UNIDEN SQ SERIES

SQ530

Integrated Receiver/Descrambler

uniden

Owner’s Guide
Front Panel Controls

FP-1. POWER — Press once to turn receiver on. Press again to turn receiver off. When the receiver is turned off, power will still be supplied to the microprocessor, the VideoCipher RS descrambler, and components mounted on the antenna. It is normal for the top of the receiver to be slightly warm while the power is off.

FP-2. CHANNEL ▲ and ▼ — Press once to move up or down a single channel. Press and hold for more than a half second to change channels rapidly. These buttons are also used for menu item selections and/or changes when using the built-in menu system. (See "Normal Operation" and "Using the Main Menu" in this Guide.)

FP-3. SATELLITE ◀ and ▶ — Press to manually move the satellite dish East or West. While the dish is moving, the Manual Dish Movement Screen is displayed on your TV. These buttons are also used for menu item selection and/or change when using the built-in menu system. (See "Normal Operation" and "Using the Main Menu" in this Guide.)

FP-4. FAVORITE — Press to display the FAVORITES Menu. Press and hold this key for at least 4 seconds to display the STORE FAVORITES menu. (See "Normal Operation" and "Using the Main Menu" in this Guide.)

FP-5. CALL — Press to display the SATELLITE CALL Menu. When in the SATELLITE CALL Menu or the FAVORITES Menu, press this button to move to the selected satellite. (See "Normal Operation" and "Using the Main Menu" in this Guide.)

Front Panel Indicators

These indicators will light only while the unit is turned on, and in the corresponding mode.

DIS-1. Channel Number — Displays the current channel number.
DIS-2. VCRS — Indicates reception of a VideoCipher encrypted channel.
DIS-3. C — Indicates that a C-Band satellite is being received.
DIS-4. KU — Indicates that a Ku satellite is being received.
DIS-5. VER — Indicates that the polarity of the selected satellite is vertical.
DIS-6. HOR — Indicates that the polarity of the selected satellite is horizontal.
WARNING: Do not use metallic objects to move the switches on the rear panel of the unit.

WARNING: Failure to observe proper polarity of connections may damage actuator and/or controller and void warranty.

BP-1. AC Power Cord — Connect to any 120V AC household outlet. Do not connect to an outlet controlled by a wall switch.

BP-2. AC Outlet — A non-switched, 120V AC, 200 watt outlet is provided for connecting additional accessories.

BP-3. Actuator Motor and Sensor Terminals — Connect the motor and sensor wires from your actuator to these connectors. The connections are:
- M1 Motor Power (2.50A max.)
- M2 Motor Power (2.50A max.)
- E
- SEN Sensor Return
- GND Ground

BP-4. GND, PULSE, DC6V, and V/H-C/Ku Terminals — The GND, PULSE, and DC6V terminals provide power and control signals for a servo type polarization device. Power to the polarizer (+6V) is automatically disconnected after a polarity change. The V/H-C/Ku terminal is for use with non-Uniden V/H Switches. Control signal provided is 0 VDC for vertical polarity and +12 VDC for horizontal polarity at 100 mA maximum current.

BP-5. RF INPUT — This input accepts the 950-1450 MHz input from the C-Band or Ku-Band LNB. Power for the LNB is supplied through this connector.

BP-6. TVPass Card Slot — Exists only if the descrambler (such as VCRS) requires additional security ID. This slot may not be present with other descrambler modules.

BP-7. COMP OUT — Composite video output used with external descrambling devices or processors like Scientific Atlanta, B-Mac, and others.

BP-8. Data — For connection with special external data equipment. (See your Uniden SQ Dealer for more information.)

BP-9. IPPV — For connection to an external VIDEOpal Recorder. (See your Uniden SQ Dealer for more information about VIDEOpal Recorders.)

BP-10. AUDIO OUT — These phono jacks are provided for connection to your stereo or stereo monitor. The R and L AUDIO OUT jacks provide stereo audio on most VideoCipher RS scrambled channels. Mono audio from a subcarrier is provided to these outputs when audio subcarriers are received. These audio levels can be controlled by the volume control on the SQ530 remote.

BP-11. VIDEO OUT — This jack is for video output.

BP-12. TV OUT — Connect this modulated RF output to the VHF input on your television set if you use the TV RF output connection to your television set.

BP-13. CH 3/CH 4 Switch — The receiver is shipped with this switch set to operate on TV channel 3. Set this switch to 4 if there is a strong local TV transmitter on channel 3. Your TV set should match the setting of this switch to view satellite programming. Note: This switch setting is important only if you are using the TV OUT modulated RF output for connection to your TV set.

BP-14. ANT IN — Connect this input to your external VHF antenna. When the receiver is turned off, the antenna will be connected to your TV set if you use the TV OUT connection to your TV set.

BP-15. RJ-11 Jack — Connect the telephone line here if you have a VCRS Modem-On-Module with built-in VIDEOpal. (See your Uniden SQ Dealer for more information about the VCRS and VIDEOpal.)
The Remote Control is powered by 2 AAA batteries. Computers, microwave ovens, and other electrical devices can cause interference with operation of the remote control.

**Note:** Pressing (VIEW) while in most menus will return to normal video.

**R-1.** POWER — Turns the satellite receiver On or Off.

**R-2.** VideoCipher Keys — These keys are used only while the VCRS front panel indicator is lit. (See the section on VCRS Module Operating Instructions for more details.)

**R-3.** SETUP — This key is used in some receiver menus to set up satellite information or favorite names. This key is also used for VideoCipher operation when the VCRS indicator is on. (See the section on VCRS Module Operating instructions for more details.)

**R-4.** (TUNE) — This key is used to display the receiver tuning options. The options included in this menu are Video Tune, Polarity, Skew, and Audio Information. (See the Tuning Section for more details.)

**R-5.** (CH±) — Press this key to switch between C-Band and Ku-Band reception.

**R-6.** (CH↑) and (CH↓) — Press once to move up or down a single channel. Press and hold for more than a half-second to change the channel rapidly. These buttons are also used for menu item selections and/or changes when using the built-in menu system. (See "Using the Main Menu" in this Guide.)

