One part channel number: If the channel band is ATSC digital cable, it can be used. In case of using one part channel number, minor channel does not need.

Data3, Data 4: Minor Channel Number Data3: High byte Data4: Low byte

Data 5:

7	Main/Sub Picture	6	Two/One Part Channel	5	Using Physical Channel	4	Reserved	3	2	1	0	Sleep
0	Main	0	Two	0	Use	x	0	0	0	0	0	NTSC Air
1	Sub	1	One	1	No Use	x	0	0	0	0	1	NTSC Cable
						x	0	0	1	0	0	ATSC Air
						x	0	0	1	1	0	ATSC Cable sat
						x	0	1	0	0	0	ATSC Cable inc
						x	0	1	0	1	0	ATSC Cable inc
						x	0	1	1	0	0	ATSC cable auto
						x	0	1	1	1	0	Reserved
						x	x	x	x	x	x	
						x	1	1	1	1	1	Reserved

* All data are transmitted by Hexadecimal code

*Two/One part Channel: 6_h bit

This bit is used in a cable-ready system.

*Using physical channel: 5_h bit

If the channel band is NTSC air or NTSC cable, channel tuning can be done by only physical channel. In this case, using physical channel bit must be low(0).

But if the channel band is ATSC air or ATSC cable, there are two cases that physical channel enable or disable.

If the physical channel sending is meaningful, you should set this bit low(0). If the physical channel sending is meaningless, you should set this bit high(1).

Example)

1. Analog channel: NTSC cable, channel number(35), main picture Command: ma 00 23 xx xx xx xx 01 attribute(0x01): main picture, two part(it's not mandatory), using physical channel, NTSC cable 'xx' data: don't care major and minor channel number in case analog channel tuning.

2. Digital channel: ATSC air, channel number(don't know physical channel, major(30), minor(3)), sub picture

Command: ma 00 xx 00 1E 00 03 A2 attribute(0xA2): sub picture, two part, not using physical channel, ATSC air 'xx' data: don't care analog channel number in case digital channel tuning.

3. Digital channel: ATSC air, channel number(physical(20),major(20), minor(3)), sub picture

Command: ma 00 14 00 14 00 03 82 attribute(0x82): sub picture, two part, using physical channel, ATSC air.

Acknowledgement

[a][Set ID][OK][Data0][Data1][Data2][Data3][Data4][x]
[a][Set ID][NG][Data0][x]

29. Channel Add/Del (Command: m b)

- To add and delete the channels

Transmission

[m][b][Set ID][Data][Cr]

Data 0: Channel Delete

1: Channel Add

Acknowledgement

[b][Set ID][OK/NG][Data][x]

30. Key (Command: m c)

- To send IR remote key code

Transmission

[m][c][Set ID][Data][Cr]

Data: Key code: Refer to page 93.

Acknowledgement

[c][Set ID][OK/NG][Data][x]

31. Input select(Command: x b) (Main Picture Input)

► To select input source for TV.

Transmission

```
[x][b][ ][Set ID][ ][Data][Cr]
```

Data Structure

DATA(Hex)	INPUT
00	DTV (Antenna)
01	DTV (Cable)
10	Analog (Antenna)
11	Analog (Cable)
20	AV1
21	AV2
40	Component 1
41	Component 2
50	RGB DTV
60	RGB PC
90	HDMI1/DVI
91	HDMI2

Acknowledgement

```
[b][ ][Set ID][ ][OK/NG][Data][x]
```

32. PIP Input Select(Command: x y)

► To adjust input source for sub picture in PIP mode

Transmission

```
[x][y][ ][Set ID][ ][Data][Cr]
```

Data Structure

DATA(Hex)	INPUT
00	DTV (Antenna)
01	DTV (Cable)
10	Analog (Antenna)
11	Analog (Cable)
20	AV1
21	AV2

Acknowledgement

```
[y][ ][Set ID][ ][OK/NG][Data][x]
```

IR Codes

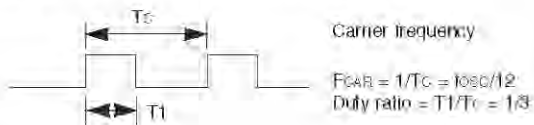
How to Connect

- ▶ Connect your wired remote control to the Remote Control port on the TV.

