

# Owners Manual Installation Guide

**GEOSAT***pro*  
Models

DSR200c

DVR1100c

# Owners Manual

## Installation Guide

Version 2010.08



### **DSR200c - Standard Receiver**

This manual contains operation and installation instructions for the GEOSATpro DSR200c standard satellite receiver and the GEOSATpro DVR1100c satellite receiver with digital video recording capability.

The basic operation of both models are identical, but the DVR1100c offers several digital recording features that are not found on the basic DSR200c receive only model. The additional features of the DVR1100c are noted in the menu features and operation guides.



### **DVR1100c - Digital Video Recorder Ready**

## Attention Glorystar Customers:

Please review the Glorystar instructions beginning on page 29

Note: Save all original boxes, manuals, accessories and packaging materials in case it is necessary to return the merchandise.

Before unpacking or assembly of any item, review the warranty, exchange and refund policies provided by your reseller.

### DTV Transition Notice

After June 12th, 2009, a television receiver with only an analog broadcast tuner will require a converter box to receive full power over-the-air broadcasts originating from a United States broadcaster with an antenna because of the Nation's transition to digital broadcasting. Analog-only TVs should continue to work as before to receive low power, Class A or translator television stations, cable, satellite TV services, gaming consoles, VCRs, DVD players, and similar products.

Information about the DTV transition is available from [www.DTV.gov](http://www.DTV.gov) or 1-888-CALL-FCC, and from [www.dtv2009.gov](http://www.dtv2009.gov) or 1-888-DTV-2009 for information about subsidized coupons for digital-to-analog converter boxes.

This notice does not affect any programming received by this satellite set-top box. Your digital satellite receiver will continue to receive the digital satellite signals and provide the programming for display on both Analog Televisions and new DTV compatible monitors with composite, Component YUV or S-Video input connections.

This notice complies with Parts 15 and 54 of Title 47 of the Code of Federal Regulations: 15.124 DTV Transition Notices by Manufacturers of Televisions and Related Devices.

**Important Installation Notice:** The Federal Communications Commission (FCC) has ruled that local government zoning and homeowner's associations may not prevent the installation of satellite antennas one meter (39") or smaller in diameter within a resident's private use area, unless legitimate safety restrictions such as fire codes are in effect.

For More information: <http://www.fcc.gov/cgb/satellite.html>

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# Important Safeguards

## Important Safety Instructions

- ① Read these instructions.
- ② Keep these instructions.
- ③ Heed all warnings.
- ④ Follow all instructions.
- ⑤ Do not use this apparatus near water.
- ⑥ Clean only with dry cloth.
- ⑦ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- ⑧ Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus(including amplifiers)that produce heat.
- ⑨ Do not defeat the safety purpose of the polarized or grounding-type plug.  
A polarized plug has two blades with one wider than the other.  
A grounding type plug has two blades and a third grounding prong.  
The wide blade or third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- ⑩ Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- ⑪ Only use attachments/accessories specified by the manufacturer.
- ⑫ Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- ⑬ Unplug this apparatus during lightning storms or when unused for long periods of time.
- ⑭ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Caution - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

**WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS**

## Precautions



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

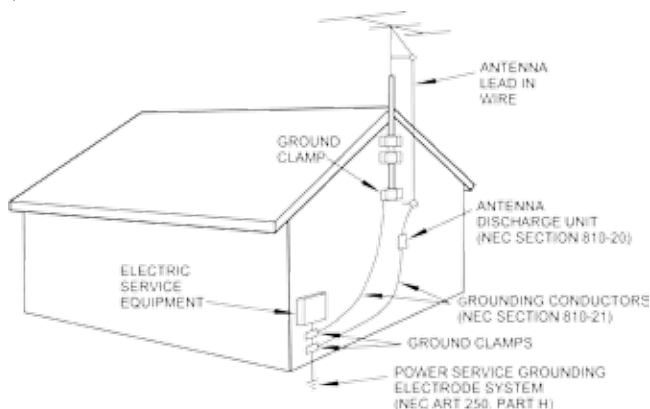
**WARNING :** To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

**Notice** ① The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

② The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.

## Example of Antenna Grounding

NEC, ANSI/NFPA 70



**Replacement Parts** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards. Modification to the hardware or software without authorization by the manufacturer will result in voiding any warranty. Service assistance may be arranged by contacting your reseller.

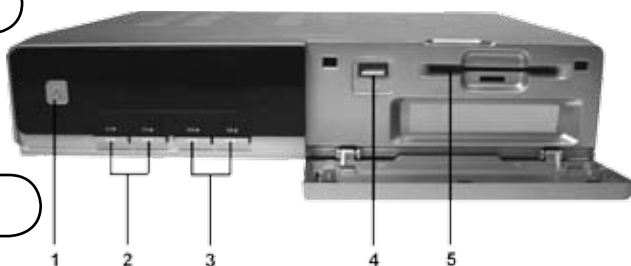
**Safety Check** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

## DSR200c / DVR1100c Specifications

<b>MPEG Transport Stream &amp; AV Decoding</b>	
Transport Stream	MPEG-2 ISO/IEC 13818 / Transport Stream Specification
Profile Level	MPEG-2 MP@ML
Input Rate	Max. 90 Mbit/s
Video Resolution	720 x 480 (NTSC)
Audio Decoding	MPEG / Musicam Layer I & II
Audio Mode	Single channel / Dual channel Joint Stereo / Stereo
Teletext / Captioning	VBI & OSD / Closed Captioning Pass Through (EIA-608 Compliant)
Sampling Rate	32, 44.1 and 48KHz
<b>Conditional Access Module Interface</b>	
Smart Card	1 SLOT, ISO 7816, GSM11.11 & EMV (payment systems)
<b>Tuner &amp; Channel</b>	
Input Connector	F-type (Output loop-through), IEC 169-24, Female
Signal Level	-25 to -65 dBm
LNB Power & Polarization	Vertical: +13.5Vdc $\pm 5\%$ Horizontal: +18.5Vdc $\pm 5\%$ Current : Max. 500mA. Overload protection
22KHz Tone	Frequency: 22 $\pm 2$ KHz
DiSEqC Control	Amplitude: 0.8 $\pm 0.2$ V, Version 1.0, 1.1, 1.2, USALS Compatible
Demodulation	QPSK
Input Symbol Rate	2-45 Ms/s Convolution Code Rate 1/2, 2/3, 3/4, 5/6, 7/8 with Constraint Length K=7
<b>AV &amp; Data Input/Output</b>	
AV Output	CVBS (Yellow), L, R Output (White, Red) w/Volume Control, YUV Component, S-VHS (Y/C) Video
SPDIF	Dolby Digital Bitstream Out (Optical)
Data Interface	RS-232, Transfer Rate 115Kbps, 9 pin D-Sub Male Type USB: USB 2.0, Type A Connector 5V, 1500mA USB: DVR1100c Also Supports Record Function
<b>RF Modulator</b>	
TV Standard	NTSC
RF Connector	75 Ohms, F-type with Loop-through
Frequency Range	VHF CH3, CH4
<b>System Resources</b>	
Main Processor	ARM946 Risc Processor
Flash Memory	4 Mbyte
Program DRAM	DSR100c - 16 Mbyte DVR1100c - 32 Mbyte
Channel Capacity	Digital Channels: 5,000
Front Panel	VFD Display (5 digit Alphanumeric)
<b>Power Supply</b>	
Input Voltage	AC 90 to 240V, 50 - 60Hz
Power Consumption	Max.30W
Protection	Separate Internal Fuse
Type	SMPS
<b>Physical Specification</b>	
Size (W x H x D)	DSR200c - 10 1/4" x 2" x 8 1/2" (260 x 50 x 210mm) DVR1100c - 11 1/2" x 2" x 8 3/4" (290 x 50 x 220mm)
Net Weight	4.5 lbs. (2.0Kg)

## DSR200c

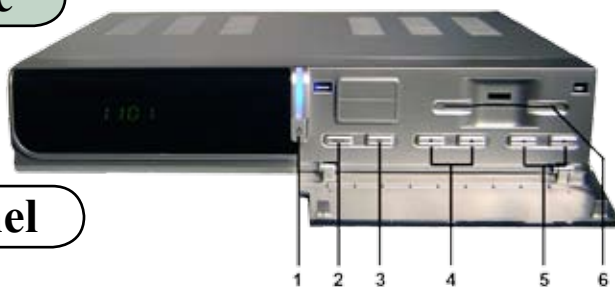
### Front Panel



- 1 Power Switch the receiver between Standby and Operation mode
  - 2 Increase or Decrease the Volume
  - 3 Change Channel Up / Down
  - 4 Connects USB memory device for Firmware / Channel List upgrade
  - 5 CAS Slot - Subscription card insertion with foil contacts facing down
- 