**R-7.** Numeric Keys (1 to 9, 0) — Use these numeric keys for channel selection and menu selection.

**Letter Keys (G,T,F,E,M,C,S,R,K,B) — Use these keys for direct satellite access.**

**R-8.** (CALL) — Press to display the SATELLITE CALL menu. When in the SATELLITE CALL menu or the FAVORITE CALL menu, press this button to move to the selected satellite and/or channel. It is also used for direct satellite access. (See "Using the Main Menu" in this Guide.)

**R-9.** (MENU) — Press this key to display the MAIN MENU. Press and hold this key for at least 4 seconds to display the INSTALLATION MENU.
R-10. **CNCL** — This key is used in some receiver menus to cancel changes. This key is also for VideoCipher operation while the VCRS indicator is on. (See the section on VideoCipher Module operating instructions for more details.)

R-11. **(E) and (W)** — Press to manually move the satellite dish East or West. While the dish is moving, the DISH LOCATION screen is displayed on your TV. These buttons are also used for menu item selection and/or change when using the built-in menu system. (See "Using the Main Menu" in this Guide.)

R-12. **VOL+ and VOL-** — Use these keys to adjust the volume. When either key is pressed, VOLUME appears on your screen with an indicator bar.

R-13. **MUTE** — Press this key to mute the audio. Press the key again to restore the audio. When **MUTE** is pressed, "MUTE" appears on the bottom of your screen. When the key is pressed again, the VOLUME screen appears.

R-14. **ENTER** — This key is used in some receiver menus to store changes. This key is also for VideoCipher operation while the VCRS indicator is on. (See the section on VideoCipher RS descrambler operation for more details.)

R-15. **VIEW** — This key is used to return to video at any time. While viewing video, this key can be used to display the current satellite and channel. This key is also used for VideoCipher operation when the VCRS indicator is on. (See the section on VideoCipher Module Operating Instructions for more details.)

R-16. **FAV** — Press this key to display the FAVORITE CALL menu. Press and hold this key for at least 4 seconds to display the FAVORITE STORE menu.
Normal Operation

This section of the Operating Guide takes you step-by-step through the most common procedures you need to perform after your SQ530 has been properly installed by a Uniden Dealer. For typical operation, perform the procedures in order.

Power On

Turn the power on the SQ530 with the remote control or the front panel button. When powered on, the current channel appears.

Next, turn on your television set and set it for either channel 3 or 4, depending on the switch setting on the back of your SQ530. If your system is connected through the Video Output, then set your television for the proper video source.

Note: While in the receiver menus, you can press [VIEW] at any time to cancel a selection and return to the program you were viewing or listening to.

Channel Identification

You can tell what channel you’re on by looking at the Front Panel Display.

— OR —

Press [VIEW] to see the satellite-channel information displayed on your screen.

Select a Satellite

1. Press [CALL] on the remote control. The SATELLITE CALL menu will be displayed, with the current satellite identified by the cursor.

Note: If your system is configured and programmed with Ku-band satellites, you can press [CH1] to switch between the C-Band satellite list and the Ku-Band satellite list.

2. Press [CH1] or [CH2] to move the pointer to another available satellite. If the satellite you want is not displayed on the screen, use [W] to move to the next page, or [E] to move to the previous page.
3. Press [CALL] when the arrow is pointing to the desired satellite. The SQ530 will automatically position the dish antenna and tune to the selected satellite.

You can also select a satellite directly with the "Direct Satellite Access" keys, which are single remote keys programmed specifically to tune to the selected satellite.

1. Press [CALL] to display the SATELLITE CALL menu.

2. Press the two designated remote keys, such as (CH x 1), to select Galaxy 1. (See the Appendix for a list of Direct Satellite Access keys.)

Selecting Channels

Channels may be selected by using [CH ▲] or [CH ▼] on the front panel or on the remote. Simply press the appropriate key until the desired channel is reached.

The SQ530 provides several methods for changing channels.

Press the [CH ▲] or [CH ▼] keys on your remote to move the channel numbers up or down sequentially (1-2-3-4 ...) or skip in increments of two (2-4-6... 22-24).

--- OR ---

Use the Seek feature to scan the channels until an active channel is found. How to program your remote keys for these various methods is described later in "Using the Main Menu."

--- OR ---

Enter the channel number directly on your remote with the numeric keys.

Note: For channels with a single number (1-9), press zero (0) before the channel number to switch to that channel immediately. If you press only the single digit, it will take about 4 seconds to switch to the desired channel.

Last Channel Recall

Press [0] or [6] (6) to recall the last satellite and channel you viewed.
Selecting Favorite Channels

Up to 40 favorite stations can be programmed into memory for instant recall.

1. Press (FAV) to display the FAVORITE list.

If the channel you want is not on the list, use (4 E) or (W↑) to see another list.

2. When the correct channel list is displayed, use (CH▲) or (CH▼) to move the arrow to the desired channel.

You can also use the remote control numeric keys to enter the number of the favorite channel entry to move directly to this screen. Be sure to use two digits when entering the item number (e.g., 03 for entry 3, or 21 for entry 21, etc.)

3. Press (CALL) to select the channel, and the SQ530 will automatically position the dish to the correct satellite and select the channel for you.
Tuning the SQ530

There may be times when you'll need to adjust the tuning of your SQ530 because of changes in the satellite signal. You can fine tune the video and audio, and adjust the skew and polarity by using the appropriate keys on the remote control. Before using any of the following remote keys, select the satellite and channel you want to adjust.

Note: Careful adherence to these instructions can help avoid problems with the operation of your SQ530.

The TUNE Options

The following options can be tuned using the (TUNE) key: Video Fine Tune, Polarity, Skew, Audio Format, and Audio Frequency.

1. VIDEO TUNING

1. Press (TUNE) to display the Tuning Options. A blinking cursor appears next to the FINE TUNE option.

2. Use the (CH ▲) and (CH ▼) keys to change the frequency in 0.25 MHz steps. (The maximum range is ±15 MHz.)

2. POLARITY

The Polarity of a satellite channel (either horizontal or vertical) is established by the orientation of the satellite. Once your SQ530 is installed, you should not need to adjust this setting. (Changing the Polarity may cause loss of signal.)