Remote Control IR Codes

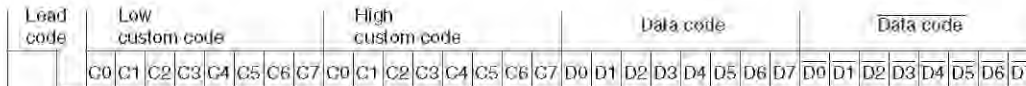
▶ Output waveform

Single pulse, modulated with 37.917KHz signal at 455KHz

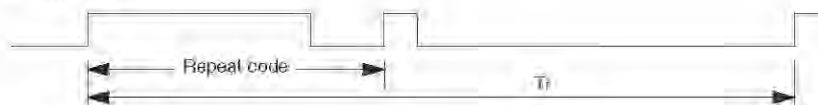


▶ Configuration of frame

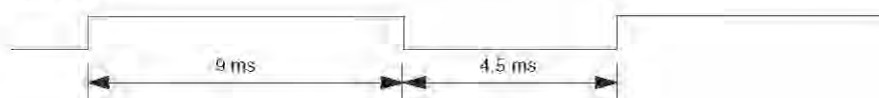
• 1st frame



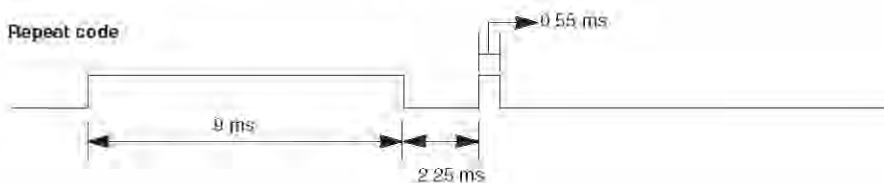
• Repeat frame



▶ Lead code

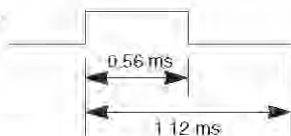


▶ Repeat code

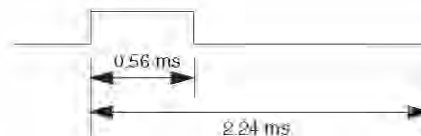


▶ Bit description

• Bit "0"

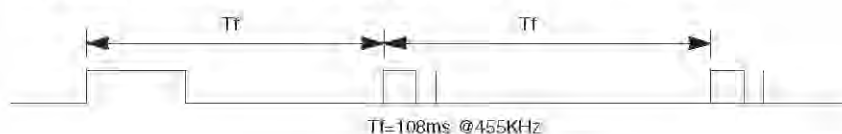


• Bit "1"



▶ Frame Interval : T1

The waveform is transmitted as long as a key is depressed.



