

## Using Your Remote

The remote control that is provided with your new DSR905 Digital Sidecar is set at the factory to control all of the receiver functions. This remote control can also be used to operate your TV and VCR components. Prior to using your remote, you will need to "program" it for the brand of TV and VCR that you own. This process is called programming the remote control.



**A Word About Modes.** To enable the remote control to operate your receiver, your TV, and your VCR, it has three main modes of operation: SAT mode, TV mode, and VCR mode. This means that when you press the SAT, TV, or VCR keys on the remote control, you enable it to control each of these devices, one at a time. Naturally, some of the remote control keys have more than one function, depending upon which mode you are using at the time. Keep this in mind as you read the description for each remote control key. Also keep in mind that some SAT functions are available only within SAT mode. Among these special functions are access to the Digital Sidecar menus through the **OPTIONS** key, use of the Interactive Program Guide (IPG) through the **GUIDE** key, and the ability to select a satellite by using the **SAT** key. In addition, you can assume that if you see a key on the remote that you have never seen on a TV or VCR remote control, it is only useful for Digital Sidecar functions and can only operate when the remote is in SAT mode.



## Programming the Satellite Mode

If you have more than one Motorola 4DTV or analog satellite receiver, you may want to prevent the remote controls from affecting the other receivers. This may also be important if your neighbor has a General Instrument 350i, 450i, 550i, 650i, 4DTV DSR920 or DSR922 receiver. To prevent this kind of interference, you must match each remote control with only one receiver. In order to do this, you will have to assign a new "address" to each matched set of remote control and receiver so that each set functions independently of the others.

To assign a unique "address" to a set of remote controls and receivers:

- Insure that the audio/video connections are completed.
- Press the POWER key on the receiver's front panel to turn it on.
- Press the  keys on the front of the receiver at the same time. The receiver will display two figures on your TV monitor: first an "A", then a second number from 0 to 3. All together it looks like this: "A0". The second figure is also known as the "address" to which we referred to earlier.
- Press the  keys on the receiver's front panel to change the address to 0, 1, 2, or 3.
- Press the ENTER key on the front panel to memorize the change. Failure to do this will cause the receiver to reset to the factory mode of "A0" the next time the power is cycled.
- Press the POWER key to exit this mode.
- On the remote control that you plan to use with the receiver, press and hold down the SAT key for about three seconds until the LED flashes.
- Enter the numbers "00" and the third number that you have already entered on the front panel of the receiver (either 1, 2, or 3). If the remote control accepts the new address, the LED will flash rapidly several times. The address combinations are 000, 001, 002 or 003.

**If You Misplace the Remote Control.** If you ever misplace the remote control and need to use the various Digital Sidecar menus, just press the MENU key on the front panel and a special menu screen will appear.

## Key Functions

**Power.** To turn the component on or off.

**VCR (mode).** To change the remote to VCR mode to control the VCR.

**TV (mode).** To change the remote to TV mode so it can control the TV.

**SAT (mode).** To change the remote to SAT mode so it can control the receiver for viewing satellite signals, as well as the OPTIONS menu.

**A/D.** To change the input from analog to digital reception.

**Source.** To control the input source to your satellite receiver, your TV, or your VCR components.

- In SAT mode, it shifts between satellite or cable and antenna input.
- In TV mode, it shifts between auxiliary antenna and video sources.
- In VCR mode, it shifts between TV input and VCR input.

**SAT.** Press this key to display the Satellite Select Menu. If you press the SAT key when you are viewing the Channel Locks, Favorite Channels, Set Timer, or IPG a special menu with a satellite list will appear. This allows you to obtain information about the satellite without actually moving the dish.

**Arrow Keys.** To highlight selections from menu screens. Also used in the Browse banner to navigate between listings.

**Enter.** For convenience, there are two ENTER keys. If you are using a menu, press ENTER to select a highlighted option. In SAT mode, press ENTER to select the channel you have pressed.