## DVR1100c

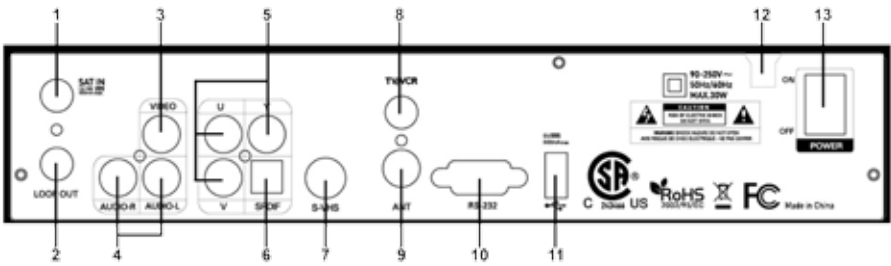
### Front Panel



- 1 Power Switch the receiver between Standby and Operation mode
- 2 Display the Main Menu screens
- 3 Display the Channel List or enter an item in a menu
- 4 Change Channel Up / Down or move the cursor within a Menu
- 5 Increase or Decrease the Volume or move the cursor within a Menu
- 6 CAS Slot - Subscription card insertion with foil contacts facing up



## Rear Panel

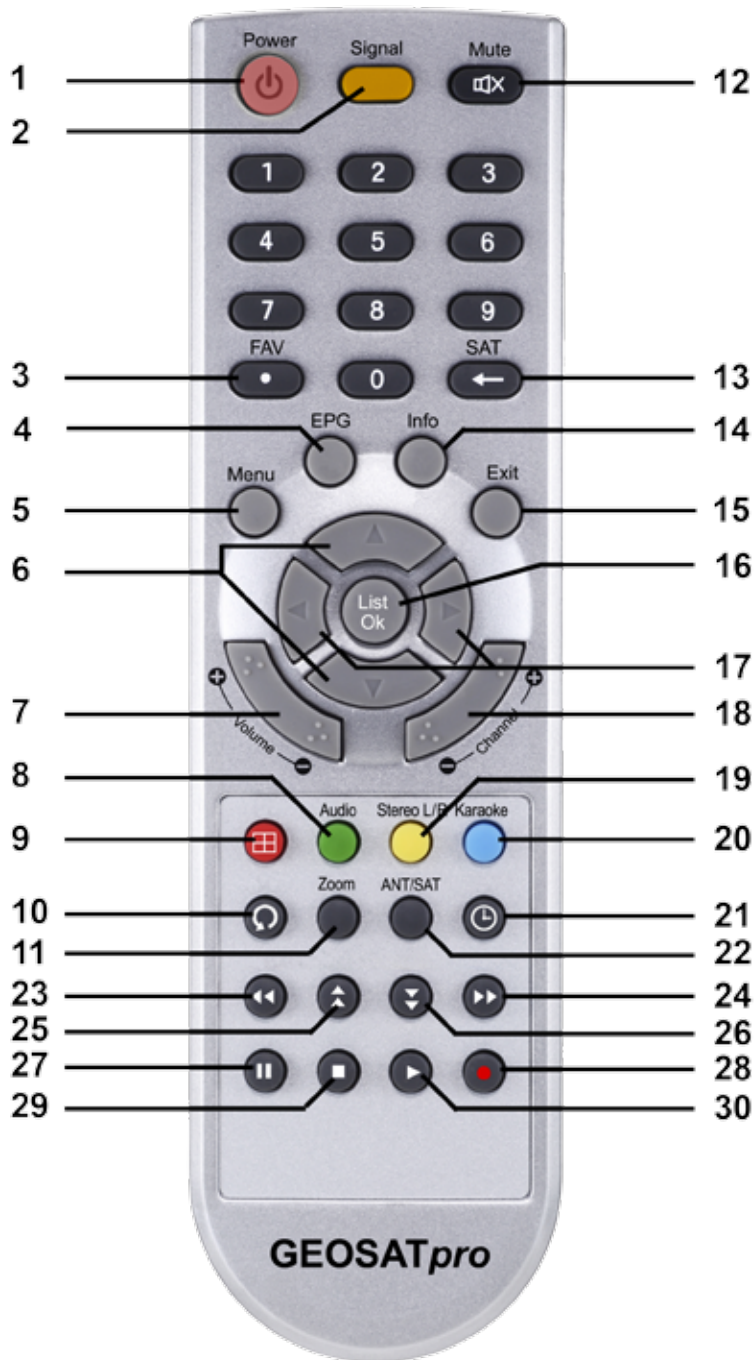


- 1 Connects to the satellite dish coax cable
- 2 Loops the satellite signal to another satellite receiver
- 3 Connects composite VIDEO to TV or other equipment
- 4 Connects AUDIO Left / Right channels to TV or other equipment
- 5 Connects Component Video YUV to TV
- 6 Connects Optical Digital Audio to a digital audio amplifier
- 7 Connects S-VHS (Y/C) video to TV or other equipment
- 8 Connects to television antenna input (tune TV to channel 3 or 4)
- 9 Connects to an outdoor TV antenna or cable
- 10 Null Modem RS232 type computer connection for upgrade or repair
- 11 Connects USB 2.0 memory device for DVR / multi-media / upgrade of Firmware or Channel List 5V/500ma (*DVR1100 model only*)
- 12 AC power plug connection (90 - 250VAC / 60Hz, 30W)
- 13 Master Power Switch disconnects receiver from external power



The GEOSATpro DSR200c & DVR1100c digital satellite receivers are Glorystar Approved.

## Remote Control Unit



## Remote Key Functions DSR200c / DVR1100c

- 1 Switch the receiver between standby and operation modes
- 2 Display the Signal Strength and Signal Quality Meter
- 3 Select the Favorite Channel List mode
- 4 Display TV / Radio Electronic Program Guide (*future Glorystar activation*)
- 5 Display the Main Menu screens
- 6 Change channels or navigate the menu cursor
- 7 Increase or decrease the Volume
- 8 Select Alternative Language or additional audio tracks
- 9 Not Used
- 10 Return to Last Channel
- 11 Magnify an area of the screen (Zoom button 13 / 28, Position 6 / 21)
- 12 Mute or enable audio
- 13 Select all or one satellite for channel availability
- 14 Display the Information Program Banner on bottom of screen
- 15 Return to the previous menu or exit to normal viewing from menu
- 16 Display the Channel List or enter an item in a menu
- 17 Adjust volume, Navigate the menu cursor, DVR: Rapid FF / REW
- 18 Change channels up or down
- 19 Select Audio Mode Stereo, Mono Left / Right channel
- 20 Display Lyrics on Glorystar Karaoke Channel (*future Glorystar service*)
- 21 Enter manual timer setting in 24 hour mode
- 22 Select TV or Satellite for RF output
- 25 Page Up / Zoom increase magnification
- 26 Page Down / Zoom decrease magnification

## Remote Key Functions DVR1100c

- 23 DVR: Scan Rewind in 2x, 4x, 8x, 16x, 32x speeds
- 24 DVR: Scan Forward in 2x, 4x, 8x, 16x, 32x speeds
- 25 DVR: Automatically rewind 30 seconds
- 26 DVR: Automatically rewind 5 seconds
- 27 DVR: Pause live or recorded TV and Radio programming
- 28 DVR: Start Record function
- 29 DVR: Stop Playback or Record function
- 30 DVR: View Recorded Program List or Resume Play function

## Basic Remote Operation

Place the satellite receiver in standby or operation modes, **ON/OFF**, using the Power button.

Change channels by either entering the channel on the numeric keypad or by pressing **CHANNEL UP/DOWN** buttons. Press the **PREVIOUS CHANNEL** button to return to the last channel.

Adjust the volume by pressing the **VOLUME UP/DOWN** buttons. *Volume is also controlled by the TV. The satellite receiver volume should be set at mid-level and use the TV to adjust the volume.*

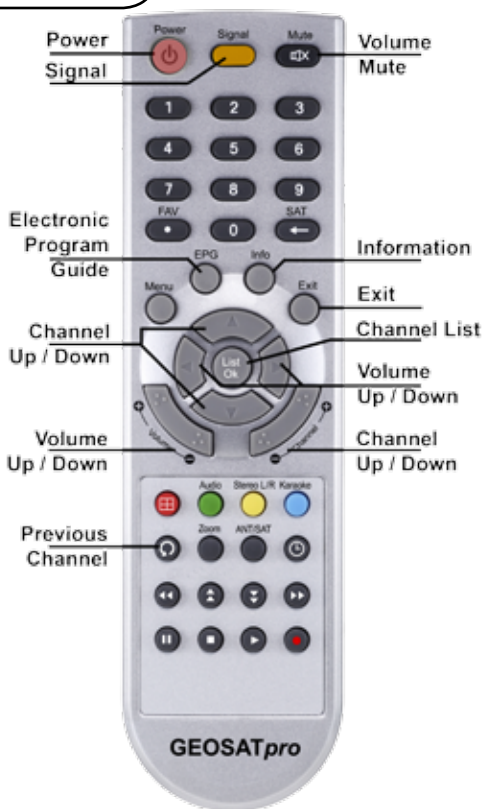
Mute the volume by pressing the **MUTE** button. Return to normal volume setting by pressing **MUTE** button or the **VOLUME UP/DOWN** button.