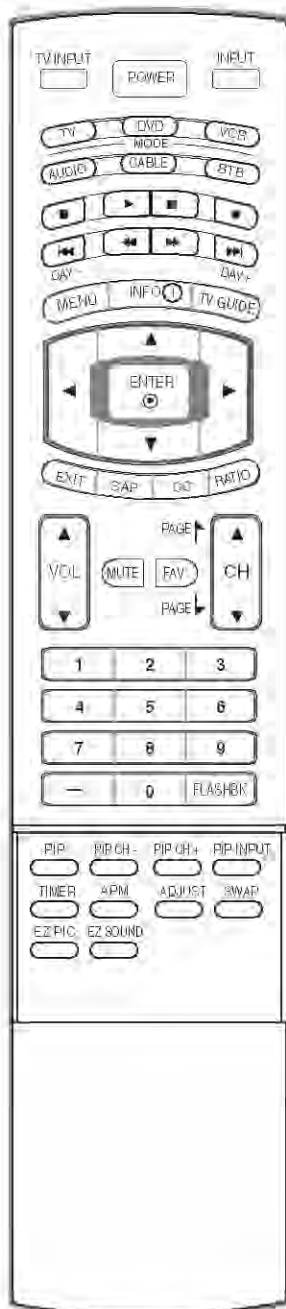
Code (Hex)	Function	Note
9E	LIVE TV	R/C Button
0B	INPUT	R/C Button
08	POWER	R/C Button (Power On/Off)
79	RATIO	R/C Button
0E	TIMER	R/C Button
10 ~ 19	Number Key 0~ 9	R/C Button
4C	- (Dash)	R/C Button
1A	FLASHBK	R/C Button
09	MUTE	R/C Button
02	VOL ▲	R/C Button
03	VOL ▼	R/C Button
00	CH ▲	R/C Button
01	CH ▼	R/C Button
1E	FAV	R/C Button
AA	INFO	R/C Button
39	CC	R/C Button
40	▲	R/C Button
41	▼	R/C Button
07	◀	R/C Button
06	▶	R/C Button
44	ENTER	R/C Button
43	MENU	R/C Button
52	EZ SOUND	R/C Button
4D	EZ PIC	R/C Button
5B	EXIT	R/C Button
60	PIP	R/C Button
72	PIPCB -	R/C Button
71	PIPCB +	R/C Button
61	PIP INPUT	R/C Button
63	SWAP	R/C Button
0A	SAP	R/C Button
CB	ADJUST	R/C Button
D6	TV	Discrete IR Code (TV Input Selection)
5A	AV1	Discrete IR Code (AV1 Input Selection)
D0	AV2	Discrete IR Code (AV2 Input Selection)
BF	COMPONENT 1	Discrete IR Code (Component1 Input Selection)
D4	COMPONENT 2	Discrete IR Code (Component2 Input Selection)
D5	RGB-PC	Discrete IR Code (RGB-PC Input Selection)
D7	RGB-DTV	Discrete IR Code (RGB-DTV Input Selection)
C6	HDMI1/DVI	Discrete IR Code (HDMI1/DVI Input Selection)
CC	HDMI2	Discrete IR Code (HDMI2 Input Selection)
76	Ratio 4:3	Discrete IR Code (Only 4:3 Mode)
77	Ratio 16:9	Discrete IR Code (Only 16:9 Mode)
AF	Ratio Zoom	Discrete IR Code (Only Zoom1 Mode)
70	POP	Discrete IR Code (Channel Search)
C4	POWER ON	Discrete IR Code (Only Power On)
C5	POWER OFF	Discrete IR Code (Only Power Off)
B0	PLAY	R/C Button
BA	PAUSE	R/C Button
B1	STOP	R/C Button
BD	REC	R/C Button
8F	REW	R/C Button
8E	FF	R/C Button
B2	GOTOPREV	R/C Button
B3	GOTONEXT	R/C Button
A9	TV GUIDE	R/C Button
92	APM	R/C Button
7D	MARK	R/C Button
90	REC LIST	R/C Button
7C	X STUDIO	R/C Button

Programming the Remote

- The remote control is a multi-brand or universal remote control. It can be programmed to operate most remote-controllable devices of other manufacturers.

Note that the remote control may not control all models of other brands.

Programming a code into a remote mode



- 1 To find out whether your remote can operate the device without programming, turn on the device such as a VCR and press the corresponding mode button on the remote.
After that, press the **POWER** button. If the device is turned off then it responds properly and the remote need not to be programmed. If not, the remote should be programmed to operate the device. The programming procedures are explained below.
- 2 Press the **MENU** and **MUTE** button continuously at the same time for 2 seconds, the current selected device button will be illuminated.
If you don't press any button for 20 seconds, the light on the mode button will be turned off. In that case, you have to repeat from step 2.
- 3 Enter code numbers using the number button on the remote by referring the code table on the following pages. When pressing the button, the light blinks at a time. If the device turned off, the programming is successful.
- 4 Press the **MENU** button to store the code. After blinking twice, this code is stored.
- 5 Test the remote functions to see if the device responds properly. If not, repeat from step 2.