To change the polarity setting:

1. Press (2) while in the Tuning menu.

2. Press (VIEW) to exit this screen.

POLARITY changes are not stored. If you do not press any key for 25 seconds, the screen disappears.

Note: If you change the polarity and cannot get picture or sound, change it back by pressing (2) while in Tuning Options. If the Polarity needs to be stored for that satellite, change the Polarity so a picture can be seen. Then reprogram that satellite (See "REPROGRAM SATELLITE" in "Using the Main Menu").
3. SKEW

If there is rotation in the position of a satellite, you may need to make small adjustments to the skew.

1. Press (3) while in the Tuning Options menu to select SKEW. You will see the present SKEW displayed.

2. Use the (CH▲) or (CH▼) key to adjust the Skew in 1.5 degree increments, through a range of -90 degrees to +90 degrees.

3. Press (VIEW) to exit this screen. If you do not press any key for 25 seconds, the screen disappears.

   **Note:** SKEW changes in this menu are not stored. To permanently store SKEW changes, see REPROGRAM SATELLITE in "Using the Main Menu."

4. FORMAT

While tuned to a VCRS channel, press (4) to switch between VCRS or MONO audio formats.

   **Note:** This option works only while tuned to a VCRS channel.

5. FREQUENCY

Press (5) to select the FREQUENCY option. Press (CH▲) or (CH▼) to adjust the frequency in 0.01 MHz steps.

   **Note:** This option only appears when the format is set to MONO.
Dish Antenna Tuning

Once your **SQ530** is installed, you should not need to adjust the dish antenna for a particular satellite and channel. If you do need to make a small change in the dish antenna position for better picture clarity, you should do so for the clearest possible picture before using the video or audio fine tuning.

1. Press (.Down) or (.Up) to adjust the dish position. The **DISH LOCATION** screen will appear, showing the current dish position.

2. Press either (.Down) or (.Up) to move the dish one count at a time. You can also hold the key down to move the dish more rapidly.

   **Note:** Once you have moved the dish, (ON) will not cancel the move. You must move the dish back to the original position using (Down) or (Up), or by calling the original position.

   **Note:** If you want to store any of the above Dish Tuning adjustments, reprogram the satellite (see "REPROGRAM SATELLITE" in "Using the Main Menu").
Using the Main Menu

Note: The illustrations in this Chapter are representative of typical satellite screens seen on this receiver, and are shown for information only. The actual screens may vary from those shown here, depending upon how your SQ530 was installed and configured.

Operating the SQ530 is easy with the built-in menu system. You use the MAIN MENU to:

1. Reprogram a Satellite.
2. Turn Channel Lock On or Off.
3. Change the Password.
4. Set the Scan type.
5. Reset a Ku-Band Satellite Channel number.

Press [MENU] to display the MAIN MENU.

Once in the MAIN MENU, press the appropriate numeric key to select the corresponding function.

1. REPROGRAM SATELLITE

This function is used to store any adjustments (Polarity or Dish Position) you may have made to the programmed satellite. Press [1] at the MAIN MENU to display the REPROGRAM A SINGLE SATELLITE screen:

If the satellite displayed on this screen is not the one you are reprogramming, use [CH↑] or [CH↓] to change to the desired satellite. Then press [ENTER] to store the changes, or [CNCL] to exit this screen without saving the changes.

Note: If no key is pressed for 25 seconds, the screen disappears and you return to normal view.
2. LOCK/UNLOCK CHANNEL

The SQ530 has a special feature which allows selected channels to be locked out or blocked from viewing. If you feel that a certain program is not suitable for viewing you can lock out that channel so that it cannot be seen.

Note: If you forget your password, contact your Uniden Dealer for assistance.

To lock out any channel:

1. Tune to the channel using any of the standard methods.

2. Press [MENU] to display the MAIN MENU.


4. Enter a four-digit password using the remote control numeric keys. (The numbers will not appear on the screen.) The factory preset code is "0000."

Note: When a channel has been locked out, it will not be possible to switch to the channel using [CH-] or [CH+] or [FAV]. You will need to use the remote control numeric keys to directly call the channel.
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To unlock the channel for viewing:

1. Tune to the locked channel.

2. Press [MENU] to display the MAIN MENU.


4. Enter the four-digit password using the remote control numeric keys. The factory preset code is "0000" (The numbers will not appear on the screen).

If you enter the wrong password, the words "WRONG PASSWORD" will flash under the password, and you'll return to normal video.

The correct password unlocks the channel. You can then view the program normally. When you have finished watching the program you can re-lock the channel.
To re-lock the channel:

1. From the **MAIN MENU** screen, press (2) to display the **LOCK/UNLOCK CHANNEL** screen.

2. Lock the channel by entering the four-digit password with the remote control numeric keys.

3. **CHANGE PASSWORD**

   To change the password used only for Channel Lock:

   1. Press (3) at the **MAIN MENU**.

   You will be asked to enter the old password.

   2. Enter the four-digit password using the remote control numeric keys. (The numbers will not appear on the screen.) The factory preset code is “0000”.

   **Note:** If you enter the wrong password, “WRONG PASSWORD” will flash on the screen and you return to normal video.
3. Now enter the new four-digit password.

4. As soon you have entered the password you'll be asked to retype the new password.

5. After you have entered the password a second time, the word "SUCCESSFUL" will flash under the password.

After a few seconds you will return to normal video.

4. CHANNEL SCAN

In the NORM mode, changing channels using (CH▲) or (CH▼) will scroll through the channels sequentially (1-2-3-4-5-...-23-24) during normal operation.

If you press (4) at the MAIN MENU, you can change SCAN TYPE to SKIP or SEEK.

In the SKIP mode, pressing (CH▲) or (CH▼) will scroll through every other channel (1-3-5-7-9-...-23-2-4-6-...-24) during normal operation.

