

## Installing and Configuring Your DSR905




Prior to installing your 4DTV Digital Sidecar it is important that you ensure that your C-Band system is operating properly. The Digital Sidecar will *only* display DigiCipher II programming. During the installation process you will be asked to make selections using your analog receiver. You should not see any “sparkles” on these analog broadcasts. If your system cannot consistently tune these analog transponders, see your local authorized dealer for assistance in peaking the performance of your C-Band TV satellite reception system.

Prior to disconnecting any wires from your existing receiver, move the dish to 123 degrees west (satellite G10R). This satellite is identified as G0 on existing 4DTV systems and may be identified differently on older analog receivers. It is the satellite immediately to the east of G5. Please refer to a current printed satellite guide for more detail.

### How to Select Menu Options

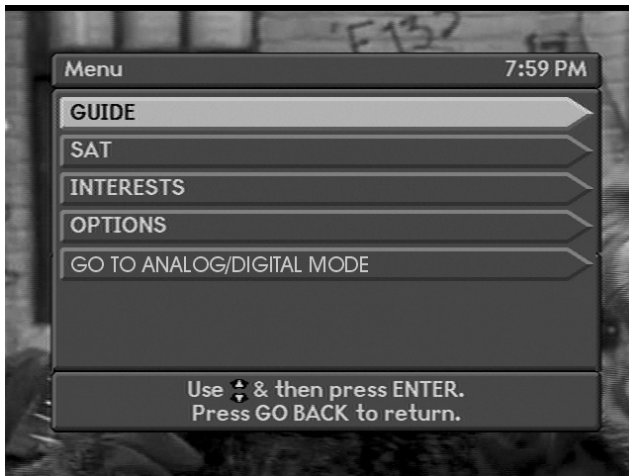
As you use the many features and follow directions throughout this User Guide, you will display menus and be instructed to select various options. When you see the word select, it is important that you understand what to do—whether you use the remote control or whether you use the keys on the front panel of the receiver.

If you use the remote control, there are two ways to select a menu option:

- Press the  keys or the   keys to highlight an option. Then press the ENTER key to select it.
- If the options are numbered, simply press the number key for an option. You do not need to press the ENTER key.

If you use the front panel of the receiver, there is only one way to select a menu option. Press the **◆** keys or the **◀ ▶** keys to first highlight an option. Then press the ENTER key to select the highlighted option.

**If you Misplace the Remote Control.** If you ever misplace the remote control and need to use the various system menus, just press the MENU key on the front panel, and a special Menu screen will appear. From this screen, you will have access to the other onscreen menus.



Only option 5, "Go to Analog Mode" is unique to the front panel controls. All other screens are identical to the screens accessible via the remote control. Option 5 allows you to view the output of your analog receiver without changing the current settings of the Digital Sidecar. To revert to the digital picture mode from the front panel while in the analog mode, press the Menu key.

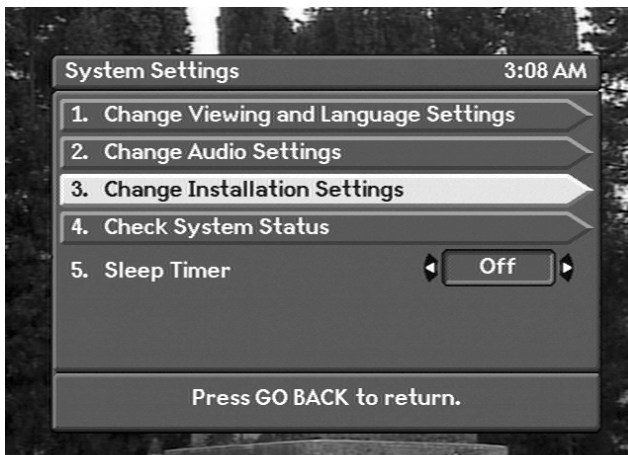
## Configure the DSR905 Sidecar Digital Receiver with

## Onscreen Menus - Initial Installation

Press **OPTIONS** to select option 6 (Change System Settings).



Press option 3 (Change Installation Settings) to get to the Change Installation Settings screen.



Select option 2 (LNB Type).



- Press the ◀ ▶ keys to highlight the correct LNB type for your system.
- The LNB type displayed in the window will be the setting that takes effect when you leave this menu.