**Go Back.** To return to the previous menu.

**Exit.** To exit any menu to watch a program or to display program information while you are watching a program.

**Guide.** To display the Interactive Program Guide (IPG). Press it again to return to program viewing.

**Interests.** To exit any menu and display the Interests menu. Press it again to remove the Interests menu and return to watching a program.

**Options.** To exit any menu and display the Options menu.

**Info.** To display detailed information about the current program or a highlighted program in the Guide. Press it again to turn the information off.

**Browse.** To view program information for channels and times, other than the current channel and time, while continuing to view a program. Press GO BACK to return to watching a program. Press ENTER to go to the program located in the Browse banner.

**Future.** To display a program banner for information on future programs while you are currently watching a program.

**Vol.** To raise or lower the volume level.

**Mute.** To mute (silence) the TV sound.

**Last Ch.** To return to the last channel viewed.

**Chan.** To change the channel. If you are using a menu, press to change channels without removing the menu. If you are using the Guide, press to move one screen up or down.

**Number Keys.** These keys operate in different ways, depending upon which mode you are in:

- If you are using the menus, press these keys to select a numbered option.
- If you are watching a program, press these keys and ENTER to change channels. If the channel has three numbers, it will tune in immediately after you enter the third number. Generally speaking, analog channels are numbered 1-99, and digital channels are assigned numbers 100 and above.
- The numbered keys also function as letter keys for the first key press after you press the SAT key. This allows you to enter the letter portion of a satellite name, for example, the G in satellite G5. These keys return to functioning as number keys for the second key press to allow you to enter the number portion of a satellite name - the 5 in satellite G5.

**Help.** To display the help screens. Press it again to turn off the help screens and return to watching a program.

**Enter.** For convenience, there are two ENTER keys. If you are using a menu, press ENTER to select a highlighted option. In SAT mode, press ENTER to tune in the channel whose numbers you have selected.

**VCR Keys.** The remote control has separate keys to operate the VCR's record, stop, pause, fast-forward, rewind, and play functions.

## Programming the Remote Control



Follow these instructions to program the remote to control your TV or VCR components.




1. Turn on the connected component for programming.
2. Use the table that appears later in this section (page 28) to find the brand of TV, VCR or auxiliary component.
3. After the manufacturer's brand name is a three-digit code number (or several three-digit codes). Locate the page with your manufacturing code(s) and make note of your code(s).
4. Press and hold the TV or VCR key on the remote control for at least three seconds-until the light on your remote flashes.
5. When the light flashes, key in the first of the three-digit codes (listed in the table) for your component using the number keys on the remote control. Make sure to do this accurately and without a long delay.
6. If the remote control "accepts" the code, you will see several rapid flashes of the light. If it does not flash, repeat steps 4 and 5. After the remote control accepts the code, press the POWER key to make sure the remote control is able to turn your component off. This means it is functioning properly.
7. If your component does not respond to the remote control POWER key, even though it has "accepted" the manufacturer's code, repeat steps 4, 5, and 6 using the second three-digit code from the table. If this does not work, try the third code, etc., until the remote control accepts the code and your component responds to the remote control POWER key.

## If Your Remote Control Cannot Find a Working Three-Digit Code in the Tables (Scanning)

If you try to program your remote control using the three-digit codes, and the remote control does not work correctly, you may be able to find a code that works by using the "scanning" process.

1. Turn on the component (TV or the VCR), for which you plan to program the remote.
2. Press the TV key (or VCR key) for at least three seconds or until the LED blinks.
3. The following steps explain how to "scan" through the TV (or VCR) codes

stored in your remote control using the  keys. (The LED will not be lit while the  keys are depressed.)

- While pointing the remote control at your TV (or VCR), press the  key to scan upward to the next code. (Use the  key to return to the previous code.)
- If the transmitted code is correct, your TV (or VCR) will turn off, responding as if its POWER key were pressed.
- If your TV (or VCR) does not respond, press the  key to try the next code. When your TV (or VCR) turns on or off as a result of the transmitted code, you will know that you have found the correct code.
- When you have found the correct code (power to your TV or VCR is toggled on or off), press the ENTER key. This will store the manufacturer's code. The LED will then flash rapidly several times and turn off.