View a Programming Guide with program listings and descriptions by pressing the **ELECTRONIC PROGRAMMING GUIDE** button.

View a program description of the selected channel (if available) by pressing the **INFORMATION** button.

View a list of available channels by pressing the **CHANNEL LIST/OK** button.

View Signal Level (**S**) and Signal Quality (**Q**) of any channel by pressing the **SIGNAL** button.



The receiver features many of the controls necessary for basic operation of the satellite system in case the remote is misplaced.

# Receiver Operation Guide

## Channel Information

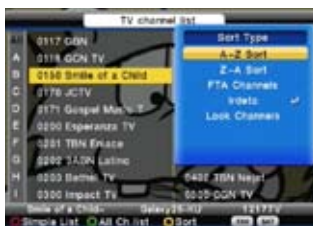
### Program Information Banner

- When selecting a channel, an information banner automatically appears on the bottom of the screen for a few seconds. This banner provides the current channel information.
- Press INFO button to view the information banner during normal live viewing mode.



### Detailed Channel List

- Press List OK button during normal live mode to view a channel list
- When a simple channel list is displayed on screen, press RED button to display a detailed channel list.
- Press Navigation VOLUME UP/DOWN to sort alphabetically.
- Press SAT button to sort by satellite and FAV button for Favorites List.
- Press Green button to return to All Channel mode or EXIT to return to the live channel.
- Press YELLOW button to sort by ascending or descending alphabet, free, encryption type, or locked channels. Once sorted, press YELLOW button to unsort.
- Press BLUE button to enter the BISS code for cardless subscribed viewing of BISS encrypted scrambled events. Check with the event coordinator or pay service provider to obtain the unique code. Use a calculator to convert the provided BISS Key into the 18 digit HEX format.



### Simple Channel List

- Press List OK button during normal live mode to view a channel list
- When a detailed channel list is displayed on screen, press RED button to display a simple channel list.



## EPG - Electronic Program Guide

- a) Press EPG button during normal live mode. An Electronic Program Guide will be displayed on the screen.
- b) Select the desired channel.
- c) Press OK once to view the channel in the preview window. Press OK a second time to go to the channel in live mode.



### EPG - DVR1100c

- d) Select the program to watch or record. Program information (if available) will be displayed in the upper right corner.
- e) To set an event timer to Record, press the RECORD button once. A Red record symbol will appear in the EPG program title. The DVR will automatically record the program based on the program's posted start and stop times. *NOTE: An USB drive must be attached and have enough space to complete the recording.*
- f) To set an event timer to view, press the RECORD button a second time. A Green view symbol will appear in the EPG program title. The receiver will automatically change to the selected program based on the program's posted start time.
- g) Press Exit to return to the current live channel.

### Last Channel

## Return to the Last Channel

- a) Press Return button to recall the last channel selected.

## Alternative Audio

### Select Alternative Audio

- a) Press AUDIO button.
- b) Press the Navigation VOLUME UP/DOWN arrows to select an alternative audio (if available) for the current channel.
- c) Press EXIT to save the selection.



## Stereo / Mono Audio

### Stereo or Mono Audio Selection

- Press STEREO L/R button.
- Press STEREO L/R button to toggle Stereo, Left or Right Audio output for the current channel. Often a channel may program several audio sources together and a left or right channel must be selected.
- Press EXIT to save the audio selection.



## Zoom Function

### Zoom IN / OUT

- Press ZOOM button.
- Press PAGE UP button to increase the magnification or PAGE DOWN to decrease.
- Press the Navigation VOLUME UP/DOWN arrows and the CHANNEL LEFT/RIGHT arrows to select the area to magnify.
- Press EXIT to return to live channel.



## Karaoke

### Display Karaoke Lyrics

*Feature not yet activated*

Press KARAOKE button to display lyrics for available audio services.

## Built-in A/B Switch

### Select TV/VCR Output

Press ANT/SAT button to toggle the TV/VCR output on the rear of the receiver between the receiver's satellite channels or any Cable TV, antenna or any source that is connected to the ANT input on the rear of the receiver. Perfect for connecting with Cable TV.



## Signal Meter

### View Signal Level and Signal Quality

- a) Press the SIGNAL button to display a meter which shows Signal Level and Quality.

A Signal Level above 5% will indicate that a working LNB is connected. The Signal Quality indicates the reception of the selected satellite and transponder. This advanced meter features a 10 bar graphic display of Signal Quality sampled in .5 second intervals with a 5 second history. A high Signal Quality Reading with minimal ripple in the bar graph indicates optimal dish aiming and LNB placement.



- b) Press SIGNAL to exit the meter display.

## Event Timer

### Manual Event Timer Setup

- a) Press TIMER button.
- Number: Select event 1 - 10
  - Enable: Select YES to enable
  - Type: Select Once, Daily, Weekly
  - Channel: Select a TV or Radio channel
  - Month: Select month of the event
  - Date: Select the date of the event
  - Start: Enter the start time in 24 hour mode. Example: Midnight is 00:00, 1:30pm is set as 13:30.



## DSR200c

### Event Timer - DVR1100c

- Duration: Enter the length of the event. Entering 00:00 will cause the receiver to tune the channel, but not record



## DVR1100c



## Receiver Menu Items

Press MENU button and five Sub Menus will be displayed on screen

- I. Channel Manager**
- II. Installation**
- III. Options**
- IV. Utility**
- V. Accessory**

## Main Page



### I. Channel Manager

Organize Channels according to your preference. Note: In the Glorystar Mode, changes made to the channel lists will be automatically updated to the most current list during the weekly OTA updates. To retain channel manager modifications, OTA Update must be disabled.

1. Press OK to display TV Channel Manager
2. Enter Password (default 0000)
3. Select Mode with Navigation buttons volume left or right arrow.
4. Press RED button to view channel
5. Press EXIT to return to previous menu or to go to the current live channel.



- I-1. Favorite**
- I-2. Rename**
- I-3. Move**
- I-4. Lock**
- I-5. Delete**

Press MENU button and five Sub Menus will be displayed on screen

1. Press Navigation buttons volume left or right arrow to highlight FAVORITE 1-8.
2. Press OK on the channel to add or delete
3. A mark will appear on the selected channel Press OK to add or delete.
4. Selected channels are automatically saved.
5. Press EXIT to return to previous menu or to go to the current live channel.

### I-1. Favorite



1. Press the Navigation button volume right to highlight RENAME.
2. Select channel to rename. Press OK.
3. Enter or edit the name using the keypad dialog screen.
4. Press YELLOW to rename Favorite 1-8.
5. Press BLUE to rename Satellite
6. Press EXIT to return to previous menu or MENU to go to the current live channel.

## I-2. Rename



1. Press the Navigation button volume right to highlight MOVE.
2. Select channels to move by pressing OK.
3. Move cursor to the channel(s) new location.
4. Press GREEN to place the channel(s).
5. Press EXIT to return to previous menu or MENU to go to the current live channel.

## I-3. Move



1. Press the Navigation button volume right to highlight LOCK.
2. Select channel to lock by pressing OK.
3. Press OK to lock the channel.
4. Press EXIT to return to previous menu or MENU to go to the current live channel.

## I-4. Lock



1. Press the Navigation button volume right to highlight DELETE.
2. Press YELLOW button to toggle between single channel delete (CH), delete all channels on a transponder (TP) or delete all channels on a satellite (SAT).
3. Press OK to select a channel then BLUE button to delete individual channels in the CH mode, all channels on a TP or all channels on a SAT.
4. Press EXIT to return to previous menu or MENU to go to the current live channel.

## I-5. Delete



## II. Installation

This section will assist in configuring the unit to receive signals from the dish, control switches and enable a motorized dish. Scan for channels using Blind Scan, or using pre programmed transponders. Manually add, delete or edit transponders.