Note: SKIP mode is recommended for systems using a single feed polarizer to prolong the life of the tiny servo motor located at the antenna.
In the SEEK mode, pressing (CH▲) or (CH▼) selects only channels actively receiving signals to be displayed during normal operation.

5. KU CHANNEL SET

KU CHANNEL SET is used to relabel a Ku-band channel so that it matches the program channel shown in your viewing guide. For example, you may want to relabel Channel 1 on Ku-band satellite ASC A1 as Channel 11 to match your viewing guide.

Note: Before you can use the KU CHANNEL SET function, you must already be tuned to the correct Ku-band satellite and channel.

To select the current satellite and channel:

1. Tune to the Ku-band satellite and channel you wish to relabel using the ‘Select a Satellite’ and ‘Selecting Channels’ procedures described at the beginning of the “Normal Operation” section.

Note: When you are on the Ku-band, KU lights up on the front panel display.

2. Press (MENU) to access the MAIN MENU.

3. Press (5) to enter the KU CHANNEL SET menu.

4. Use (CH▲) or (CH▼) to change the TO: channel to the number desired (11 is shown in the example).

5. Press (ENTER) to exit this screen and save the changes.

6. Now, when you select Channel 11, you get the same program as on Channel 1.
Storing Favorite Channels

FAVORITE STORE is used to add your favorite satellite channels to your favorite's list. You can use the remote control keys to enter a name up to 10 characters long for your favorite channels. The "Available Characters List" in the Appendix of this Guide shows characters available for naming your favorite channels.

Adding Favorites

Use any of the procedures in the "Normal Operation" section to tune to the satellite and channel you wish to store as a personal favorite. When you are at the satellite and channel, make any necessary changes, such as fine tuning the video or selecting a different audio mode for receiving a satellite radio station. (For more information on these procedures, refer to the "Normal Operation" and "Tuning the SQ530" sections.)

When all adjustments have been made:

1. Press and hold (FAV) for at least four seconds to display the STORE FAVORITES menu.
   - Note: If you press any other key before you press (FAV), you may not retain the video and audio settings you just made.

You will see the FAVORITES menu at first. Then the menu name will change from FAVORITES to STORE FAVORITES.

2. Use (CH A) and (CH V) to move to the first blank row of **********.

___OR___

Enter the number at the favorite.
3. Press \textbf{Setup}. The satellite and channel number are automatically entered, and the typing cursor ( ) is at the first character position of the description.

4. Use (CH \textup{\textup{\textup{\uparrow}}}) or (CH \textup{\textup{\textup{\downarrow}}}) to select the first character (letter or number) of the name you want to use for this satellite and channel. (See the "Available Character List" in the Appendix.) Then use (IN) and (OUT) to move the cursor to the next position and enter the next character.

5. When all characters have been entered, press \textbf{Enter} to store the new name change, or press (CNC) to cancel the changes.

6. When you are finished, press (VIEW) to exit the \textbf{STORE FAVORITES} mode.

To store additional favorite channels, repeat all the above procedures.

\textbf{Note:} Once you have stored an item you cannot delete it. However, you can change the entry at any time using the following procedure.

\textbf{Changing a Favorite}

You can easily replace a stored item with a new selection:

1. While in the \textbf{STORE FAVORITES} menu, use (CH \textup{\textup{\textup{\textup{\uparrow}}}}) or (CH \textup{\textup{\textup{\downarrow}}}) to position the cursor at the correct line.
2. Press SETUP. The satellite and channel will change to the new entry.

3. Use (CHA) or (CHV) to select the first character (letter or number) of the name you want to use for this satellite and channel. (See "Character List" in the Appendix for a list of available characters.) Then use (<<) and (>>) to move the cursor to the next position and enter the next character.

4. When all characters have been changed, press ENTER to store the new name change, or press (CNCL) to cancel the changes.

5. When you are finished, press (VIEW) to exit the STORE FAVORITES mode.

To change any other entry, repeat the above procedures.
VCRS Module Operating Instructions

Features

The VCRS module represents the state of the art in satellite TV descrambling technology. Your VCRS module will also allow you to view the new and expanding world of pay-per-view programming as well as all of the subscription and "clear" programs you currently enjoy.

Other key features include additional data and audio channels for future services as well as greatly expanded on-screen displays (OSDs). These new displays can provide you with more helpful information about your system and the types of satellite programming you watch.

If your receiver is equipped with a built-in VIDEOpal Order Recorder, you can also access pay-per-view programming options each month.

Renewable Security With The TvPass Card

Assures a rapid, easy upgrade of security in the event that it becomes necessary. If necessary, this "smart card" will be sent to you by your program provider (it is not included in this initial shipment). At that time, you will be instructed to slide the TvPass Card into the back of your VCRS module. This process will change the level of subscription security.

Non-Scrambled, "Clear" Programming

These services will work with or without your VCRS module installed. These "clear" program services are not scrambled and you may enjoy the programs as you have in the past. Non-scrambled services may be viewed at any time they are broadcast and do not require subscription authorization.

Module Authorization

After your dealer has installed your new VCRS module, you or your dealer must follow the steps below:

1. Tune to a VideoCipher® scrambled channel. At this time the VCRS indicator should be illuminated on the front panel of your SQ530.

2. Press [setup] (X1) (X2) to display the INSTALLATION DATA screen.
   The Unit ID will appear in two formats on the screen in lines number 1 and 2.

Please write the numbers down in the spaces provided:

Unit ID: ________________________________

Phone ID: ______________________________

These lines contain your unique unit identification numbers and are used by your program providers to authorize you for subscription program reception.

Note: The information on your screen may be different from that in the illustrations in this Owner's Guide.
3. The installation data will also show Signal Quality on line 8. This should read greater than 60. If this signal reads less than 60, you may experience difficulty authorizing the module. Adjusting dish alignment, receiver video fine tuning, and/or skew may help to increase the Signal Quality received by the module. Press \text{(VIEW)} to leave this screen and resume normal viewing.