There are two ways that the polarity is changed on residential TVRO systems: by using a servo-motor driven probe, and by electronically switching between two fixed probes. Your system uses a servo-motor if there are three leads coming in and connected to the terminals on your receiver labeled SKEW, +5V and GND. Your system uses an LNB (or dual LNBs) if these terminals are left blank and your system switches polarities by high/low voltage in the coaxial cable leading to the LNB.

You must select an LNB type for your system to operate correctly. The default settings are for C-Band and Ku-Band LNB's. There are seven possible configurations available from this screen. Consult the table below for the configuration which best matches your system.

LNB Type	Reason	Indicator
C-Band LNB	C-Band Horz & Vert	The LNB is used for both H & V transponders on a C-Band only system.
Ku-Band LNB	Ku-Band Horz & Vert	The same LNB is used for both H&V transponders on a Ku-Band only system.
C-Band & Ku-Band LNBs	C-Band Horz & Vert or Ku-band Horz & Vert	Two LNBs: One for C-Band and one for Ku-Band transponders.

LNB Type	Reason	Indicator
C-Band LNB	C-Band Horz & Vert	One LNB controlling both H&V transponders. Polarity is changed via high/low voltage on a single coaxial cable – no polarizer motor used.
Ku-Band LNB	Ku-Band Horz & Vert	One LNB controlling both H&V transponders. Polarity is changed via high/low voltage on a single coaxial cable – no polarizer motor used.
C-Band and Ku-Band LNBs	C-Band Horz & Vert or Ku-Band Horz & Vert	Two LNBs: One for C-Band and one for Ku-Band transponders. Polarity is changed via high/low voltage on a single coaxial cable – no polarizer motor used.
Dual C-Band LNBs (no polarizer)	C-Band Horz or C-Band Vert	Two LNBs: One for each polarity
Dual Ku-Band LNBs	Ku-Band Horz or Ku-Band Vert	Two LNBs: One for each polarity




Select the correct LNB type for your system by using the ◀ ▶ keys. Press the GO BACK key to save the settings.

**Feedhorn Polarization.** If your system uses an LNB and it was installed 90° out of phase at the dish (affecting the normal/reverse polarity settings and scrambling the picture), select option 3 (Feedhorn Polarization) to electronically compensate.

When you select a satellite, the Digital Sidecar receiver will automatically select the settings for the band (C or Ku) and polarity (standard or rotated 90°). When you select an LNB type, the unit will automatically limit the satellite selection screen to formats compatible with your selection.


### ***A word about digital channels...***

Digital channels on the Digital Sidecar receiver are actually virtual channels that reside on digital root transponders. In other words, channels 100 to 110 on a particular satellite, for instance, are actually small portions of a single analog transponder – transponder 9 for example. If you tune to transponder 11 on your analog receiver you will not see a picture, but the special circuitry in your Digital Sidecar will be able to decode this hidden signal and provide you with a high quality picture. For the system to operate properly the receiver must be able to change the polarity to the correct root transponder, being fed from the feedhorn on your satellite dish.

Press 4 (Memorize Useable Satellites) to display the Memorize Satellites screen. Use the  keys or the   keys to highlight the G0 tile. Next press ENTER to place a check mark on the G0 tile.



Press EXIT. Select 9 on your remote control. Press ENTER; this selects G0-9. This will change your receiver to the channel 9 to receive digital information. Check to see if the satellite icon on the front panel is green. If not, you may need to adjust your position or skew settings on your satellite dish.

If your satellite icon on the front panel stays red or changes from green to amber, you may need to adjust the skew. To adjust the skew, press exit, then press  keys to bring up the Adjust Picture screen immediately upon channel change.

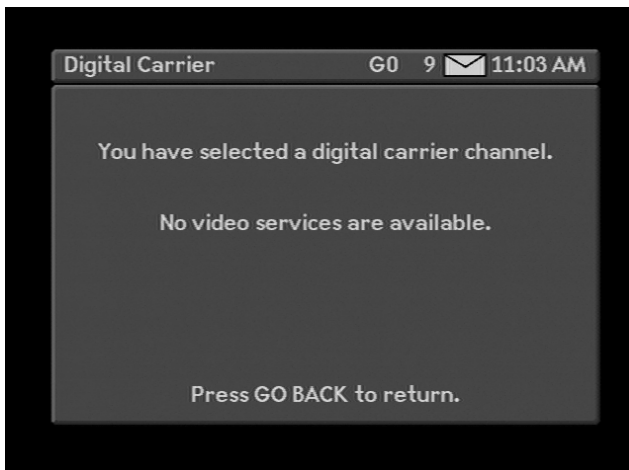


Adjust the SKEW to peak the Signal and Quality levels. You may also need to “bump” the dish east or west using your analog receiver to maximize the signal. If you are unable to receive an acceptable signal level and quality using an LNBF, you may need to switch the feedhorn setting to a rotation of 90°. See **page 54** for more information about this feature.

