



A  **THOMSON COMPANY**

Product Functional Specification

**Gyro-Equipped, Universal TV,
Windows XP Media Center RCU,
Music LCD display, Dell Version**

Date: 1/13/2006
Version 0.1

Table of Contents

| | |
|--|----|
| Introduction..... | 2 |
| Battery Installation and Information..... | 3 |
| Battery Saver..... | 3 |
| Gyro Operation..... | 3 |
| Product Diagram..... | 4 |
| Button Cluster Locations..... | 4 |
| RCU Mode Selection..... | 5 |
| Transport Control..... | 6 |
| Menu Navigation..... | 7 |
| Gyro Activation/Select..... | 7 |
| Channel/Volume Control & Media Center Green Button..... | 8 |
| MCE Shortcut Buttons..... | 8 |
| Numeric Keypad..... | 8 |
| European Addition..... | 9 |
| Backlighting..... | 9 |
| ON/OFF Switch..... | 9 |
| RF Receiver..... | 10 |
| Setting Up and Synchronizing the Remote and the PC..... | 10 |
| Programming the Remote..... | 12 |
| Find Out If You Need to Program the Remote..... | 12 |
| Programming Methods..... | 12 |
| Using Automatic Code Search [This function to be added later]..... | 12 |
| Using Direct Entry..... | 13 |
| Learning..... | 13 |
| Learning Tips..... | 13 |
| Code Learning..... | 13 |
| Learning Commands..... | 13 |
| Clearing a Learned Function..... | 14 |
| Music Mode..... | 14 |
| LCD Characters Supported..... | 17 |
| Gyro Battery Saver Mode..... | 17 |
| Troubleshooting..... | 17 |
| Remote Code List..... | 19 |
| HDTV..... | 19 |
| TV Monitor..... | 19 |
| TV..... | 19 |
| Errata..... | 21 |

Introduction

This users' manual describes the operation of the Dell / Gyration Universal 2-in-1 (1 IR devices + 1 RF device) Windows XP Media Center Remote Control Unit (RCU). The

RCU contains an embedded micro gyro for motion sensing and in-air control of floating cursor. This RCU features an IR code database and IR learning capabilities to universally control standard home theater TVs.

The RCU is also equipped with a 2.4 GHz RF transceiver to send cursor movement information and other commands to the PC via a built in transceiver. The radio frequency (RF) transceiver delivers a range of up to 100 feet with no line-of-sight requirement. The 800 possible channels of the RF transceiver provide high resistance to interference from other radio devices.

Battery Installation and Information

The Media Center RCU requires four AAA Alkaline batteries. To install the batteries:

1. Remove the battery compartment cover.
2. Insert the batteries, matching the batteries to the (+) and (-) marks inside the battery compartment.
3. Replace the battery compartment cover and snap it into place.

Note: Reprogramming may be required after batteries are replaced.

Battery Saver

The RCU saves battery power by automatically going into a low-power state if no button is pressed after a few seconds. See the Gyro section for gyro battery saver mode.

Gyro Operation

The RCU provides in-air control of the PC's cursor via patented gyroscopic motion-sensing technology. This means mouse-like cursor control, from anywhere in the room, without the need of a flat surface. There is no line-of-sight requirement so you don't have to point the RCU at the PC you are controlling. Remember the following things when using the in-air cursor control feature of the RCU:

- Use your thumb to press the gyro and mouse buttons. [add picture of hand holding the RCU]
- Click the center button to activate the gyro motion-sensing control. Single click and hold to move the cursor and release it to "park" the cursor where you want it. Double click the center button and release it for continuous cursor movement similar to a standard mouse.
- The right and left buttons function like standard mouse right-click and left-click buttons.
- Move the cursor by flexing your wrist, not your arm or body, much as you would with a flashlight; side to side and up and down. Placing your arm on an armrest or on your lap will make this motion more comfortable.
- The RF Transmit LED indicates when gyro motion or other information is being sent independent of which mode is selected on the RCU.