### II-1. Channel Search Press OK. (Default 0000)

Red Button - TP Edit

Blue Button - Signal Beep ON / OFF

### II-2. Motor Set-up Press OK. (Default 0000)

Red Button - TP Edit

Blue Button - Signal Beep ON / OFF



## II-1. Channel Search

1. Satellite
  - Press OK to display list of satellites
  - Select the proper satellite. Press OK
2. DiSEqC / DiSEqC 1.1
  - Press OK to list switch types
  - Select the correct switch port. Press OK
3. TP Frequency
  - Press OK to list programmed transponders
  - Select an active transponder. Press OK
4. LNB
  - Press OK list LNB LO type or frequency
  - Select LO type or frequency. Press OK
5. 22KHz (*may be controlled with LNB LO setting*)
  - Press OK to display ON / OFF
  - Select the proper switch setting. Press OK
6. Multi-Dish Switch
  - Press OK to display list of switch types
  - Select the proper switch. Press OK
7. Search Options
  - Press OK to display list of search types
  - Select the desired search type. Press OK



*All Channels - Scans satellite preprogrammed transponders for free & scrambled channels*

*SAT (FTA) - Scans satellite preprogrammed transponders for free channels*

*One TP - Scans selected transponder for free and scrambled channels*

*One TP FTA - Scans selected transponder for free channels*

*Blind Scan - Searches entire satellite signal for all available channels*

## II-1. Channel Search - cont.

8. LNB Power
  - Press OK to display list ON / OFF
  - Select if to provide LNB power. Press OK
9. Search
  - If Signal Quality meter is displaying Quality, Press OK to scan for channels.

Channel Search Completed - Press OK to save.

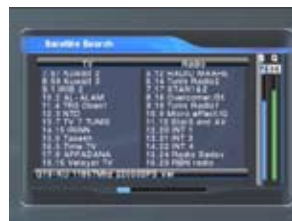
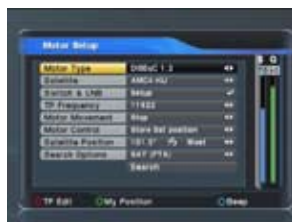


## II-2. Motor Setup

1. Motor Type *USALS is preferred*
  - Press OK to display DiSEqC 1.2 / USALS
  - Select the motor control method. Press OK
  - If USALS, Press GREEN button and enter the install location Longitude and Latitude.
2. Satellite
  - Press OK to list preprogrammed satellites
  - Select the desired satellite. Press OK
3. Switch & LNBF
  - Press OK to display switch / LNBF setups
  - Change settings as needed. Press OK
4. TP Frequency
  - Press OK to list programmed transponders
  - Select an active transponder. Press OK
5. Motor Movement
  - Press Navigate LEFT/RIGHT arrow to move or bump the dish position East or West
6. Motor Control
  - Press Navigate LEFT/RIGHT arrow to:
    - Store Sat Position: Stores current position
    - Goto Sat Position: Moves to stored position
    - Goto 0: Moves to motor 0 position
    - Reset Position: Resets motor stored settings
  - Press OK to execute command
7. Satellite Position
  - Modify if preprogrammed satellite longitude position is incorrect.
8. Search Options
  - Press OK to display list of Search Types
  - Select the desired search type. Press OK

*See description on page 17*
9. Search
  - If Signal Quality meter is displaying Quality, Press OK to scan for channels.

Channel Search Completed - Press OK to save.



## II-1 & 2.b Transponder Edit

1. Press RED button to exit - no modification
2. Press Green button to add a transponder
3. Press YELLOW to delete a transponder
4. Press BLUE to manually add a channel when PIDs are available.
5. Press EXIT when completed. Press OK to save changes or highlight CANCEL and then press OK.

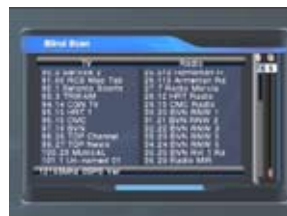


## II-1 & 2.c Blind Scan

*Note: The Signal Quality will not be initially displayed when Blind Scan Option is selected. Quality will be displayed as the receiver locates active transponders.*

1. Freq Step
  - Press OK to list 2, 4, 6, 8, 10MHz steps
  - Select the step size. Press OK
  - Small steps provide detailed scans. Find more / takes longer*
2. Symbol Rate
  - Press OK to list SR ranges: ALL, <8000, >8000, 8000 - 4000, <4000, >4000
  - Select the desired range. Press OK
3. Polarity
  - Press OK to list All, Hor, Ver polarity
  - Select the desired polarity. Press OK
4. Start Frequency
  - Enter start IF between 950 - 2150MHz
  - The satellite tuner will scan the entire range unless modified.*
  - If Blind Scanning with a Standard LNB LO, leave at 950*
5. End Frequency
  - Enter stop IF between 950 - 2150MHz
  - Standard LNB enter 1450 / Universal LNB enter 2150*
6. Search Options
 

*See description on page 17*
7. Search
  - Press OK to scan for new transponders and channels. The process may take an extended time if searching a wide range of parameters.



## III. Options

This section will assist in setting up the receiver with selected languages, time settings, RF output channel, screen size, parental security, etc.

- III-1. **OSD Setup**
- III-2. **Control Panel**
- III-3. **Time Adjust**
- III-4. **Security**



### III-1. OSD Language

Highlight OSD (On Screen Display) Setup. Press OK

1. **OSD Language**
  - Press OK to display list of OSD languages
  - Select the proper Language. Press OK
2. **Audio Languages**
  - Press OK to display list of languages
  - Select a language for each priority. Highlight OK, Press OK
3. **Subtitle Language**
  - Press OK to display list of languages
  - Select a subtitle language. Press OK
4. **Display Information Banner**
  - Press OK to show list of display time-outs
  - Select 2, 4, 6, 8, 10, 12 seconds. Press OK
5. **OSD Position**
  - Press OK to display horizontal/vertical positioning offsets.
  - Select the proper positioning. Press OK
6. **Screen Format**
  - Press OK to display list screen output formats ratios
  - Select proper display type 4:3, 16:9 or 4:3 letterbox mode. Press OK
7. **Channel History**
  - Press OK to display the of number of previous channels for RETURN button.
  - Select the desired quantity. Press OK



## III-2. Control Panel

Highlight Control Panel. Press OK.

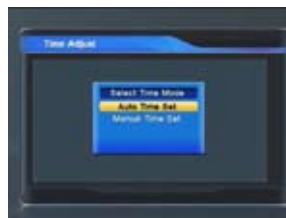
1. RF Channel *sets TV / VCR output channel*
  - Press OK to display output channels 3 or 4
  - Select the desired output channel.
  - Press OK
2. Closed Captioning *enables / disables feature*
  - Press OK to display ON / OFF
  - Select correct mode, Press OK
3. EPG (Electronic Program Guide) Duration
  - Press OK to show length of time for EPG display window listing.
  - Select 60, 90, 120, 150, or 180 minutes.
  - Press OK



## III-3. Time Adjust

Highlight Time Adjust. Press OK.

1. Auto Time Set *synchronizes via the satellite. In the Advanced Mode time will be set to the transponder time of the channel number one.*
  - Press OK to display time zones
  - Select the correct time zone.
  - Press OK
2. Manual Time Set *overrides auto time. Manual time may drift as it relies on a stable AC power.*
  - Highlight Daylight Savings
  - Press OK to display ON / OFF
  - Select the correct time offset.
  - Press EXIT



Year

- Press OK to display list of years
- Select correct year, Press OK

Month

- Press OK to display list of months
- Select correct month, Press OK

Hour

- Manually enter time in a 24 hour format.
- Example: 1:30 pm = 13:30

### III-4. Security

Highlight Security. Press OK. Enter Password (default 0000)

1. Parental Lock
  - Press OK to display ON / OFF
  - Select Parental Control mode. Press OK
2. Parental Level
  - Press OK to display list ratings
  - Select the proper rating level. Press OK
3. Install Lock
  - Press OK to display ON / OFF
  - Select if install menu lock is ON / OFF
4. New Password
  - Enter new password
5. Confirm Password
  - Reenter new password to confirm change



### IV. Utility

This section will assist in reviewing the system information, using the USB 2.0 functions with the DVR1100c, manually setting event timers and resetting the system.

- IV-1. System Information
- IV-2.a USB Firmware / Channels
- IV-3.a Timer - *DSR200c*
- IV-3.b Time Record - *DVR1100c*
- IV-4. Factory Default



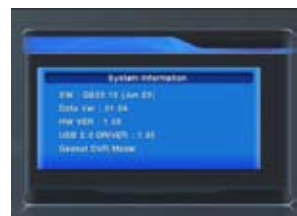
**DSR200c**

**DVR1100c**

### IV-1. System Information

Highlight System Information. Press OK.

This screen provides information regarding the brand, model, software and firmware currently installed in the satellite receiver.





## IV-2. USB

Highlight USB. Press OK.

This menu shows all files that are saved on the connected USB drive.

1. File Loading
  - Highlight correct file. Press OK
  - Select S/W Upgrade, S/W + All Data Upgrade or Boot Loader Upgrade as specified in the text file provided with the data or firmware file.