## Signal Strength and Quality

It is necessary for the Quality reading to be greater than 20. With a Quality reading of 12 to 20, digital reception will be unreliable and you may experience “macroblocking” or other reception anomalies. Above a Quality reading of 20, your digital picture reception will become stable. It is possible to have a system that can capture a marginal signal useable for an analog transmission, but not a digital transmission. Under these circumstances it is necessary to service your satellite reception system and/or peak your satellite dish to attain a maximum signal quality reading on the digital transponders you wish to receive.

If the satellite icon is solid green and the quality is of an acceptable number, leave the receiver on this transponder for a minimum of 10 minutes to retrieve all satellite updates. You will see the following display on G0-9.



## Authorizing your DSR905 Digital Sidecar

For proper operation, the Digital Sidecar receiver must be authorized for reception. When you authorize your programming, your provider will automatically set the clock on your receiver and enable reception of any “Free Preview” channels currently offered. In addition, your programming provider will

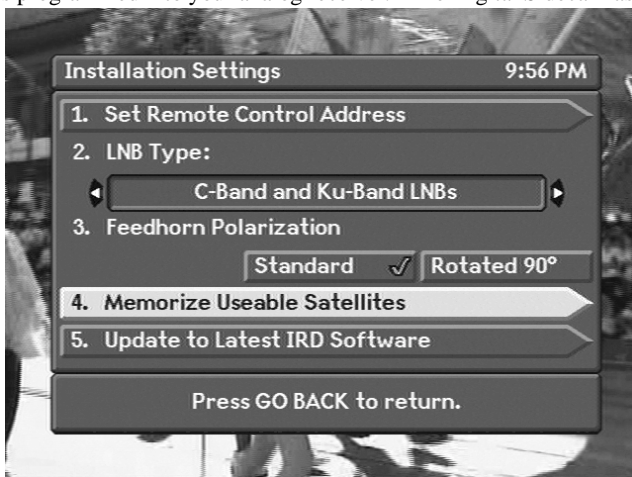
authorize your receiver to display any premium digital programming you have purchased or that is associated with the purchase of your analog channel selection.

You will need to obtain the unit ID# that is located on the back of your DSR905 receiver. The label is located near the power cord attachment. The unit ID# will appear as a 10-digit number that contains letters and numbers. It may take several minutes for the unit to completely download the channel maps. Do not move the dish or change other settings while the Digital Sidecar is performing this function.

*NOTE: Write down the numbers and letters found on back of the Digital Sidecar on the label near the power cord. Your program provider will need this digital Unit ID number in order to authorize the IPG. The clock will be set based on your zip code. Please call your program provider now to authorize your programming selections. You can watch your program authorization by noting the increase on the Trip Counter. You may need to call more than one program provider if you purchase programming from multiple providers.*

## Programming the Remaining Satellites

After authorizing your Digital Sidecar, and allowing a minimum of 10 minutes to retrieve all satellite updates, you are now ready to resume programming satellites by pressing OPTIONS. Select option 6 (Change System Settings), option 3 (Change Installation Settings), and option 4 (Memorize Useable Satellites). Using the ◀ ▶ and the ⬥ keys, highlight the next satellite your analog system can receive. Press ENTER to place a check mark on that satellite icon. Repeat this procedure until you have placed check marks on all the icons that correspond to satellites programmed into your analog receiver. The Digital Sidecar has the



ability to receive the signals from a wide range of satellites, all of which may not






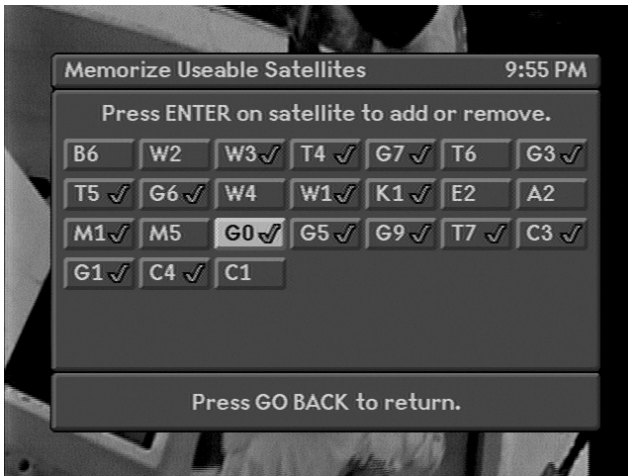
be applicable to your particular installation. Because your analog receiver will retain control over dish movement, your receiver's satellite selection will be limited to those that your analog IRD can tune. By memorizing only the useable satellites for your system from this screen, you will eliminate IPG listings and other references to signals that cannot be received.