Product Diagram

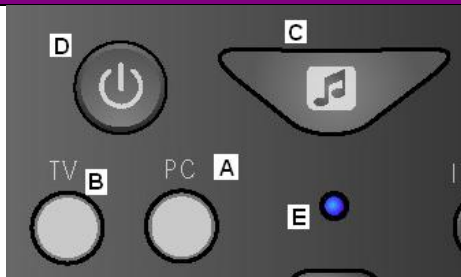
Button Cluster Locations



| | Button Cluster | Function |
|---|---|--|
| A | RCU mode selection and power | Selects RCU mode (PC , TV , and MusicDisplay). Powers on/off selected device. Includes RF LED. |
| B | Additional buttons needed for RF connection, LCD Backlighting, and TV Input support | CONNECT , BACKLIGHT , TV INPUT |
| C | Transport control | Standard AV control for selected transport or Windows Media Player, Windows Media Center, DVR, etc. |
| D | Menu navigation | Standard menu navigation: up, down, left, right, OK. Includes MS required buttons: LIVE TV , GUIDE , BACK and MORE . |
| E | Gyro button cluster | Center button activates gyro for in-air cursor control. Outer buttons function like standard left and right mouse buttons. |
| F | Volume and Channel control, eHome (MCE Green Button), Mute | Standard volume up/down, channel up/down, Media Center eHome, and volume mute. |
| G | Media Center shortcuts | Shortcuts buttons to easily navigate within the Media Center environment |
| H | Alpha-numeric keypad | Standard 0-9 keys with alpha characters, plus * , space, # , CLEAR , and ENTER |

See following pages for more detail on these buttons

RCU Mode Selection



| | | |
|---|--|---|
| A | Puts RCU into <i>PC control mode</i> for communicating with Media Center PC via RF protocol. | |
| B | Puts RCU into <i>TV control mode</i> for communicating with TV via IR protocol. | |
| C | Turns on LCD and puts RCU into <i>Music control mode</i> for playing music stored on your Media Center PC. | |
| D | PC, TV mode: Powers on/off the selected device. | PC Mode: Issues a standby command. If the system is active, the first button press puts it into standby mode and the second button press issues a power down command. If the system is already in standby mode, a button press will awaken. |
| E | Transmit LED indicator for RF transmission | |

Transport Control



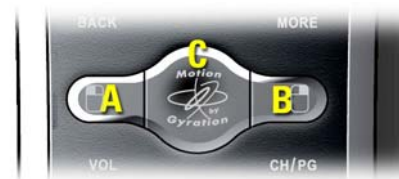
| | PC, TV, or Music mode: | PC Mode |
|---|--|---|
| A | Puts selected device into <i>Stop</i> mode, if supported | Stops media playback and positions pointer to start of media |
| B | Puts selected device into <i>Pause</i> mode, if supported | First button press will pause the media at present position. Subsequent button presses toggles between pause and playback at present position pointer. |
| C | Puts selected device into <i>Fast Forward</i> mode, if supported | First press speeds up the time base of the media stream to the first FF value (3X). If media is a slide show, skips to next picture. Subsequent button presses cycle through the FF speed values looping through 0 (normal speed) 3X, 20X, 60X. If slide show, skips to next picture. |
| D | Skip command, if supported by selected device | Skips ahead an increment: CD and Playlists skip to next song. DVD skips to next chapter. Slide show skips to next picture. DVR skips 29 seconds |
| E | Puts selected device into <i>Play</i> mode, if supported | Start (if paused, continue) playback of media at present position pointer. Used by Media Center for Media Center media, DVR, CD/DVD, playlists and slide shows. |
| F | Replay command, if supported by selected device | Move the position pointer back an increment: CD and Playlist: skips back to previous song. DVD: skips back to previous chapter. Slide show: skips back to previous picture. DVR skips back 7 seconds |
| G | Puts selected device into <i>Rewind</i> mode, if supported | First press speeds up the time base and reverses direction of the media stream to the first rewind value (3X). If media is a slide show, skips to previous picture. Second press cycles through the RWD speed values looping through 0 (normal speed) 3X, 20X, 60X. If media is a slide show, skips to previous picture |
| H | Puts selected device into <i>Record</i> mode, if supported | Records the TV show to disk. Starts recording at the beginning of the show as defined by on-screen TV program guide (if the pause buffer enables it) |