**Do not load any file that is not provided by Satellite AV or Glorystar specifically for the model. Loading an incorrect file can permanently damage the receiver and void the manufacturer warranty!**

- Press OK to download the file.
2. Saving Channel List or settings
  - Press GREEN button to select save mode.
  - Select Channel Data or All S/W Data
  - Press OK to save the data to attached USB
3. Deleting File
  - Highlight file to be deleted
  - Press BLUE button to delete file.
  - Select OK. Press OK to confirm delete
4. Format the USB Drive
  - Press YELLOW button to Format
  - Select OK. Press OK to confirm Format.



**Warning! Formatting will erase all information on the drive and you will not be able to undo this process! Maximum drive size supported is 500Gb.**

## IV-3.a Timer / Time Record

Highlight Timer / Time Record. Press OK.

1. Number
  - Press OK to display event timers 1 - 10
  - Select timer to program. Press OK
2. Enable
  - Press OK to display YES / NO
  - Select YES to enable. Press OK
3. Number
  - Press OK to display event timers 1 - 10
  - Select timer to program. Press OK
4. Type
  - Press OK to display event frequency
  - Select Once, Daily, or Weekly. Press OK



## DSR200c

### IV-3.a Timer / Time Record - cont.

5. Channel
  - Press OK to display Channel list
  - Select channel. Press OK
6. Month
  - Press OK to display month
  - Select month of event. Press OK
7. Date
  - Press OK to display date
  - Select date of event. Press OK
8. Start
  - Enter the time for the start of the event in a 24 hour mode. Example: 5:30pm = 17:30



**DVR1100c**

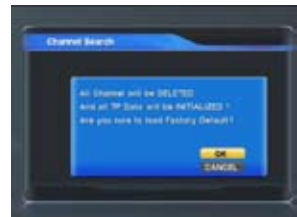
### IV-3.b Time Record - *DVR1100c*

9. Duration - ***DVR1100c Model***
  - Enter the length of time for the event. Entering a duration of 00:00 and the receiver will tune to the selected channel but will not record. Maximum record time is per file is 4GB. The receiver will create additional files and continue recording as long as the drive has empty space. There will be a short interruption (10 - 20 seconds) between stitched file recordings.
  - Press EXIT

## IV-5. Factory Default

Highlight Default. Press OK. Highlight OK then press OK to confirm the resetting of the receiver back to the default setting.

**Warning! A Factory Default will reset the receiver back to the factory settings and eliminate all scanned channels and reset all menu settings!**



## V. Accessory

This section will assist in setting up the receiver for Time Machine recording and defeating the automatic receiver updating via the satellite.

- V-1. Time Machine - *DVR1100c*
- V-2. OTA
- V-3. Smart Card



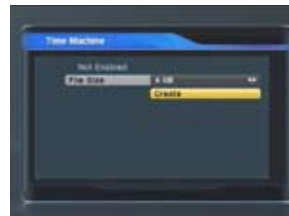
**DSR200c**



**DVR1100c**

## V-1. Time Machine - DVR1100c

Time Machine is an advanced feature on the DVR1100c that will record the current program that you are viewing or listening up to the maximum memory space reserved for the function when a USB drive is connected. Example 1GB provides approximately 1 hour of TV program record time. You may rewind, pause, skip backwards, forward or anywhere within this recording. A new recording begins when the channel is changed. The previous channel recording is recycled and will no longer be available for viewing. Disconnecting the USB will disable the feature.



Highlight Time Machine. Press OK.

- Press OK to display the USB drive space reserved for the Time Machine function. 512MB = 30 minutes, 1GB = 1 hour, 2GB = 2 hour, 3GB = 3 hours, 4GB = 4 hours
- Select Create. Press OK

## V-2. OTA

These receivers can be manually updated with new features and firmware from a satellite. Glorystar channels are automatically added to the channel list. This feature is automatically set to ON by default in the Glorystar mode. If you wish to control the updating process and update manually, turn the OTA feature OFF.

Highlight OTA. Press OK.

- Select Automatic Update
- Press OK to display ON or OFF
- Select OTA Update feature ON or OFF
- Press OK to confirm and EXIT



To manually update the receiver with the newest firmware and or channel lists in the Advanced mode, your dish must be aimed at a satellite carrying the GEOSATpro updating firmware service. Visit [www.GEOSATpro.com](http://www.GEOSATpro.com) to locate the satellite servicing your region. Select UPDATE NOW and press OK to download.

**Warning! OTA Firmware Updates will reload the factory settings, channel list and eliminate scanned channels and reset all menu settings! Save any custom channel lists to a USB drive before updating then reload after completion of the update.**



## V-3. Smart Card

Highlight Smart Card. Press OK.

This screen provides information regarding the reception of subscription based programming with a CAS (conditional access card / smart card).

Insert the subscribed Smart Card:

DVR1100c - Foil contacts facing up

DSR200c - Foil contacts facing down



## DVR Operation - DVR1100c

DVR stands for **D**igital **V**ideo **R**ecorder. Satellite TV and Radio programs can be recorded and played back on the TV with perfect digital quality using an optional USB 2.0 drive. The maximum USB 2.0 drive capacity is 500GB and must be formatted to FAT32. If the drive is not formatted to FAT32, a free software program called SwissKnife ([www.compuapps.com](http://www.compuapps.com)) is available online to format with a PC (MAC computers automatically format as FAT32). Always format a new drive with the DVR1100c before recording (see page 23).

The USB hard drive can also be connected to a MAC or PC for transferring, archiving and viewing the recorded programming. Transfer programs onto your laptop for enjoying programs on the road! Many computer viewing programs are available free online for download. Example: PC - Media Player Classic-Homecinema ([www.mpc-hc.sourceforge.net](http://www.mpc-hc.sourceforge.net)) & MAC - iSkySoft (<http://www.iskysoft.com>).

It is simple to burn digital quality DVD copies of a TV program in just minutes with iSkySoft for MAC and VideoReDo *TVSuite* ([www.videoredo.com](http://www.videoredo.com)) for PC. This software also will rip files so you can enjoy TV and Radio programs on your iPod or MP3 player. VideoReDo will transfer home movies, photos, MP3's onto the USB drive for display on your TV or audio system through the DVR1100c.

### Navigation Buttons



## Recording - DVR1100c

Connect a compatible FAT32 formatted USB 2.0 drive up to 500GB capacity to enable recording functions. For maximum compatibility, the USB drive must be formatted with the receiver when connecting for the first time. Do not use a computer to delete recordings from the drive. Always use the receiver to delete recorded files.

The USB drive may not work if it features power saving sleep functions or automatic data back-up. A current list of verified drives is available at [www.geosatpro.com](http://www.geosatpro.com).

Program recording can be started quickly with the INSTANT RECORD button, PAUSE button or set up as a timed event. If the program title is listed with the EPG (Electronic Program Guide) button, highlight the desired program and press the RECORD button. The program record date, start and duration times will be automatically set.

## Timer - DVR1100c



If no event information is available in the EPG, press the TIMER button and manually set an event timer:

- Event Number: 10 timers available
- Enable a Timer: YES / NO
- Type: ONCE, DAILY, WEEKLY
- Channel: Choose the channel from the Channel List
- Month of the event
- Date of the event
- Start Time: Set in 24 Hour Mode. I.E. 5pm = 12+5=17:00
- Duration: Set the length of recording. A setting of 00:00 will not record, but instead bring the channel on screen for viewing at the preset time. Maximum record time for manual recording setting is limited only by the available free space on the drive.

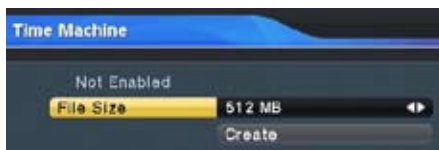
You can often view or listen to other channels while recording. Press the LIST OK button to see a list of available channels that share the same transponder.

## Time Machine - DVR1100c

Time Machine is a function that can be enabled by the customer to allow up to 4GB (4 hours) of programming to be automatically and continuously recorded and available for review as long as the receiver is not in the OFF or STANDBY mode. The selected or viewed satellite channel will be automatically recorded onto the attached USB drive. If the channel is changed, the recording will start again and the previous recorded programming will be erased. Time Machine recordings cannot be saved.

To create a Time Machine partition on the connected USB drive:

1. Press **MENU**
2. Select **ACCESSORY**
3. Highlight **TIME MACHINE**
4. Press **OK**
5. Set File size: **512M** (30 min.), **1G** (1 hour), **2G** (2 hours), **3G** (3 hours), **4G** (4 hours)
6. Highlight **CREATE** Press **OK**



### Program Playback - DVR1100c

Programming can be played back (Time Shift) even while the program is still recording. Most playback controls are available during both recording and playback modes.

To Playback a prerecorded program, press the **PLAY** button to display a list of available recordings. Highlight and press **OK**.