*NOTE: If your TV is not listed in the tables and/or the codes for your brand are not accepted by the remote, you will need to use the remote originally manufactured for your unit.*

## Programming the Master Power Feature

The Master Power feature allows you to control the power on/off function of your satellite receiver, VCR, TV, and all connected equipment with a single press of the POWER key on your remote control. You can enable the remote control's Master Power feature by following these steps:

- Press the SAT key on the remote control for at least three seconds or until the light on the key blinks.
- Press the POWER key on the remote. The light will remain steady. Press the power key a second time, and the light will blink on and off briefly, which indicates that the remote has accepted the Master Power command.

If you wish to cancel the Master Power feature, just repeat the steps outlined above.

## Verifying Your TV and VCR Mode Codes

You can verify the accepted programming codes for each mode by following these steps.

1. Press the TV or VCR key for at least three seconds or until the LED blinks.
2. Press the "INFO" key.
3. The LED will blink, indicating the code of your TV or VCR in the following sequence. For example, if your TV code is for a Tandy brand TV (code 105) the blink pattern will be:
  - Pause > long blink "1;"
  - Pause > short blink "0;"
  - Pause > long blink, long blink, long blink, long blink, long blink "5."

A zero in the code will always be represented by a short blink.

## Replacing the Remote Control Batteries

When the remote control batteries are worn out (discharged), the remote will stop working. Replace the batteries as soon as possible to retain your programmed codes. Once you remove the batteries from the compartment, you must replace them within two hours to retain your programmable features. The remote control for this unit is powered by two AA batteries. Use only high quality, non-corrosive batteries designed for use in electronic equipment. Remember to replace both batteries at the same time.

To replace the batteries:

- Remove the cover by pressing down the back panel indentation and remove the panel off of the remote control.
- Position each battery in the battery compartment so that the flat base (-) is against the spring and so that the raised contact (+) is against the terminal. Make sure the batteries are securely seated.
- Replace the cover.

## "Remote Energy Saver"

If you misplace your remote (i.e., it is stuck in your couch), and a key is inadvertently pressed, the remote will automatically turn itself off after three minutes.

## TV Codes

Admiral	018,090,125
A-Mark	120,224,225
Aiwa	090,251
Akai	000,032,070,149,172
Amstrad	033
Anam	005,009,021,041,120,121
Anam National	211
AOC	005,006,019,020,120,140,163,173
Archer	120
ASA	047
Audio Dynamics	234
Audiovox	120
Bell & Howell	018
Broksonic	005,144,172,173,174,219,226
Candle	006,022,023,025,163,213
Capehar	1019
Centurion	192,194
Citizen	006,016, 018,022,023,024,025,026,144, 163,202,213,224
Concerto	005,023,213
Contec	041,091,185,227
Coronado	224,225
Craig	021,041
Crown	026
Curtis Mathes	006,016,018,026,059,125,163,172,192,194,202,224,231
CXC	041
Daewoo	005,024,026,029, 030,031,032,130,172,214,215,224,233,252
Daytron	026,192,194,224
DBX	234
Dimensia	125
Dumont	047
Electrohome	026,149,224
Emerson	017,023,026,028,033,034,035,037,038,039,041,122,141,143, 144,172,176,187,203,204,205, 219,222,223,224,225,226,227,251,253
Envision	163
Fisher	042,090,099,216,217
Fujitsu	034,187
Funai	034,041,187,251
Futuretech	041
GE	003,008,009,023,043,044,125,130, 134,147,172,195,206,207,211,228,231
Goldstar	005,023,026,045,046,088,172,173,194, 213,223,224,225,230,234,254
Grundig	047
Hallmark	023
Harmon Kardon	234
Hinari	034,187
Hitachi	018,023,026,048,049,050,051,052,053 054,055,116,126,142,172,185,213,224,225,231,251
Infinity	010,066,151
JBL	010,066,151
JCPenny	003,005,006,014,016,026,043,044,096 125,134,163,172,194,206,207,223,224,231,232,234
Jensen	056
JVC	057,058,059,060,186,234
Kawasho	061
Kenwood	006,251
Kloss	022,110
KMC	224,225
KTV	026,039,041,172,224,225
Lloytron	224