Programming Codes

VCRs

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
AIWA	034	KENWOOD	014 034 039 043	PORTLAND	108	TATUNG	039 043
AKAI	016 043 046 124 125 146 072	LG (GOLDSTAR)	047 048 001 012 013 020 101 106 114 123	PULSAR	072	TEAC	034 039 043
AMPRO	072	LLOYD	084	QUARTZ	011 014	TECHNICS	031 033 070
ANAM	031 033 103	LXI	003 009 013 014	QUASAR	033 066 075 145	TEKNIKA	019 031 033 034
AUDIO DYNAMICS	012 023 039 043	MAGIN	017 034 101 106	RCA	013 020 033 034	THOMAS	101
BROOKSONIC	035 037 129	MAGNAVOX	040		040 041 062 063	TMK	034
CANON	028 031 033	MARANTZ	031 038 034 041 067 068 012 031 033 067	REALISTIC	107 109 140 144 145 147	TOSHIBA	006
CAPEHART	108				003 008 010 014		008 013 042 047
CRAIG	003 040 135				031 033 034 040	TOTEVISION	059 082 112 131
CURTIS MATHES	031 033 041				053 054 101	UNITECH	040 101
DAEWOO	005 007 010 064 065 108 110 111 112 116 117 119	MARTA	069	RICO	058	VECTOR RESEARCH	040
DAYTRON	108	MATSUI	101	RUNGO	146	VICTOR	012
DBX	012 023 039 043	MEI	027 030	SALORA	014	VIDEO CONCEPTS	048
DYNATECH	034 053	MEMOREX	031 038	SAMSUNG	032 040 102 104	VIDEOSONIC	012 034 046
ELECTROHOME	059		003 010 014 031 033 034 053 072 101 102 134 139		105 107 109 112 113 115 120 122	WARDS	040
EMERSON	008 017 025 027 029 031 034 035 036 037 046 101 129 131 136 153	MGA	045 046 059	SANSUI	125		003 013 017 024
		MINOLTA	013 020	SANYO	022 043 048 135		031 033 034 040
		MITSUBISHI	013 020 045 046 049 051 059 061 151		003 007 010 014	YAMAHA	053 054 131
FISHER	003 008 009 010			SCOTT	102 134	ZENITH	012 034 039 043
FINAI	034	MITC	034 040		017 037 112 129		034 048 056
GE	031 033 063 072 107 109 144 147	MULTITECH	024 034	SEARS	131		056 072 080 101
GO VIDEO	132 136	NEC	012 023 039 043 048		003 008 009 010 013 014 017 020		
HARMAN KARDON	012 045			SHARP	031 042 073 081		
HITACHI	004 018 026 034 043 063 137 150	NORDMENDE	043	SHINTOM	101		
INSTANTREPLAY	031 033	OPTONICA	053 054	SONY	031 054 149		
JCL	031 033	PANASONIC	066 070 074 083 133 140 145		024		
JCPENNY	012 018 015 033 040 066 101	PENTAX	013 020 031 033 063		003 009 031 052 056 057 058 076		
JENSEN	043	PHILCO	031 034 067	SOUNDESIGN	077 078 149		
JVC	012 031 033 043 048 050 055 060 130 150 152	PHILIPS	031 038 034 054 067 071 101 101	STS	094		
		PILOT	101	SYLVANIA	013		
		PIONEER	013 021 046		081 083 034 059		
				SYMPHONIC	067		
				TANDY	034		
					010 084		

Cable Box

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ABC	003 004 039 042 048 052 053	GOLDEN CHANNEL	030	PIONEER	085 085 090	SPRUCER	047 078
AJIN	112	HAMLIN	049 050 055		034 051 052 063	STARCOM	002 004 008 009
ANTRONIK	014	HITACHI	052 055		076	STARGATE	008 030
ARCHER	005 007 014 024	HOSPITALITY	070 077	POST NEWS WEEK	016	TADIRAN	030
CABLE STAR	028	JERROLD	002 003 004 008 009 010 052 069	PRUCER	059	TAEKWANG	110
CENTURION	092		074	PTS	011 048 071 072	TAIHAN	105
CENTURY	007	LG (GOLDSTAR)	001 106 101 005		073 074	TANDY	017
CITIZEN	007	M-NET	087	PULSAR	100	TEXSCAN	029
COLOUR VOICE	065 090	MACOM	033	RCA	047	TOCOM	039 040 056
COMBANO	080 081	MAGNAVOX	010 012 064 079	REGAL	049 050	TOSHIBA	100
COMTRONICS	019 030	MEMOREX	100	REGENCY	057	UNIKA	007 014 024
DIAMOND	023	MOVIE TIME	028 032	REMBRANT	025	UNITED CABLE	004 053
EAGLE	020 030 040	NSC	015 028 038 071 073	SAMSUNG	102 107 030 088	UNIVERSAL	005 007 014 024
EASTERN	057 062 066			SCIENTIFIC ATLANTA	003 011 041 042		026 027 032 035
ELECTRICORD	032	OAK	016 031 037 053		043 045 046	VIEWSTAR	012 015 018 066
GE	072	PANASONIC	044 047	SHERITECH	022		087 088 089
GEMINI	008 022 025 054	PARAGON	100	SIGNAL	030	ZENITH	100 114 060 093
GI	052 074	PHILIPS	006 012 013 020	SIGNATURE	052		
				SL MARX	030		