4. Call the programmer(s) who provided subscription services on the old module. This is necessary to transfer your subscription programs to your new module. Programmers may ask for the Unit ID that appeared on your most recent billing statement(s), or on the back of the older module. Your Programmers will also require the ID numbers noted in item 2 above. These numbers are also used for all new subscription purchases.

\textbf{Note: } The Unit ID is sometimes referred to as the Unit Address, or UA.

5. After initiating or transferring services, leave the receiver tuned to a VideoCipher scrambled channel until the module receives authorization and you are able to view the programs you ordered. If you view the \text{SETUP} \text{(1)}, \text{(1)} screen again, you will notice that your trip counter number has increased.

Once your module has received subscription authorization, you may want to take the time to become familiar with the many different features, capabilities, and on-screen displays (OSDs) that your VCRS module can produce, and what purposes they serve. Your on-screen displays allow you to:
1) see how well your system is functioning on VideoCipher channels.
2) receive important messages from your programmer.
3) limit access to programs with mature subject material.
4) use the Instant Pay-Per-View features of your module.

\textbf{Note: } These on-screen displays are visible only on VideoCipher channels.

\textbf{Available Services Menu}

Press \text{SETUP} to display the \textbf{Available Services Menu}. This menu has four available choices. If you wish to return to normal television viewing at any time, press \text{(VIEW)}.

\textbf{1. Unit Setup}

Press \text{(1)} to display the \textbf{VideoCipher Unit Setup} menu. This menu contains eight different choices. Choices 1 through 4 are used for normal operation of the module; choices 5 through 8 relate to Instant pay-per-view operation. Press \text{(VIEW)} to leave this menu and resume normal viewing.
Single Receiver Installation

Single Feed (C-band or Ku-band)

A single feed system uses an LNB (Low Noise Block downconverter) attached to the feedhorn, and a single feed polarizer. The SQ530 has internal circuitry that prolongs the life of the tiny motor installed at the antenna to provide polarity selection. This circuitry limits the travel distance of the probe that selects polarity.

1. Use the cable recommended in the Appendix to connect the LNB directly to the corresponding input on the SQ530 rear panel. You can connect either the C-band or Ku-band directly to the receiver without using an external switch.

2. Since you are using a servo-type polarizer, you must run three additional lines to control it. Wire the polarizer to the terminal block on the back of the receiver according to the manufacturer's instructions. The normal color codes used are:

   Red to DC6V.

   White to Pulse.

   Black to GND

3. Using the manufacturer's template, adjust the feedhorn until it is on the polar axis. If the proper polarity is not indicated on the front panel of the receiver (odd channels vertical on Telstar type satellites, odd channels horizontal on Galaxy type satellites), change polarity by pressing [TUNE], then [2].

4. If the picture is recognizable but snowy, press [TUNE], then [3]. Then use [CH A] and [CH V] to adjust the skew for the best reception.

5. If you select a new channel and the picture is recognizable for just a moment, then disappears, rotate the feedhorn 90 degrees, or until the SQ530 receives a clear picture.

6. When you get the best picture, tighten the feedhorn bolts until you cannot rotate the feedhorn. After you re-tighten the feedhorn, press [TUNE] and [3] to select the SKEW option. Then use [CH A] and [CH V] to adjust for the best reception.

Note: To set the RF Configuration, refer to RF Configure under "Installation Menu."
Single Feed using LNBF (C-band or Ku-band)

LNBFs are a new type of feedhorn that allows polarity switching without the three control wires typically associated with the standard feedhorn. An LNBF switches polarity by changing the DC voltage on the coaxial cable. Long cable runs may decrease the switching voltage causing polarity problems. Cable for LNBFs should be limited to about 300 feet.

1. Use the cable recommended in the Appendix to connect the LNBF directly to the corresponding input on the SQ530 rear panel. You can connect both the C-band and Ku-band directly to the receiver without using an external switch.

2. Using the manufacturer's template, adjust the feedhorn until it is on the polar axis. If the proper polarity is not indicated on the front panel of the receiver (odd channels vertical on Telstar type satellites, odd channels horizontal on Galaxy type satellites), change polarity by pressing (TUNE), then (-).

3. If the picture is recognizable but snowy, the feedhorn should be rotated manually on the antenna until the picture is clear.

4. If you select a new channel and the picture is recognizable for just a moment, then disappears, rotate the feedhorn 90 degrees, or until the SQ530 receives a clear picture.

5. When you get the best picture, tighten the feedhorn bolts until you cannot rotate the feedhorn.

Dual Feed (C-band or Ku-band)

If you are connecting two LNBS and a dual feed polarizer to provide a dual feed, an external switch is required. You must take special care when you decide what type of V/H switch to use. There are two common switches available: a 0/12 Volt V/H switch and a -12/12 Volt V/H switch. The SQ530 is designed to use the more common 0/12 Volt switch.

1. Connect the horizontal and vertical LNBS directly to their corresponding inputs on the external switch.

2. Connect the output of the V/H switch to the RF input on the back of the receiver.

3. Two additional wires are required to control V/H switching. These connect to GND and V/H on the four-terminal strip on the back of the receiver.

4. Follow the manufacturer's instructions to connect the switch. The V/H terminal switches between 0 and 12 VDC to switch between vertical and horizontal channels.

5. Move the dish antenna to the highest position.
6. Rotate the feedhorn until one of the LNBs is parallel to the polar axis and tighten the feedhorn bolts until you cannot rotate the feedhorn.

7. If the proper polarity is not indicated on the front panel of the receiver (odd channels vertical on Telstar type satellites, odd channels horizontal on Galaxy type satellites), change polarity by reversing the C/V and Ku/H coaxial cables on the external switch.

Note: To set the RF Configuration, refer to RF CONFIGURE in Installation Menu Functions.

Actuator Installation

You can use an 18 inch acme or ball actuator arm with most mesh dish antennas up to 10 feet in diameter. If the dish antenna is larger or you notice improper counting of the satellite positions, you may need a heavy-duty actuator jack.

Note: The SQ530 has been designed for use with the following types of actuator sensors:

Hall effect
Reed
Optical

Assembly

Assemble the actuator as follows:

1. Unpack the actuator and the parts kit.

2. Find the tube clamp and attach it to the right side of the metal plate on the antenna mount (for locations east of the Rocky Mountains) so that it extends downward.