Lodgenet	018
Logik	018
Luxman	023,213
LXI	003,010,066,090,117,125,129,131,134,172,173,194,223,251,254
Magnavox	000,006,008,010,017,020,025,027,028,066,067,068,110,144,151 154,163,164,167,172,173,175,192,194,218,224,225,231,251
Majestic	018
Marantz	006,010,066,068,088,149,163,172,234
Marta	223
Matsui	032,109
Memorex	018,032,090,223,232,251
MGA	004,005,006,023,034,071,072,149,163,172,187,192,194
Mitsubishi	004,005,023,034,070,071,072,122,123,149,172,173,187,192,194
MTC	005,006,016,023,031,163,202,213
NAD	002,117
NEC	005,006,007,023,028,090,144,163,172,173,191,192,194,213
National	011,151,190,195,196,211
Nikkai	113,118
Onwa	041
Optimus	232
Optonica	129
Orion	219,226
Osume	091
Panasonic	008,009,010,011,012,066,151,195,196,211,231,232
Philco	005,006,025,067,068,110,151,163,172,218,224,225,251
Philips	005,010,025,027,066,068,088,146,151 163,164,218,220,223,225,251
Pioneer	002,008,048,051,076
Portland	005,026,172,224,225
Proscan	125,147,172
Proton	006,013,019,023,026,172,224
Pulsar	001
Quasar	008,009,195,211,231,232
Radio Shack	026,041,112,141,173,194,224,229,230,232
RCA	003,005,008,014,048,078,079,080,082,084,085 086,087,125,130,134,147,172,210,231,251
Realistic	035,041,090,141,194,222,223,224,229,251
SAA	145
Saba	051,116,142
Saisho	032,033,109
Sampo	006,019,163,192,194
Samsung	005,006,016,023,026,032,088,112,163,172 173,192,194,202,213,221,224,225,229,233
Sansui	219
Sanyo	042,089,090,091,092,109,194,216,217
Scott	026,034,037,041,093,173,187,192,194,224,233
Sears	003,023,034,042,090,096,098,099,101,102,104,117 125,131,134,151,187,194,202,216,217,223,224,225
Sharp	026,091,129,141,200,224,225
Signature	018,251
Sony	000,109,119,122
Soundesign	023,025,041,172,251
Spectricon	120
SSS	005,041
Supra	022,023
Sylvania	006,010,025,066,068,110,112,151,163,172 173,192,194,229,251
Symphonic	132,179,251
Tandy	112,113,129,251
Tatung	009,211

Teac .....	251
Technics .....	008,032
Techwood .....	023,213
Teknika .....	004,005,016,018,022,023,024,025,026,034
.....	041,072,114,149,151,187,202,213,223,224,225,251
Telerent .....	018,224
Teletex .....	032
Thomson .....	051,116,142
TMK .....	023,172,213
Toshiba .....	016,017,047,090,096,117,118,131,180
.....	201,202,216,233
Totevision .....	026,223,224
Universal .....	043,044,206,207
Vector Research .....	006,234
Victor .....	057
Video Concepts .....	070,234,251
Vidtech .....	005,023,172,173
Viking .....	022
Wards .....	005,006,018,023,034,043,044,067,068
.....	119,125,141,151,163,172,173,187,192,194,206,207,224,251
Westinghouse .....	090
Yamaha .....	005,006,234,251
Yorx .....	192,194
Zenith .....	001,018,178,219,223,251
Zonda .....	120