Menu Navigation



| | TV or Music mode | PC Mode |
|---|---|---|
| A | No action, or as defined by selected device | Brings live TV to the front to the last channel user was watching. |
| B | No action, or as defined by selected device | Invokes the on-screen TV program guide via Media Center |
| C | No action, or as defined by selected device | Goes back one location of the user interface back stack |
| D | No action, or as defined by selected device | Provide information if available for the focus point |
| E | Menu Navigation Up | Moves the focus point up one location, if at top of the screen takes no action |
| F | Menu Navigation Right | Moves focus point right one position, if at rightmost position takes no action |
| G | Menu Navigation Down | Moves the focus point down one location, if at bottom of the screen takes no action |
| H | Menu Navigation Left | Moves focus point left one position, if at leftmost position goes back 1 page in the user interface stack |
| I | Performs action indicated by focus point | Performs action indicated by focus point |

Gyro Activation/Select



| | |
|---|---|
| A | Simulates a left-mouse button-click |
| C | Activates gyroscope for motion-sensing cursor control, motion-sensing menu navigation, or other motion-sensing features |
| B | Simulates a right-mouse button-click |

Channel/Volume Control & Media Center Green Button



| | PC or TV mode | PC Mode |
|---|--|---|
| A | Go to Media Center Home page, launch Media Center if not running already | Go to Media Center Home page, launch Media Center if not running already |
| B | Increment the current channel by 1 | Increment the current channel by 1. If in a list view, move forward a page in the list. |
| C | Decrement the current channel by 1 | Decrement the current channel by 1. If in a list view, move back a page in the list. |
| D | Mute selected device, if applicable | Mute the entire PC volume, toggle mute state |
| E | Decrement the current volume by 1 unit | Decrement the current volume by 1 unit. If muted, un-mute the volume first. |
| F | Increment the current volume by 1 unit | Increment the current PC volume by 1 unit. If muted, un-mute the volume first. |


MCE Shortcut Buttons



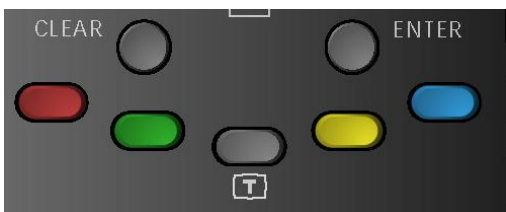
| | |
|---|--|
| A | Acts as a shortcut to the "My Pictures" page |
| B | Acts as a shortcut to the "TV Home" page |
| C | Acts as a shortcut to the "Music" page |
| D | Acts as a shortcut to the "My Videos" page |

Numeric Keypad

| | PC or TV mode: | PC Mode |
|---|---|----------------------------|
| A | Standard 1-9, alphanumeric | Standard 1-9, alphanumeric |
| B | Inserts a * symbol, if supported by the selected device | * |
| C | Inserts a # symbol, if supported by the selected device | # |
| D | <i>Clear</i> , if supported by the selected device | <i>Clear</i> |

| | | | |
|---|---|--|-------|
|  | E | Enter, if supported by the selected device | Enter |
| | | | |

European Addition

| | | |
|---|--------|--|
|  | | |
| | Red | |
| | Green | |
| | Grey | |
| | Yellow | |
| | Blue | |

Backlighting

The RCU Mode Selection buttons are backlit. One of these buttons lights up whenever a button is pressed on the remote to indicate which Control Mode the remote is in; **PC** or **TV**. If the backlighting seems dim, the batteries may need to be replaced. There is no backlighting on any other buttons.

ON/OFF Switch

This switch turns the selected device on or off. The device is selected with the RCU Mode Switches; **PC** and **TV**.

In the *PC* mode, this button issues a standard Windows *SLEEP* command. Various options for this command can be set up in Windows. Go to **Start/Control Panel/Power Options/Advanced** and then set a function for the *SLEEP* command.

In the default configuration this button is setup to give a *STANDBY* command. In this configuration, if the PC is already on, the first button press puts the PC into standby mode. If the PC is in standby mode, any button pressed on the RCU will wake up the PC.

RF Receiver

The RCU communicates via an RF transceiver that is built into the PC to control the gyro and music functions. In order for this to work you need to synchronize your remote and PC.