3. Position the actuator through the clamp so the motor is positioned up. The two small holes in the actuator case should point down for proper drainage.

4. Slide the actuator outer tube in the clamp until you can view all satellites from horizon to horizon.

5. Tighten the bolt on the clamp to hold the arm in place.

6. Pull the antenna down so that the end of the actuator arm attaches to the metal plate on the hub of the mount.

7. Use a 1/2-inch bolt to attach the pivot socket to this plate. Make sure that you fasten the lock washer and nut securely and that the connection is very tight.
Notes:

1. For proper installation, retract the actuator arm fully retracted and locate the motor casing above the arm.

2. Secure the clamp and pivot socket bolts tightly.

3. If you install the antenna west of the Rocky Mountains, reverse the actuator position (install it on the left instead of the right). Reverse the M1 and M2 wires only on the back of the SQ530. Then press the (w) key to extend the actuator just beyond the westernmost satellite you want to receive (Satcom C1 usually). Watch the antenna carefully during this step so that it does not tip over. You may need to adjust the limit cam inside the actuator to reach the satellite.

Actuator Connections

Connect the actuator to the SQ530 as follows:

1. Remove the back cover of the actuator motor.

2. Route the cable through the rubber seal.

3. Connect the appropriate cable wires to the connectors on the terminal strip inside the casing. Make sure you use the cables recommended in the Appendix.

4. Connect the cable wires from the actuator to the screw terminals on the rear on the SQ530.

   **Important:** Improper connections can cause permanent damage to the satellite system.

5. If the mechanical limit switches are set, put the case back on the motor. Make sure you position the gasket properly to assure a watertight seal.

If the mechanical limit switches are not set, continue with the next section.

Actuator Mechanical Limit Settings

The mechanical limit settings prevent damage to the dish antenna by restricting the distance the actuator arm can travel. Use the following procedure to set the east and west mechanical limits:

1. Remove the back case of the actuator motor housing

2. Set the west limit as follows:

   a. Move the dish antenna all the way west until the bottom cam activates the limit switch.
b. Loosen the bolts on the collar and slide the actuator arm downward such that the dish antenna is pointed just below the westernmost satellite. Tighten the collar bolts.

---OR---

Remove the bolt that attaches the inner arm of the actuator to the dish antenna and rotate the inner arm clockwise until the antenna is pointed just beyond the westernmost satellite. Replace and tighten the bolt that attaches the inner arm of the actuator to the dish antenna.

Note: Make sure that all bolts are attached securely to prevent actuator arm slippage.

3. Set the east limit as follows:

a. Move the dish antenna to a point just beyond the easternmost satellite.

b. Loosen the two screws that secure the top limit cam.

c. Rotate top limit cam until the limit switch is activated.

d. Tighten the screws that secure the top limit cam.

Important: Make sure the cam screws are tight before you replace the actuator case. If the actuator limit cam is not secure, it may cause permanent damage to the actuator.

4. Put the case back on the motor. Make sure that you position the gasket properly to assure a watertight seal.

5. Use the (E) and (W) keys to move the actuator arm back and forth. Make sure that the satellite dish can reach the satellite farthest west and the satellite farthest east before the limit switch stops the travel of the arm.

Note: The mechanical limit switches eliminate the possibility of damaging the dish antenna through extreme actuator movement. Also program the east and west limits from the receiver as an added precaution when you program the other receiver functions.
Connecting the TV set and Other Components

The SQ530 has two video outputs and two sets of stereo audio outputs. These connections provide a variety of ways to customize the complete home entertainment center.

The video outputs and stereo audio outputs are intended for a TV set or monitor, stereo amplifier, and/or a VCR.
Connecting the Antennas

Note: The TVRO antenna system should be connected by a qualified installer.

Connect the broadcast VHF antenna or cable decoder output to the ANT IN coaxial connector on the back of the receiver.

Note: Additional grounding may be required to avoid electrical damage caused by lightning.

Note: If the broadcast antenna cable is not coaxial cable, you will need to attach an adapter with an F-type connector.

Connecting a TV Set

TV Set with Separate Audio And Video Inputs

Connect RCA cables from the TV OUTPUT audio and video RCA jacks on the SQ530 to the audio and video inputs on the TV set.
TV Set with Single Coaxial Input

Connect a coaxial cable from the TV OUT coaxial connector on the SQ530 to the VHF input on the back of the TV.

TV Set with Screw Terminals

If the TV set does not have a coaxial antenna connector, you will need an adapter that matches the impedance (75/300Ω) of the SQ530 TV OUT coaxial connector.

Connect a coaxial cable from the TV OUT coaxial connector on the SQ530 to the F connector on the adapter.

Connect the two leads of the adapter to the screw terminals on the rear of the TV set.

If the TV set has separate UHF inputs, connect the broadcast UHF antenna directly to the TV set.

Tuning the TV Set

Tune the TV set to channel 3 or 4, whichever corresponds to the setting on the 3/4 switch on the back of the SQ530. If you are unable to get good reception on one channel, change the setting on the 3/4 switch of the SQ530 and change the channel on the TV set to match the new setting. If there is no reception or reception is poor, you may need to adjust the fine tuning on the TV set. During satellite TV viewing, the TV set must stay on the channel set on the 3/4 switch on the SQ530.
Connecting a Monitor

You may be using a monitor for your satellite viewing instead of a TV set. If so, follow these directions for connecting it to your SQ530 receiver.

Connect an RCA cable from the VIDEO OUTPUT (TV) connection on the back panel of the SQ530 to the VIDEO input of the monitor.

For a monitor with mono sound, connect an RCA cable from the Left AUDIO OUTPUT (TV) connection on the back panel of the SQ530 to the AUDIO input of the monitor.
For a monitor with stereo sound, connect an RCA cable from the Left AUDIO OUTPUT (TV) connection on the back panel of the SQ530 to the Left AUDIO input of the monitor. Connect an RCA cable from the Right AUDIO OUTPUT (TV) connection on the back panel of the SQ530 to the Right AUDIO input of the monitor.