## DVD Codes (To program, press VCR mode key)

Denon .....	222,223,224,239
Fisher .....	236
Funai .....	225
General Electric .....	249,250
Goldstar .....	221
Hitachi .....	226
Kenwood .....	227,253

## VCR Codes

Aiwa	088,202
Akai	008,013,,014,015,016,018,019,020,145,157,198,210
Alba	046
Amstrad	088,214
ASA	065
Audio Dynamics	030,093,210
Broksonic	008,059,148
Bush	089
Cannon	054
Canon	022,042,056,080,092,093
Capehart	043,046
Citizen	056,091,092,093
Craig	044,082,091
Curtis Mathes	054,092,105,184
Daewoo	034,046,093,150,204,206
Daytron	046,206
DBX	030,093,210
Dimensia	105
Dual	210
Dumont	049
Dynatch	088,214
Electrohome	109
Emerson	005, 006, 008, 009,010,011,012,059,068,088, 090,109 132,190,192,193,198,204,211,212,213,214
Ferguson	210
Finlandia	049
Finlux	049,065,088,214
Fisher	048,049,081,082,084
Funai	088,214
General Electric	025,050,051,052,053,054,091,105,133,184
Go Video	057,058,164,186
Goldstar	030,033,056,092,102
Goodmans	085,089
Graetz	210
Granada	049,081
Grundig	065
Harman/Kardon	030,069
Hinari	089
Hitachi	036,037,038,040,041,088,094,095,121,210,214
ITT	018,210
Instant Replay	184
JC Penney	030,052,054,080,081,091,093,094,184
JCL	184
Jensen	060,210
JVC	061,062,063,064,081,092,093,122,123,210
Kenwood	062,081,092,093,210
Lloyd	088,214
Logik	089
Luxor	018
Magnavox	027,034,054,065,088,111,130,134,136 137,138,139,141,142,143,158,159,184
Marantz	030,054,065,081,085,092,093,102,184
MEI	054,184
Memorex	033,049,054,066,081,082,085,088,184,214
MGA	067,068,109,183,211
Minolta	094
Mitsubishi	062,067,068,069,070,071,109,124 125,140,183,211

MTC	080,088,214
Multitech	088,089,091,214
NAD	073,153
National	184
NEC	030,031,032,062,081,092,093,100,102,127,128,160,210
Nordmende	210
Optonica	072,085
Orion	006
Panasonic	021,022,023,024,026,054,098,114,129,184
Pentax	037,092,094
Philco	054,111,184
Philips	054,065,085,154,155,184
Pioneer	062,073,074,075,076,093
Portland	046,093,206
Proscan	105
Pulsar	033
Quartz	081
Quasar	054,078,184
Radio Shack	081,082,084,085,109,184,188,214
RCA	025,026,027,028,037,091,105,146,147,162
Realistic	049,054,080,081,082,084,085,088,184,188,214
Saba	210
Saisho	006,212
Salora	067,081,183
Samsung	015,034,079,080,091,186,204
Sansui	032,062,093,210
Sanyo	044,049,081,082,083
SBR	065
Schaub Lorenz	210
Schneider	089
Scott	008,034,059,090,183,204,212,213
Sears	048,049,081,082,084,094
Sentra	046
Sharp	085,109,130,188
Sony	000,001,002,003
Sylvania	054,067,088,111,183,184
Symphonic	214
Tandy	081,082,084,085,088,109
Tashiko	088
Tatung	086,210
Teac	088,210,214
Teknika	054,087,088,184,214
Telefunken	210
Thomson	210
Thorn	210
TMK	006
Toshiba	034,035,067,084,090,183,204,210
Totevision	080,091
Unitech	080
Vector Research	030,092,093,183
Video Concepts	068,092,093
Videosonic	091
Wards	027,054,080,082,085,088,089,090,09, 109,156,161,184,188,214
Yamaha	030,081,092,093,210
Zenith	033,062