Setting Up and Synchronizing the Remote and the PC

After inserting the batteries in the remote control unit,

1. Hold the remote close to the front of the PC.
2. Press the **CONNECT** button at the top of the remote control unit. Your RCU is now connected to your PC and Windows Media Center. The green STATUS light on the USB transceiver indicates when RF signals are being received from the RCU.

Add DEFAULT KEY CODE MATRIX and anything else important from the document
“PFS - Gyro MCR Remote V1 13 July.doc”

Programming the Remote

The RCU can be programmed to operate many brands of remote-controllable TVs via the IR functions of the RCU.

Find Out If You Need to Program the Remote

To determine whether the remote needs to be programmed to operate your TV, do the following:

1. Turn on the TV.
2. Point the remote at the TV.
3. Press the TV button.
4. Press ON•OFF to see if the TV responds. If the TV doesn't respond, you must program the remote to operate it.

Programming Methods

There are two ways to program the remote control to operate other TV's: Automatic Code Search and Direct Entry.

Using Automatic Code Search [This function to be added later]

The following instructions can be used to program the remote to operate each of your components. If you want to stop the automatic code search without programming any of your components, press and hold **CLEAR** (*) until the indicator on the remote turns off.

1. Turn on the component you want to operate (TV, DVD player, etc.)
2. Press and hold the component button you want to program (**TV**, **AUX**, etc.). While holding the component button, press and hold ON/OFF button until the component button on the remote turns on, then release both buttons.
3. Point the remote at the component.
4. Press and release **PLAY**, then wait 5 seconds or until the component button stops flashing. At this point the remote is searching for the correct code to program. If, after 5 seconds, the component you want to operate does not turn off, press **PLAY** again to tell the remote to search the next set of codes. Continue pressing and releasing **PLAY** until the component turns off or you have searched through all of the codes. The component buttons flash when all codes have been searched, the component button turns off, and the RCU exits *Automatic Code Search*.

If the component you want to control *does* turn off:

1. Press and release **REVERSE**, then wait 2 seconds. Repeat this step until the component turns back on.
2. To finish, press and hold **STOP** until the component button on the remote turns off.

Using Direct Entry

1. Turn on the TV you want to operate.
2. Look up the brand and code number(s) for the TV in the Remote Code List at the end of this booklet.
3. Press and hold the TV button on the RCU.
4. Enter the 4-digit code from the Remote Code List. If all the mode buttons flash, you have either entered an invalid code or the button isn't programmable.
5. Release the TV button, point the RCU at the TV, and then press the ON/OFF button to see if the TV responds to the command. If it doesn't, try pressing the TV button and then ON/OFF again.
 - If you get no response, repeat these steps using the next code listed for your brand, until the TV responds to the remote commands.
 - If you try all the codes for your TV brand and none work, try the automatic code search method. If automatic code search doesn't find the code, the remote is not compatible with your TV.

Learning

The RCU has the ability to *learn* the commands of other remote control units. This allows the most-used commands on those remotes to be combined on the RCU. These original remote control units are also known as *source* remotes. Learning is not active in the PC mode.

Learning Tips

1. Perform the learning process in low-light areas because too much ambient light might cause interference with the infrared (IR) signals of the remotes.
2. Use fresh batteries in both the Media Center RCU and the original remote.

Code Learning

Codes from the Remote Code List include basic functionality for each TV they control. Once you have programmed in the code for your specific TV, you can customize the RCU to perform certain functions from your original remote(s) that were not embedded in the preset code. The RCU has the ability to learn and store commands from your original remote(s).

Learning Commands

To learn from your other TV remotes follow these simple instructions.

- 1) First press and hold the TV button on the Gyration remote, then press and hold the **RECORD** button on the Gyration remote.
- 2) Keep pressing both buttons until the TV mode button light turns off, flashes, and turns off. Release both buttons.

- 3) On the Gyration remote control unit, press and release the button where you want to store the new function (the TV button turns off and then back on).

Note: If you press an invalid button on the remote, the TV mode button flashes 4 times to alert you. You'll have to repeat step 3.

- 4) Position the source remote facing the bottom of the RCU no more than 2 inches apart [add picture below]. Press and hold the button of the source remote that has the functionality you are recording. Keep pressing the button until the RCU TV mode button light turns off and back on (the source function has been saved to the TV mode on the RCU).