Digital Cable/Satellite Box

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ALPHASTAR DSR	123		133 134	PAGE-SKY SATELLITE	145		088 090 107 130
AMPLICA	050	GENERAL INSTRUMENT	003 004 016 029	PANASONIC	060 142	TOSHIBA	137
BIRDVIEW	051 126 129		031 059 101	PANSAT	121		002 127
CHANNEL MASTER	018 014 015 018	HITACHI	139 140	PERSONAL CABLE	117	UNIDEN	016 025 042 043
	036 055	HOUSTON TRACKER	033 037 039 051	PHILIPS	071		044 045 048 049
CHAPARRAL	008 009 012 077		057 104	PICO	105		078 079 080 086
CITOH	054	HUGHES	088	PRESIDENT	019 102		101
CURTIS MATHES	050 145	JANIEL	060 147	PRIMESTAR	030 110 111	UNIDEN	135 136
DRAKE	005 006 007 010	JERROLD	081	PROSAT	072	VIEWSTAR	115
	011 052 112 116	KATHREIN	103	ROA	066 106	WINEGARD	128 146
	141	LEGEND	057	REALISTIC	043 074	ZENITH	081 082 083 084
DX ANTENNA	024 046 056 076	LG	001	SAMSUNG	123		091 120
ECHOSTAR	038 040 057 058	LUTRON	132	SATELLITE SERVICE CO	026 035 047 057		
	093 094 095 096	LUXOR	062 144		085		
	097 098 099 100	MAGCOM	010 059 063 064	SCIENTIFIC ATLANTA	032 138		
	122		065	SONY	103		
ELECTRO HOME	089	MEMOREX	057	STARCAST	041		
EUROPLUS	114	NEXTWAVE	023 124 125	SUPER GUIDE	020 124 125		
FUJITSU	017 021 022 027	NORSAT	069 070	TEECOM	023 026 075 087		

Audio

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
AIWA	014 028 070 098	JVC	004 013 141	PHILIPS	026 112 143	TOSHIBA	137
	125 129 139 229	KEC	185 186 187	PIONEER	039 042 043 063	THE	061
	230	KENWOOD	038 050 067 089		085 091 093 094	VICTOR	088 131
AKAI	183		170 171 197 206		115 123 127 250	WARDS	089
ANAM	003 014 017 023		215 222	QUASAR	113	YAMAHA	054 055 066 092
	059 108 189 216	KOHEL	030	ROA	060		199
	217 235 236	NAD	045 046	ROX	092		
BURMESTER	252	LOTTE	014 016 036 098	REALISTIC	103 108		
CARVER	086		100 172 173 174	SAMSUNG	124 145 146 182		
CLARION	199		175 176 177 178		193 194 195 203		
DAEWOO	027 053 060 084		179 180 181 183		204 244 245 246		
	102 148 198 221		201 202 208 213	SANSUI	011 135 138 144		
DENON	015 075 130 143		214 219 223 232	SANYO	019 083 234		
FANTASIA	071		238 240	SCOTT	106 186		
FINEARTS	022	LXI	103	SHARP	031 032 051 052		
FISHER	099 099	MAGNAVOX	111		072 082 117 119		
LG(GOLDSTAR)	001 021 024 029	MARANTZ	002 018 020 025		156 184 199 200		
	087 107 108 110		034 041 081 090		206 209		
	190 191 192 210	MCINTOSH	097 112	SHERWOOD	005 006 158		
HAITAI	211 212 239	MOS	049	SONY	044 045 109 114		
HARMAN/KARDON	034 035 198 222	MEMOREX	104		118 126 248 249		
INKEL	068	NAD	107	TAEKWANG	012 020 073 074		
	037 058 062 069	ONKYO	046		076 077 105 181		
	078 079 095 121		018 040 041 047		162 163 164 165		
	122 149 150 151		048 058 057 132		166 167 168 169		
	152 153 154 155		133 140		205 231 233 242		
	157 158 159 160	OPTIMUS	159	TEAC	010 085 106 136		
	189 207 222 224	PANASONIC	007 033 064 113		185 187 237		
	225 226 227 243		142 220 241 251	TECHNICS	101 113 129 134		
	247	PENNEY	104		147 218		