Connecting Stereo Audio Equipment
To attain the full dynamic sound of satellite television, connect the left and right TV audio outputs of the SQ530 to the auxiliary left and right inputs of a stereo system. Many satellite channels and audio services provide left and right audio signals for full reproduction of the sound.
Installation Menu Functions

**Note:** These functions are normally used by the Dealer for installation and setup.

**Note:** The Installation screens are designated by the color purple. This is used to indicate at a glance the function of the menus.

Use the **INSTALLATION MENU** to:

1. Program Satellites.
2. Delete a satellite.
3. Resync satellites.
4. Set the RF Configuration of Receivers and Switches.
5. Set the Global Shift.
6. Set the Electronic Dish Limits.
7. Turn the Blue Screen ON or OFF.
8. Perform a Master Reset.

To display the **INSTALLATION MENU**, press and hold **MENU** for at least 4 seconds.

**Note:** You can exit this menu by pressing **VIEW**. You can also return to this menu by pressing **MENU** from any submenu within the **INSTALLATION MENU**.

Once in the **INSTALLATION MENU**, press the appropriate numeric key to select the corresponding function.

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1. **PROGRAM SATELLITES**

At the **INSTALLATION MENU**, press (1) to move to the **SATELLITE STORE** menu.

The **SATELLITE STORE** menu lists all pre-programmed satellites. The satellites already programmed into memory are identified by a □ to the left of the name. Use (F) and (W) to page forward and back to find the list with the satellite you want to program.

**Note:** Press (CU) to switch between the C and Ku-band satellite lists. To store Ku-band satellites, use the following procedure, substituting Ku for C.
Owner's Guide

Once at the correct list of satellites, use (CH▲) and (CH▼) to move the cursor next to the satellite name.

Press (CALL) to start looking for that satellite. The Program Satellite screen will appear. Use (E◆), (E◆), (CH▲), (CH▼), and the numeric keys to locate and tune in the satellite.

Note: To see this information, the screen must be displayed over active video. If no active video is available, press (VIEW) to turn Blue Screen ON. Press (VIEW) again to turn Blue Screen OFF.

Once you have tuned in the satellite, press (ENTER) to store the satellite, or press (CNCL) to return to the SATELLITE STORE menu without programming the satellite. If you store the satellite, a ■ will now appear to the left of the name.

When you have finished programming satellites, press (MENU) to return to the PROGRAM SATELLITES menu.

2. DELETE A SATELLITE

If you want to delete a programmed satellite from memory, you must first tune to the desired satellite.

Press (2) at the INSTALLATION MENU to delete the satellite. A warning screen will appear asking you to confirm that the current satellite should be deleted.

Press (ENTER) to delete the satellite, or (CNCL) to exit without deleting the satellite. If you delete a satellite, you will return to the INSTALLATION MENU.

GALAXY-5
SKEW (+45)
POLARITY (HORZ)
PROGRAM SATELLITE
POSITION (4973)
E-----------------------------w
*USE ▲,▼,◄,►,ENTER,CNCL

GALAXY-5
G5-19
ARE YOU SURE YOU WANT TO DELETE THIS SATELLITE?
(ENTER) FOR YES (CNCL) FOR NO
*USE ENTER,CNCL

INSTALLATION MENU
1 PROGRAM SATELLITES
2 DELETE A SATELLITE
3 RESYNC SATELLITES
4 RF CONFIGURE
5 GLOBAL SHIFT
6 SET DISH LIMITS
7 BLUE SCREEN (ON)
8 MASTER RESET
*USE #,VIEW

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3. RESYNC SATELLITES
First, choose a satellite and use (H,E) and (W,D) to find the best picture. At the INSTALLATION MENU menu, press (3) to display the RESYNC SATELLITES screen.

Use (CH A) and (CH V) to select the key satellite to realign with. Then press ENTER to resync. Afterwards, the word "SUCCESSFUL" will flash on the screen, and you will return to view mode.

4. RF CONFIGURE
Press (4) at the INSTALLATION MENU to display the RF CONFIGURE menu.

Press the appropriate key to change the setting in each of the items. The selections appear in this order:

1  C BAND: (SINGLE), (DUAL), (NO)
   Ku BAND: (SINGLE), (NO), (DUAL)
2  C V/H SW: (EXT),
3  C/Ku SW: (STD), (LNBF)

The steps for configuring the receiver in this manner are:

1. Press and hold (MENU) for at least four seconds to display the INSTALLATION MENU.
2. Press (4) to display the RF CONFIGURE menu.
3. Press (1) to set C BAND to (SINGLE) and Ku-Band to (SINGLE)
4. Leave C/KU set to (STD).
5. Press (MENU) to store the configuration and return to the INSTALLATION MENU.
5. GLOBAL SHIFT

Global Shift is used to adjust the frequency of any or all of the LNBS connected to your receiver, depending upon the RF Configuration. This is used to compensate for any frequency drift in the LNB electronics.

Press (3) at the INSTALLATION MENU to display the GLOBAL SHIFT screen. The correct LNB will automatically be selected.

Use (CH▲) and (CH▼) to adjust the frequency in 0.25 MHz steps. Press (MENU) to store the configuration and return to the INSTALLATION MENU.

6. DISH LIMITS

Use (E) to move the dish to the East limit. At the INSTALLATION MENU, press (4) to display the DISH LIMIT SET menu.

Press (1) at the DISH LIMIT SET menu to set the current limit as the East limit. As soon as you press the key, the position appears in parentheses next to EAST LIMIT.

To set the West limit, follow the same procedure, pressing (2) to set the limit. If you need to clear either limit, press (3) or (4). After you make any changes, press (MENU) to exit this screen and save the changes.
7. BLUE SCREEN
This option enables satellite and channel information as well as set up menus to be displayed over the “snow” of an inactive channel. The information appears in white letters on a blue background.

Press (7) at the INSTALLATION MENU to turn BLUE SCREEN ON or OFF.