Press the **PAUSE** button any time that you wish to step away from the program.

Press **PLAY** to resume playback.

Miss a telephone number, address or announcement? Press the **30 SECOND** or the **5 SECOND REWIND** button to skip back.

Press **SCAN REWIND** or **SCAN FORWARD** to rapidly scan recordings at 2x, 4x, 8x, 16x or 32x speeds.

The smoothest navigation is when the Program Banner is displayed at the bottom of the screen (Press the **INFO** button). Now press the **LEFT** arrow button to Rapidly skip backward or move towards the start of the recording. Press the **RIGHT** arrow button to rapidly move forward in the recording.

### Delete Recordings - DVR1100c

- Press the **PLAY** button to display the Recorded Program List
- Highlight the program to be deleted
- Press the **BLUE** button to delete

# Installation Guides



Glorystar requires that you carefully read through these pages before beginning the installation.

Save all original boxes, manuals, accessories and packaging materials in case it is necessary to return the merchandise. You have 30 days from the date of delivery to return the equipment for refund or exchange.

Before unpacking or assembly of any item, review the warranty, exchange and refund policy on the back of the Sales Invoice.

Please call Glorystar with any questions regarding your Glorystar equipment or installation

This guide is intended for an individual experienced in performing the various tasks described, including:

- Determining an antenna location with a view of the satellites positions.
- Climbing a ladder and working on your roof.
- Observing safe working practices around heights and electrical hazards.
- Determining if water pipes, gas lines or wires are hidden before drilling.
- Using a power drill to drill holes into your house.
- Routing cable through walls, crawl spaces or attics.
- Safely lifting and securing the 25 lb. antenna assembly.
- Grounding the system as recommended in the National Electric Code.

If you don't feel completely comfortable with these tasks, you may consider contracting the installation with a local satellite technician.

Web site **<http://www.FTAinstall.com>** provides a free referral service for local installers. Please visit today!

## Glorystar System Parts List



Reflector (1)



LNBF ARM (1)



Post (1)



Tripod Support Leg (2)



LNBF Arm Supports (2)



Installation Kit (1)

Satellite Receiver  
and Remote (1)

Dish Accessory Kit (1)



LNBF (1)

## Tools Required



Phillips Screwdriver



1/4" Socket



Drill and Bits



Measuring Tape



Hammer



## Site Survey

If you feel comfortable with drilling holes in the walls and/or roof of your home, climbing ladders, attaching wires to the ground according to NEC and local codes and following step-by-step instructions, you might consider installing your own system.



The satellite is located over 23,000 miles away and the installation does require precise tuning and a great deal of patience to correctly install.

Have you recently installed a light switch, ceiling fan, basketball hoop and programmed a VCR? If not, this project might not be a good time to hone your mechanical and electrical skills!

**To contract a local installer visit: [www.FTAinstall.com](http://www.FTAinstall.com)**

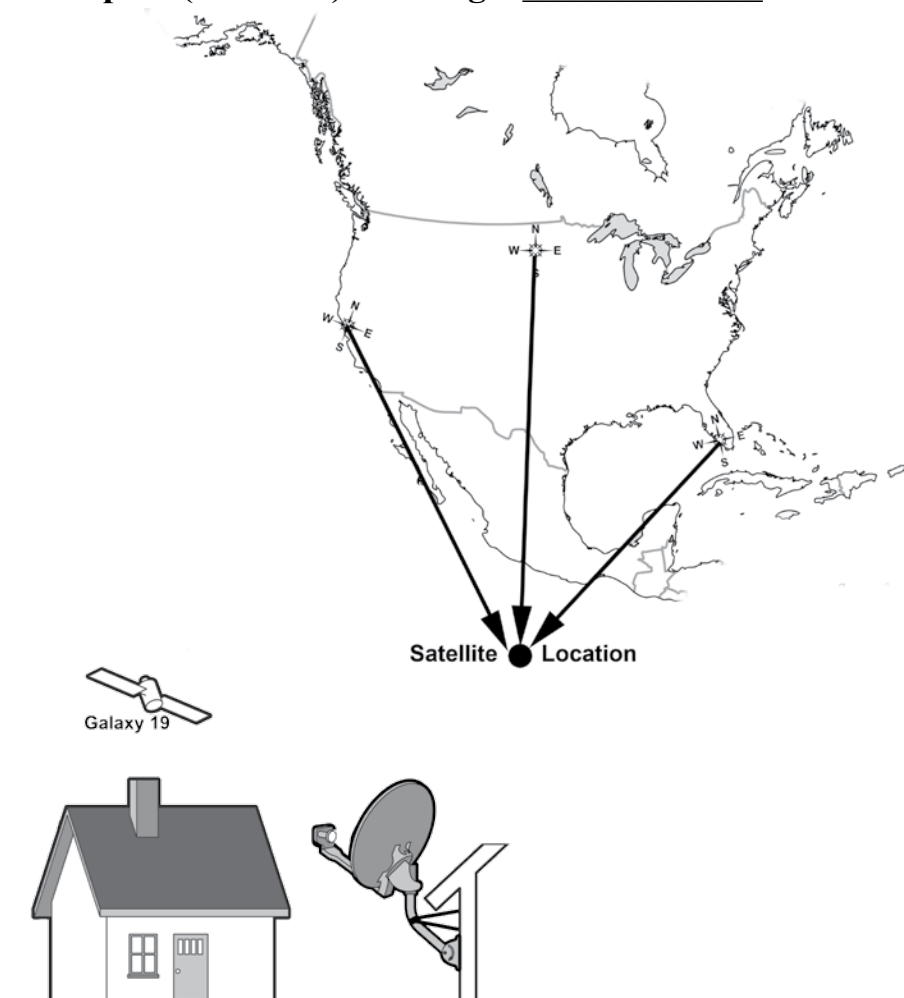
**This web site will introduce you to local professionals, laypersons and also individuals who install Christian satellite systems as an outreach ministry.**

Before assembling any equipment it is important to verify that the installation location has a suitable area to safely and securely mount the satellite dish and have a clear line of site to receive the satellite signal. The satellite dish must be pointed directly at the satellite, with NO obstructions between the two. This means NO trees and NO buildings. Satellite signals will not pass through leaves, limbs, so consider future tree growth, house remodeling or additions and new construction in your area. The dish cannot be installed indoors!

## Where Is The Satellite?

In North America, the dish will be pointed towards the South, Southeast or Southwest. The satellite is located south of Texas and Mexico, directly over the equator. If you live in Miami, you must have a clear line of sight to the Southwest; if you live in San Francisco, you must have a clear line to the Southeast.

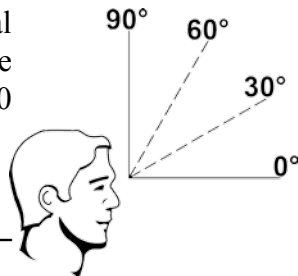
**Compass (Azimuth) Reading:** \_\_\_\_\_



Glorystar Satellite Systems receive channels from Galaxy 19 KU at orbital position 97W. This is not the compass reading! Galaxy 19 is near the same location as the DirecTV main satellite at 101W.

## How High Up in the Sky is the Satellite?

Depending on where you live, the satellite will usually be at an elevation angle between 30 and 60 degrees in North America. Southern US point more toward 60 degrees; northern US point more toward 30 degrees. Northern Canada and Hawaiian elevations can be as low as 10 degrees, but in Central American and the Caribbean, the dishes are aimed almost straight up between 70 - 90 degrees!



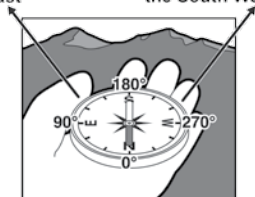
**Dish Elevation Angle:** \_\_\_\_\_

## Where to Mount the Dish?

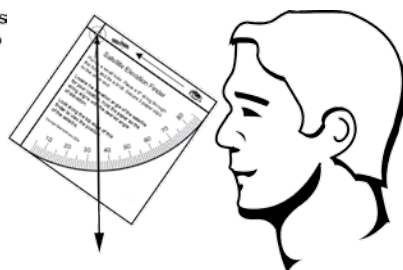
Use the aiming coordinates included with this system or found at <http://www.GeoSatFinder.com> along with a compass and the Site Check Angle Finder found on the last page of this manual to locate a suitable area for mounting the dish. While facing south, hold the compass level in the palm of your hand. With the red needle pointed exactly at North, reference the compass reading. Are there any obvious obstructions? If the line of sight appears clear, continue to the check the elevation angle.

If installing West of Texas  
the satellite is located to  
the South East

If installing East of Texas  
the satellite is located to  
the South West



Compass



Elevation Angle Finder

Sight along the top edge of the elevation angle finder with the weighted string registering the correct elevation angle. Is the line of sight clear with no branches, limbs or tall buildings?