The satellite name icons are grouped on the screen in order from east to west (top to bottom). Programming satellites east of B6 or west of C5 may require special equipment. Contact a qualified dealer for assistance in programming satellites I1 through P5.

When you have input all the satellites your system can receive, press EXIT. You have now completed the programming of your Digital Sidecar receiver and are ready to begin viewing.

### How to Remove a Satellite from the Satellite Select Screen

To remove a satellite from the Satellite Select menu, then press the OPTIONS key, then press 6, 3, and 4 to go to the "Memorize Useable Satellites" screen. Use the  keys or the   keys to highlight the satellite you wish to remove.



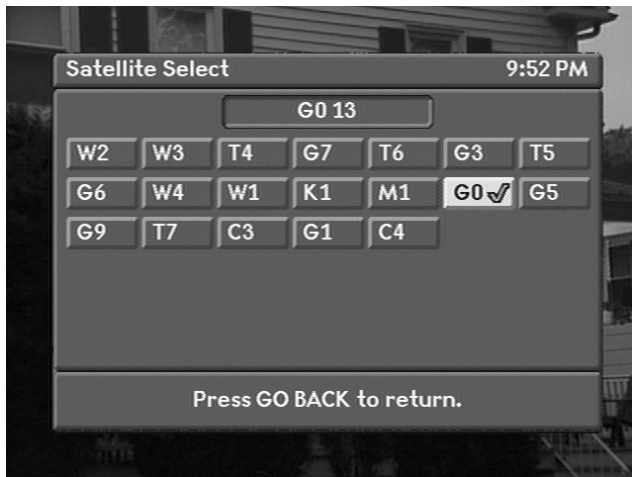
Press ENTER; the check mark will be removed from the removed satellite.

*Note: You cannot remove a satellite's settings from the Satellite Select menu if you are viewing that satellite.*

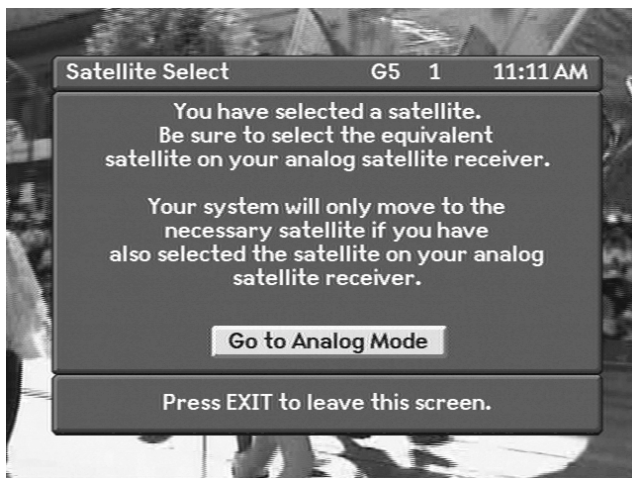
### How to Change Satellites

To change to a different satellite when you are watching a program, press the SAT key. This will bring up the satellite selection screen, where the current channel

name, satellite name, and channel number will be displayed near the top of the screen. The current satellite will be highlighted and have a check mark in the list of satellites in the middle of the screen. The satellite selection matrix will only display those satellites which were programmed into the memory during the installation process. Use the ◀ ▶ keys to highlight the satellite to which you wish to tune. Press the ENTER key and the Digital Sidecar will change its satellite selection matrix to reflect the channel line-up of the target satellite.



After satellite selection, the following screen will appear:



If you press ENTER your Digital Sidecar will select analog mode and enable viewing of your analog receiver video output. You will need to utilize the analog receiver remote control to select the equivalent satellite to move your satellite dish to the proper location. After the satellite dish has moved, utilize the blue A/D key on the Digital Sidecar remote control to resume digital program viewing.