Important: It is recommended that this option remain on during casual viewing.

8. MASTER RESET
Master Reset is used to erase all the receiver memory. Press (8) at the Installation Menu to display the MASTER RESET screen.

You must then enter a special password to continue. If you enter the wrong password, “WRONG PASSWORD” flashes. You then return to the INSTALLATION MENU. Check with your Uniden dealer for more information.
General Information

Helpful Hints

To make sure you get the most out of satellite television viewing we offer the following information. The sophisticated engineering required to tune in satellite signals from about 22,300 miles away can be as mysterious as space itself. We hope that this information will take some of the mystery out of this technology, making it even more enjoyable for you.

Terrestrial Interference

The most common cause of interference for a satellite television system is Terrestrial Interference. It is caused by local telephone or data microwave links. If your antenna is located too close to, or in the path of a microwave tower you may experience snowy video, sparkles or a distorted picture. This kind of interference is usually not constant and may appear to increase and decrease at different times of the day. If the problem persists, you may need to relocate your antenna or use more sophisticated filters. Contact your Uniden SQ Dealer for more information.

Solar Outage

Another cause of interference is the biannual solar outage. Due to the seasonal changes of the earth's axis the satellite belt moves between the earth and the sun. When the satellite belt moves directly between the sun and your antenna, the satellite transmissions will be overpowered by the natural radio transmissions of the sun. This kind of satellite eclipse occurs twice a year around the spring and fall equinox. As the satellite eclipse approaches you may notice a gradual, daily increase in interference. It will peak for about 10-30 minutes with a completely distorted picture. As the eclipse decreases so will the amount of interference until the picture is back to clear, normal operation. The degree of interference and the timing of this phenomenon varies with the satellite, your geographical location and the size of your antenna. Unfortunately the only solution is to tune to a satellite that is east of the sun's position until it has passed the satellite you were watching.

Other Sources of Interference

All electrical equipment is susceptible to interference from other electrical devices. The SQ530 is an extremely sensitive unit and may pick up interference from any household appliance. If you experience temporary audio or video interference you should check other equipment in your house. Appliances such as refrigerators, washers/dryers, microwave ovens, pumps, power tools, hair dryers, etc. may cause a variety of annoying interference. Also, radio transmitters such as CBs or shortwave radios may be a source of interference. Try plugging the SQ530 into another outlet, or isolated circuit. Check with your Uniden SQ Dealer for other ways to control this type of interference.

Aircraft passing over or near to your antenna may cause some temporary interference as it blocks or reflects the satellite signal. This type of interference is momentary and cannot be filtered.
Troubleshooting

If your SQ530 is not performing up to your expectations, please try the simple steps listed below. If you cannot get satisfactory results after following these steps, contact your local Uniden SQ Dealer.

**Note:** Most of the problems occurring with satellite TV systems are related to cable trouble. If you are experiencing any problem with your system, first check all cables and connections carefully. If the problem still exists, try the following steps:

**Problem:** The indicator lights on the receiver are not working. No video or audio.

1. Check the Power switch to make sure it is on.
2. Check the AC power cord to make sure it is plugged into an outlet that is not controlled by a wall switch.

**Problem:** The indicator lights are on but no TV picture or audio.

1. Check the power switch on the TV. Check the cable between the RF Out connector on the back of the unit and the VHF In on the TV set. Make sure both connections are secured.
2. Check the channel selector on the TV to be sure it is set to 3 or 4 and that the 3/4 switch on the back of the unit is set to the same number.
3. Channel Lock may be engaged. Check another channel or satellite.
4. Check another channel on the satellite. The current one may not have any programming.
5. Check the alignment of the antenna. Press the (▲) and (▼) keys momentarily to align the antenna for the best picture.

**Problem:** There are ghost images or wavy lines on the TV screen.

1. Check the polarization. To adjust the Skew, press the (TUNE) button to display the tune options, then press (▼) to select Skew. While in the Skew screen, use the (CH▲) or (CH▼) keys to adjust the polarization.
2. Check the channel fine tune adjustment on the TV and the channel selector to make sure it is on 3 or 4.
3. Fine tune antenna by pressing (▲) or (▼) momentarily so that satellite position counter changes up to +10 counts.
4. Check the alignment of the antenna.
5. External interference. See 'Helpful Hints' in the “General information” section about interference.
Problem: Picture is full of snow or sparkles. Weak picture.

1. Check all cables for proper connection.

2. Make sure that the feedhorn is properly positioned. Check the feedhorn instructions.

3. 1 GHz cable is too long or improper cable used for length required. Check cable chart. Check with your Uniden SQ Dealer about a line amplifier.

Problem: Distorted audio or no audio.

1. Check volume of receiver and TV. Check Mute control.

2. Check program guide to make sure the correct audio frequency is tuned. 
Press (TUNE), 5 to tune to a different frequency.

3. If you are using the Audio Out jacks, check to make sure cables are properly connected.

Problem: The channel number displayed does not correspond to your program guide. The video is weak or has superimposed images. The polarity indicated in the program guide does not correspond to the setting on the receiver.

1. Change the polarity. To change the polarity, press (TUNE) to display the Tuning screen. Press (2) to change the polarity.

2. If Ku-band, verify the Ku channel set.

Problem: Remote control will not work, works erratically.

1. Weak batteries. Replace with 2 AAA size batteries.

2. Make sure nothing is blocking the front of the receiver.

Problem: Cannot receive scrambled channels.

1. You have not subscribed to the service.

2. The program is blacked out in your area.

3. Signal strength is too low.

4. Channel Lock is engaged for the channel.

5. Rating ceiling is set too low.

Problem: Cannot select the desired satellite from memory.

Satellite not programmed.
Problem: Antenna will not move. Antenna movement is erratic.

1. Check actuator breaker on bottom of receiver.

2. Actuator improperly installed or binding. Check actuator installation and antenna mount to make sure nothing is obstructing movement.

3. Check actuator cable for proper connections at both the motor and back of receiver.

4. Antenna is too heavy for actuator. Check with your Uniden SQ Dealer about a heavy duty antenna kit.