Note: If the TV mode button flashes 4 times, the function wasn't learned. Try again starting with Step 3.

- 5) The RCU remains in the "learning mode" so you can continue adding functions to different buttons by repeating steps 3 and 4.
- 6) Press **CLEAR** to exit the learning mode.

Clearing a Learned Function

To delete a learned button function, use the procedure below.

1. Press and hold the TV mode button (the TV button lights). Then press and hold the **CLEAR** button for 3 seconds. Hold both buttons depressed until the TV mode button flashes.
2. Release both buttons. The TV mode button turns on indicating that the remote is now in the Clear Learned Function mode.
3. Press and release the button where learning is to be cleared. The TV mode button blinks off then back on indicating that the function was cleared successfully.
4. Repeat Steps 1 through 3 until all the buttons' learned functions have been cleared.

Note: If an invalid button is pressed, the TV mode button flashes 4 times, then stays on, and the remote remains in Clear Learned Function mode. Repeat Step 3 to continue the clearing process.

5. Press the **CLEAR** button to return the remote to normal operation.

Music Mode

Music mode is a revolutionary new way for you to search through and play your favorite songs that you have already setup on your Media Center PC. It links directly to your Windows Media Player library so that you can browse through your Play List and listen to your tunes without going to your computer.

It has the same look and feel of your favorite Dell DJ mp3 player, making it easy to navigate and use.

Let's power it up and give it a try shall we!

NOTE: THIS IS A REPRESENTATION OF THE LCD SHOWN HERE – ACTUAL VERSION WILL LOOK MORE LIKE THE DELL DJ



When you press the 🎵 button the LCD powers up with the backlight on, and the RCU downloads the top level menu structure from your WMP database.



To move up and down the screen you use the up and down arrow keys.



To enter a menu level, use the right or OK buttons. To back out of a level, use the left button. You can play the whole album by pressing the Play button at this level, or enter the album and select a specific song.

Notice as you navigate through the menu the heading changes on the top line.



When a song is playing, you'll see the same data on the screen that the Dell DJ shows, along with a progress bar, the current running time and the time left for that song.



More TBD

LCD Characters Supported

Japanese Characters

Due to the limited resources in the RCU with memory and bandwidth, we will only be able to support the Hiragana and Katakana scripts. Romaji will only be supported using the standard ASCII character set (a..z, A..Z, 0..9 etc.). There may be room for about 35 Kanji characters but we will only use them if 2 conditions are met. First of all, if we determine that there is an unchangeable menu structure, as to say that the Windows Media Player data base has default text for “All Music”, “Contributing Artist”, “Composer”, “Album”, “Genre” etc. and the user can’t change these or delete these categories. Secondly, we need to determine that the number of characters needed to represent these categories is less or equal to the 35 undefined characters.

Hiragana – あいうえおかきくけこさしすせそたちつてとなにぬね
のはひふへほまみむめもやゆよらりるれわぬをん
Katakana – アイウエオカキクケコサシスセソタチツテトナニヌ
ネノハヒフヘホマミムメモヤユヨラリルレロワヰヱヲンヴカケ

English

We will support the first 128 characters of the standard ASCII set.

Gyro Battery Saver Mode

TBD

Troubleshooting

If the IR functions on your RCU don’t work properly...

- Something might be between the RCU and the remote sensor on the component. Make sure there is a clear path.
- The RCU may not be aimed directly at the TV that you’re trying to operate.
- The RCU might not be in the correct mode for operating the TV. Try pressing **TV** and then see if you can it with the RCU.
- The batteries in the RCU might be weak, dead, or installed incorrectly. If batteries are weak, the backlighting will be weak on the device mode buttons. In this case, put new batteries in the remote. (**Note:** if you remove the batteries, you may have to reprogram the remote to operate other components.)

- When using the Learning feature, do the learning process in low light areas to prevent natural light and fluorescent light from interfering with the infrared signals.

If the RF or gyro functions on your RCU don't work properly...