YES



MAYBE

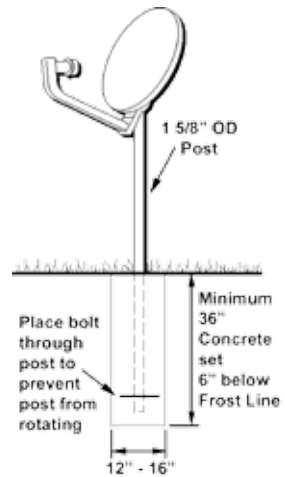


NO

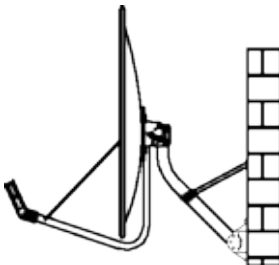


## Dish Mounting Options

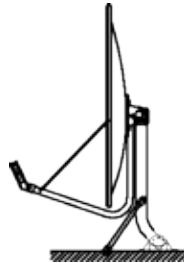
We recommend ground mounting the dish on a 1 5/8" heavy wall galvanized post set in cement. Attach a bolt or muffler clamp to the bottom of the post to prevent the post from twisting in the hardened cement. These items are readily available at any hardware store. Filling the post with a wet cement mixture will provide greater rigidity. The post must be perfectly plumb, level on all sides. Posts standing higher than 7 feet should be stabilized to prevent movement during high winds. The post should be installed in advance of the install as the cement can take 24 - 48 hours to set. DO NOT install the dish on a wooden 4" x 4" post or on a tree. The grain of the wood will twist during dry and rainy seasons causing the dish to swing off of the satellite causing reduced or loss of signal. Take proper precautions to protect the dish from being bumped during yard care or damaged by children at play.



Ground Post Mount



Wall Mount



Roof Mount

The Glorystar system includes a heavy duty universal wall / roof post mount. This mount can be attached at almost any angle and provides a stable secure mount even in high wind regions if properly attached. The tripod legs **MUST** be installed. The universal post will fail under moderate wind load if the tripod legs have not been installed to support the larger wind load area of a 36" dish. The dish and mount are designed to remain operational in winds up to 80+ mph and survive wind gusts over 110+ mph.

## Dish Assembly

Once a dish location has been chosen it is time to set up the dish. Use the large cardboard shipping box as a working surface to prevent damage to the dish components during assembly. We recommend assembling the dish first and then installing on the post mount.



It is important to check the reflector for warping before assembly of the satellite dish.

### Dish Reflector Accuracy

Before assembling the dish it is **Extremely Important** to verify that the reflector was not warped or bent during shipping. Failure to check for dish warping or damage could lead to many frustrating hours of trying to locate the satellite. This simple test may be the most important step in a successful installation!



Bad - Warped Reflector



Good - Reflector

Find a perfectly flat surface such as a garage cement floor and lay the reflector face down. Are the edges of the reflector laying perfectly flat? If any area of the edge is raised by even an 1/8th of an inch reception of the satellite signal will be affected! If you cannot find a perfectly flat surface or if the dish is already installed, perform the string test.

Tape a string horizontally from edge to edge across the center of the dish. Tape a second string vertically from top to bottom on the edges of the dish.

If the strings do not lightly touch in the center, the dish is warped and it must be corrected before aiming the dish.



















To correct a warped reflector, hold the dish like a steering wheel and quickly thrust the reflector away from your body like the motion of passing a basketball. This action will cause the reflector to slightly flex and spring back into the factory pressed shape. Check for correction with the string test. It may be necessary to repeat the flexing process several times until the reflector edges are uniformly flat.



**Important Note:**

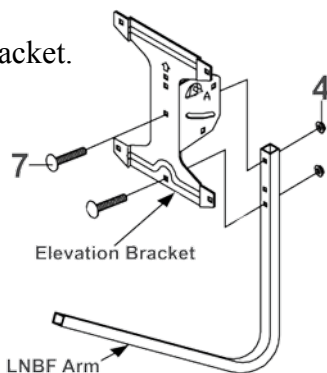
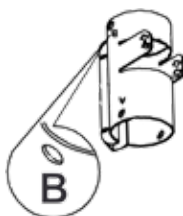
**An assembled dish will not be accepted for refund.**

### GEOSATpro 90cm Dish Hardware

Item	Quantity		Description	Size
1	6		Carriage Bolt	1/4" x 1/2"
2	2		Phillips Screw	M4 - 16m
3	2		Hex Nut	M4
4	13		Hex Nut	1/4"
5	1		Carriage Bolt	1/4" x 1 1/4"
6	1		Structural Bolt	1/4" x 2 1/2"
7	2		Elevator Bolt	1/4" x 1 1/4"
8	2		Washer	1/4"
9	2		Carriage Bolt	1/4" x 3/4"
10	2		Phillips Bolt	1/4" x 1/2"
11	2		Hex Nut	1/4"
12	1		Phillips Bolt	1/4" x 1 1/4"
A	4		Hex Flange Bolt	1/4" x 1/2"
B	1		Hex Nut	1/4"
C	1		Hex Tap Bolt	1/4" x 3 1/2"
D	1		Fastener Insert	

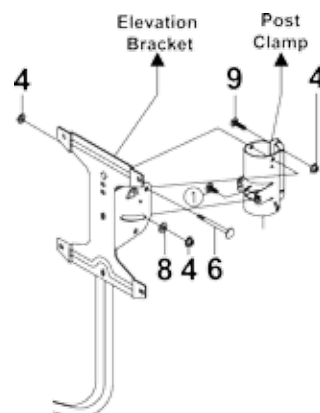
Please contact your reseller if any of these parts are missing or damaged. Most replacement hardware items can be purchased at a local hardware supply store.

Attach the LNBF Arm to the Elevation Bracket.



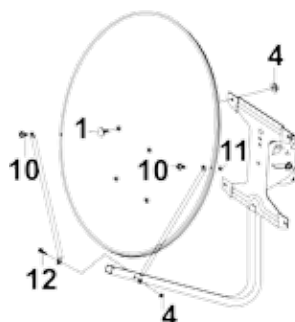
Assemble the Elevation Bracket and Post Clamp. The Post Clamp has two holes drilled. One hole is stamped with an A and the other with a B.

Assemble the Elevation Bracket to the Post Clamp inserting Structural Bolt A (part #6) through the hole stamped A if the Dish Elevation Angle is between 10 - 60 degrees. Assemble using hole stamped B if the elevation angle is to be between 50 - 90 degrees. Most installations in the US and Canada will use Elevation Scale A type assembly. Installations in Mexico will usually use Elevation Scale B assembly.

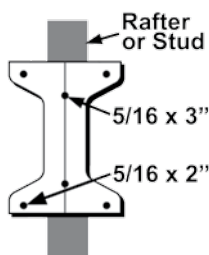


The dish has been correctly assembled for Measuring the Dish Elevation Angle using Scale A (10 - 60 degrees) if a letter B is visible stamped on the Post Clamp on the left side of the Post Clamp.

After verifying the Reflector is not warped, mount the Reflector to the Elevation Bracket and install the two LNBF Arm Side Supports. The Side Arm Supports will perfectly center and support the LNBFs for optimal reception.

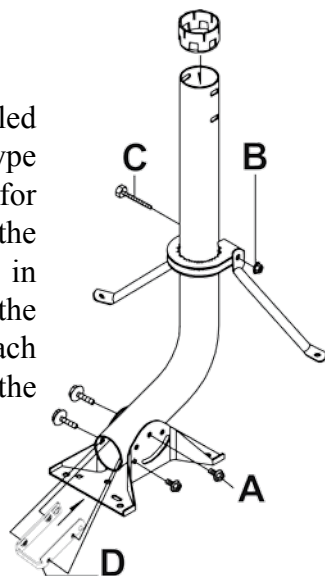


## Universal Post Mount Assembly

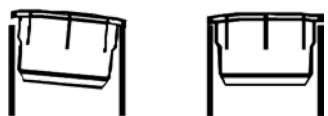


Mount the Universal Post Mount Foot Plate to a wall stud or roof rafter using two 5/16th x 3" lag bolts. Additional 5/16th x 2" lag bolts on the outer edges will increase stability. To prevent water leakage, use the included silicone sealant or other waterproofing product on all wall or roof penetrations.