DVD

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
APEX DIGITAL	022	MAGNAVOX	013	PHILIPS	013	SONY	007
DENON	020 014	MARANTZ	024	PIONEER	004 026	THOMPSON	005 006
GE	005 006	MITSUBISHI	002	PROCEED	021	TOSHIBA	019 008
HARMAN/KARDON	027	NAD	023	PROSCAN	005 006	YAMAHA	009 018
JVC	012	ONKYO	008 017	ROA	005 006	ZENITH	010 016 026
LG	001 010 016 025	PANASONIC	003 009	SAMSUNG	011 015		

Troubleshooting Checklist

The operation does not work normally.	
The remote control doesn't work	• Check to see if there is any object between the product and the remote control causing obstruction. • Are batteries installed with correct polarity (+ to +, - to -)? • Correct remote operating mode set: TV, VCR etc.? • Install new batteries.
Power is suddenly turned off	• Is the sleep timer set? • Check the power control settings. Power interrupted • No broadcast on station tuned with Auto off activated.

The video function does not work.	
No picture & No sound	• Check whether the product is turned on. • Try another channel. The problem may be with the broadcast. • Is the power cord inserted into wall power outlet? • Check your antenna direction and/or location. • Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	• This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.
No or poor color or poor picture	• Adjust Color in menu option. • Keep a sufficient distance between the product and the VCR. • Try another channel. The problem may be with the broadcast. • Are the video cables installed properly? • Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	• Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	• Station or cable product experiencing problems, tune to another station. • Station signal is weak, reorient antenna to receive weaker station. • Check for sources of possible interference.
Lines or streaks in pictures	• Check antenna (Change the direction of the antenna).

The audio function does not work.	
Picture OK & No sound	• Press the VOL or VOLUME button. • Sound muted? Press MUTE button. • Try another channel. The problem may be with the broadcast. • Are the audio cables installed properly?
No output from one of the speakers	• Adjust Balance in menu option.
Unusual sound from inside the product	• A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.

There is a problem in PC mode. (Only PC mode applied)	
The signal is out of range. (Invalid format)	• Adjust resolution, horizontal frequency, or vertical frequency. • Check it whether the signal cable is connected or loose. • Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	• Work the Auto configure or adjust size, phase, or H/V position. (Option)
Screen color is unstable or single color	• Check the signal cable. • Reinstall the PC video card.

There is a problem on the TV Guide On Screen™ function.	
My Guide listings disappeared after a power failure	You should begin to receive listings again within 24 hours.
Some channel numbers in the Guide are incorrect.	You can correct them using Change Channel Display under Setup.
I have not received any Guide listings.	- Listings usually appear within 24 hours after a successful Setup. - It may take up to a week to fill the Listings grid with the full 8 days of listings. - If you see a Listings grid with the message "No Listings" displayed you should start to receive updated program listings within 24 hours. To receive listings: - If the message "No data for this screen" is displayed: - Check the connections between the TV, cable, antenna. - Verify Setup information under Change System Settings. - If this message is still displayed after multiple days, please contact the LG® Brand Customer Support.
A show I set to Record did not occur.	Check the Schedule menu and verify that the show is listed before recording begins.
I set a show to Auto-Tune and it did not.	- Check the Schedule menu and verify that the show is listed as a Reminder. - Highlight the show under Listings and do the following: - Press the Menu key on the remote. - Use the down arrow to highlight Edit Reminder, and press ENTER. - Verify the Auto-Tune option reads Yes. - The TV must be On at the scheduled time for Auto-Tune.
I set a show with the Power On TV option and it did not.	- Check the Schedule menu and verify that the show is listed as a Reminder. - Highlight the show under Listings and do the following: - Press the Menu key on the remote. - Use the down arrow to highlight Edit Reminder, and press ENTER. - Verify the Power On TV option reads Yes.

Maintenance

- Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new TV. Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth. Please be sure not to use a wet cloth.

Extended Absence



If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

Product Specifications

MODEL	42PC1DA-UA	37LB1D
Resolution	1366 x 768 (Dot)	852 x 480 (Dot)
Power requirement	AC 100-240V ~ 50/60Hz	AC 100-240V ~ 50/60Hz 2.0A
Television System	NTSC-M, ATSC, 64 & 256 QAM	
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 135, CADTV 1 ~ 135, DTV 2 ~ 69	
External Antenna Impedance	75 Ω	
Operating Temperature Range	32 ~ 104°F (0 ~ 40°C)	
Operating Humidity Range	Less than 80%	

- The specifications shown above may be changed without prior notice for quality improvement.