- If the RCU does not appear to be working at all, it may not be connected or synchronized with the builtin RF transceiver. Repeat the *Setting Up and Synchronizing the Remote and the Transceiver* procedure above.
- If, when using the RCU as an in-air cursor control, the cursor is visible on the screen, but shows no movement, the gyro may not be activated. See the *Gyro Operation* section above to activate the gyro and in-air cursor control.
- If the cursor movement is choppy or erratic, there may be radio interference. Move the PC farther away from other electronic devices such as monitor speaker or radios.
- The batteries in the RCU might be weak, dead, or installed incorrectly. If batteries are weak, the backlighting will be weak on the device mode buttons. In this case, put new batteries in the remote. (**Note:** if you remove the batteries, you may have to reprogram the remote to operate other components.)

Remote Code List

HDTV

Panasonic.....1045
Sony.....1099
Toshiba.....1098

TV Monitor

Panasonic.....1058

TV

Action.....1037
Admiral.....1063, 1084, 1090
Advent.....1055
Aiko.....1070
Akai.....1034, 1035
Amtron.....1073
Anam.....1036
Anam National.....1039, 1064, 1073
AOC.....1034, 1048, 1065, 1066, 1067
Apex.....1002, 1003, 1004, 1005
Audiovox.....1037, 1048, 1052, 1073
Bell & Howell.....1063, 1075
Benq.....1006
Broksonic.....1034, 1036, 1046, 1054
Carver.....1060
Centurion.....1068
Citek.....1051
Citizen.....1046, 1065, 1067, 1070, 1073, 1080, 1083
Classic.....1034
Colortyme.....1035, 1047, 1065, 1067
Contec Cony.....1036, 1037
Contec/Cony.....1069, 1073
Craig.....1036, 1037, 1046, 1073
Crosley.....1060
Crown.....1073, 1078
Curtis.....1034
Curtis Mathes.....1035, 1060, 1062, 1065, 1067, 1075, 1080, 1083, 1093, 1095, 1096
Daewoo.....1034, 1039, 1048, 1052, 1065, 1066, 1067, 1070, 1083
Daytron.....1048, 1065, 1067, 1083
Denon.....1053
Dimensia.....1062, 1096
Dumont.....1065, 1082
Electrohome.....1034, 1035, 1064, 1065, 1067, 1071
Emerson.....1034, 1035, 1036, 1037, 1047, 1052, 1054, 1065, 1067, 1069, 1072, 1073, 1074
1075, 1083, 1087, 1094
Envision.....1035, 1065, 1067
Fisher.....1008, 1075
Fujitsu.....1074
Funai.....1036, 1037, 1073, 1074

GE.....1009, 1010, 1034, 1036, 1039, 1052, 1061, 1062, 1064, 1065, 1067, 1076, 1077
 1096, 1097
 Goldstar.....1034, 1035, 1038, 1065, 1066, 1067, 1069, 1071, 1083
 Gradiente.....1035
 Hallmark.....1034, 1065, 1067
 Harman Kardon.....1034
 Hisense.....1057
 Hitachi.....1011, 1012, 1013, 1048, 1053, 1065, 1067, 1069, 1092
 Infinity.....1060, 1078
 Janeil.....1085
 JBL.....1060, 1078
 JC Penney.....1034, 1062, 1065, 1066, 1067, 1076, 1077, 1080, 1083, 1096, 1097
 Jensen.....1035, 1065, 1067
 JVC.....1001, 1014, 1015, 1069, 1077, 1094
 Kawasho.....1065, 1067
 Kenwood.....1034, 1035, 1047, 1065, 1067, 1071
 Kloss Novabeam.....1039, 1073, 1085
 KTV.....1036, 1037, 1073, 1083
 LG.....1066
 Lloyds.....1047
 Loewe.....1078
 Logik.....1050, 1063
 Luxman.....1065, 1067
 LXI.....1034, 1060, 1062, 1067, 1075, 1078, 1096, 1097
 Magnasonic.....1034, 1035, 1048
 Magnavox.....1016, 1034, 1035, 1060, 1065, 1067, 1071, 1078
 Majestic.....1063
 Marantz.....1035, 1060, 1065, 1067, 1078
 Megatron.....1067
 Memorex.....1034, 1063, 1066, 1067, 1075
 MGA.....1035, 1065, 1066, 1067, 1071
 Mitsubishi.....1017, 1034, 1035, 1065, 1066, 1067, 1071
 Montgomery Ward.....1063
 Motorola.....1064, 1084
 MTC.....1034, 1048, 1065, 1066, 1067, 1080
 Multitech.....1073
 Multivision.....1079
 NAD.....1067, 1092
 NEC.....1035, 1047, 1064, 1065, 1066, 1067
 Nikko.....1048, 1067, 1070
 Onwa.....1036, 1073
 Optimus.....1092
 Optonica.....1084
 Orion.....1054, 1087
 Panasonic.....1018, 1019, 1020, 1037, 1039, 1048, 1064, 1077, 1078
 Philco.....1034, 1035, 1048, 1053, 1060, 1064, 1065, 1066, 1067, 1069, 1071 1078
 Philips.....1021, 1022, 1060, 1064, 1065, 1069, 1071, 1078
 Pioneer.....1023, 1039, 1040, 1065, 1067, 1092
 Portland.....1034, 1065, 1066, 1067, 1070, 1083
 Price Club.....1080
 Prima.....1050, 1059
 Prism.....1077
 Proscan.....1061, 1062, 1096, 1097
 Proton.....1034, 1035, 1046, 1065, 1067, 1069
 Quasar.....1024, 1039, 1064, 1077
 Radio Shack.....1036 1037 1039 1075 1096

| | |
|-----------------------|--|
| Radio Shack/Realistic | 1062, 1065, 1067, 1069, 1073, 1075, 1083 |
| RCA | 1000, 1025, 1036, 1039, 1040, 1061, 1062, 1064, 1065, 1066, 1067, 1071, 1093 1095, 1096, 1097, 1100 |
| Realistic | 1075, 1096 |
| Runco | 1082 |
| Sampo | 1026, 1039, 1065, 1067, 1083 |
| Samsung | 1027, 1028, 1034, 1047, 1065, 1066, 1067, 1069, 1071, 1080, 1083, 1088 |
| Sansui | 1087 |
| Sanyo | 1065, 1075 |
| Scott | 1036, 1037, 1065, 1067, 1069, 1073, 1074 |
| Sears | 1034, 1036, 1060, 1062, 1065, 1067, 1071, 1074, 1075, 1086, 1096, 1097 |
| Sharp | 1029, 1047, 1049, 1065, 1067, 1069, 1083, 1084 |
| Signature | 1063 |
| Sony | 1041, 1042, 1089, 1091 |
| Soundesign | 1034, 1036, 1065, 1067, 1073, 1074 |
| Starlite | 1073 |
| Supre-Macy | 1085 |
| Sylvania | 1030, 1034, 1035, 1048, 1060, 1065, 1067, 1071, 1078 |
| Symphonic | 1037, 1072, 1073, 1086 |
| Tandy | 1084 |
| Tatung | 1064 |
| Technics | 1077 |
| Techwood | 1035, 1065, 1067, 1077 |
| Teknika | 1036, 1037, 1048, 1051, 1060, 1063, 1065, 1066, 1067, 1069, 1070, 1073, 1074 1080, 1083 |
| Telecaption | 1081 |
| Telefunken | 1047 |
| Toshiba | 1031, 1032, 1033, 1056, 1075, 1080, 1081 |
| Totevision | 1083 |
| Ultra | 1048 |
| Universal | 1076 |
| Video Concepts | 1036 |
| Vidikron | 1060 |
| Wards | 1034, 1060, 1062, 1063, 1065, 1066, 1067, 1071, 1072, 1074, 1076, 1078, 1096 |
| White Westinghouse | 1034, 1048, 1052 |
| Yamaha | 1047, 1048, 1065, 1066, 1067, 1071 |
| Zenith | 1038, 1043, 1044, 1048, 1063, 1065, 1082 |

Errata

- There is a programming error in the *Learning Commands* section. The incorrect mode LED lights during the learning process. The LED to the left of the correct one is currently lit during this function. This will be corrected in future versions.
- In the Product Diagram, RCU Mode Selection section, the Transmit LED (F) is shown as red. It is actually green.
- The Code Search Function is not in the current version, but will be added in later versions. It is included above for reference.
- In the Learning Mode there is no “All Clear” function to clear all learned IR commands. This will be added in future versions.