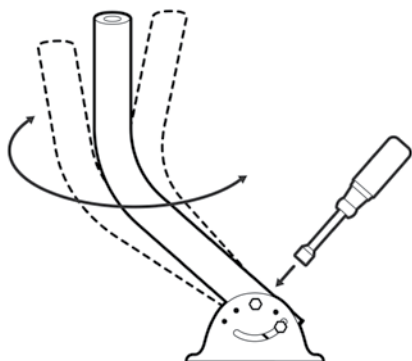
The Universal Post Mount can be assembled for flat and pitched roof or wall type installations. The post has two slots for attaching to the Foot Plate on both ends of the tube. This allows the dish to be mounted in one of two methods. Either with the "J" at the bottom of the post providing a higher reach (as pictured), or the "J" is positioned at the top of the post for greater outward reach.



### Level and Secure Post



Insert the Bubble Spirit Level into the top of the post. Be sure that the level is seated level and flush with the top edge of the post.

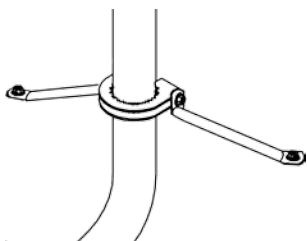
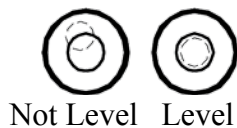


The unique slots in the post tube allows the post to be leveled or made plumb in almost any installation position.

If the post is not exactly plumb, the elevation scale will not be accurate and it will be very difficult to locate the satellite and properly tune the dish for reliable reception.



Center the bubble in the level then tighten the 4 flange bolts to secure the post. It is very important to make sure that the post is perfectly plumb (level on all sides).



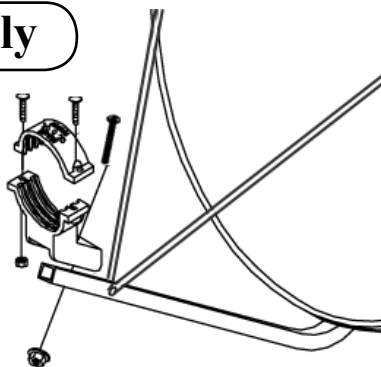
The **Most Critical** step to providing a stable mounting platform for the dish is the installation of the Tripod Support Legs. If the lag bolts cannot be secured directly into a stud or rafter, the legs should be secured into plywood sheeting with either a backing a toggle bolt or to a 2 x 4" that is lag bolted between the rafters or studs.

The legs are required to support the wind load on the universal post mount. Failure to install the tripod support legs will result in collapse of the post even during moderate winds. The post is not designed to solely support the dish without the tripod support legs. If you hire a local installer, be sure that the tripod support legs are installed.

Place the assembled dish onto the top of the post with the Structural Bolt #6 sitting on top of the post. Loosely secure the mast clamp hardware until the dish only moves when applying light pressure to the rotate the reflector.

## LNBF Clamp Assembly

Assemble the single LNBF Clamp and attach to the LNBF arm.



Install the LNBF into the clamp with the white cap facing the dish.

## LNBF Rotation Setting

Set the LNBF Rotation (Skew Angle) to the setting specified in the aiming instructions provided with your system. The LNBF rotates in the circular clamp until the centering line on the top of the LNBF aligns with the LNBF Rotation angle. Each mark indicates 5 degrees.



**LNBF Rotation:** \_\_\_\_\_  
(Skew)



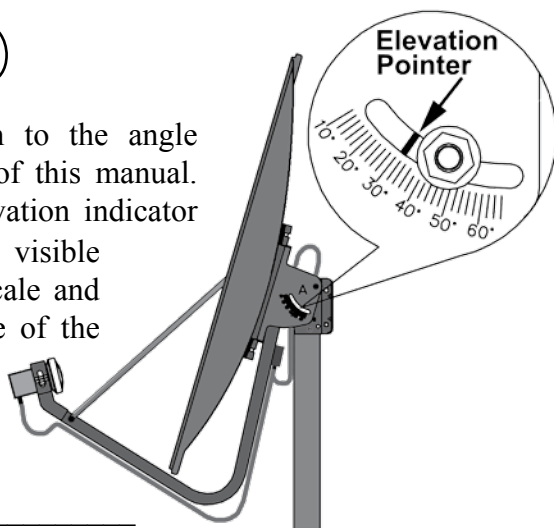
When standing in front of the dish and looking at the back of the LNBF and towards the reflector, rotate the LNBF counter clockwise (left) for a positive (+) LNBF Rotation (Skew) setting and Clockwise (right) for a negative (-) LNBF Rotation (Skew) setting.

**Example: Positive +20°**

## Dish Aiming

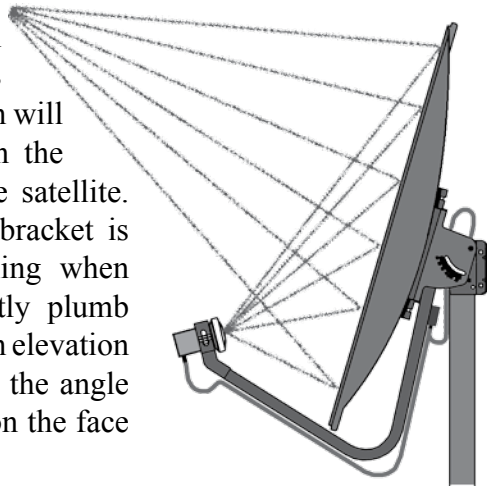
### Elevation Angle

Set the Dish Elevation to the angle provided on the cover of this manual. The pointer for the elevation indicator is a white line that is visible through the elevation scale and is located near the edge of the elevation fastening nut.



**Elevation Angle:** \_\_\_\_\_

When setting the elevation angle on an offset dish, it is important to note that the dish will appear to be aimed lower than the actual elevation angle to the satellite. The scale on the elevation bracket is calibrated for accurate aiming when the post is installed perfectly plumb (leveled on all sides). The dish elevation angle cannot be found using the angle finder on the LNB arm or on the face of the dish.

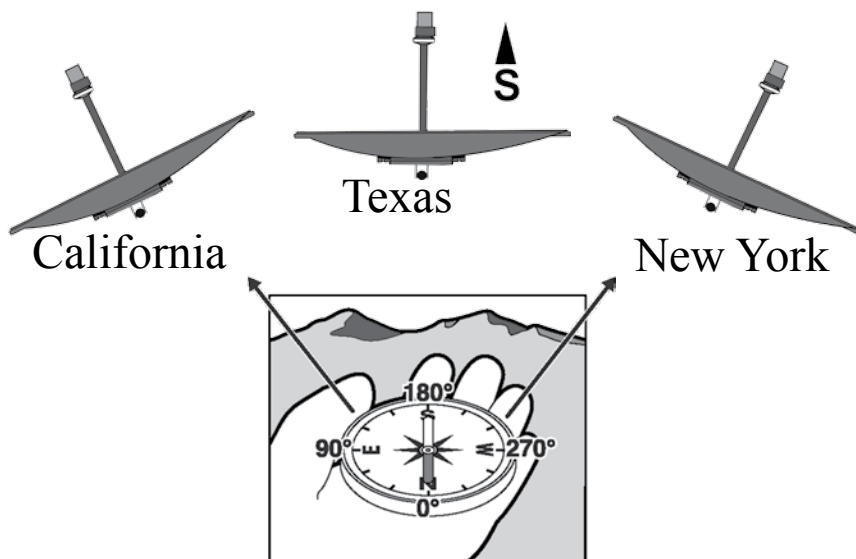


Do not grip the edges of the reflector to adjust the dish. Always hold the dish by the elevation bracket during elevation or azimuth (side-to-side) adjustments. Applying pressure to the edges of the reflector will affect the accuracy of the satellite signal reflection from the dish into the LNB.

Semi-tighten the elevation fastening nuts to hold the dish in position. Do not tighten the fasteners for final setting at this time. Additional adjustment will be needed to locate and peak the satellite signal.

### **Compass Reading: Azimuth**

In North America, satellites are always located South of your location. To correctly aim the dish you must first accurately determine the exact compass reading angle (azimuth). Metals, electricity and other magnetic disturbances can cause the compass to point incorrectly. Compass readings should be made at least 10 feet in front of or behind the metal satellite dish and away from any large metal object such as metal buildings, air conditioners, vehicles, utility and power lines or electrical panels. Check compass reading several times to reduce install time and the need to hunt the entire southern sky for the satellite signal.



Example: Compass Reading 180 degrees.

## Compass Azimuth Reading: \_\_\_\_\_

Identify a reference point on the horizon like a tree, utility pole or other landmark that lines up with the compass reading. Installers often find it easier to align the dish if they can reference an object that has been identified with the compass reading. If you cannot locate a visual reference, stretch a 10 - 20 foot rope out in front of the dish in the direction of the compass reading pointing towards the satellite.

Move directly behind the dish and align the dish so that the LNBF arm is aimed directly at the reference landmark or in line with the rope. Semi-tighten the post clamp nuts, but allow the dish to be just loose enough to be rotated left or right by applying light pressure.

**Need dish aiming coordinates? [www.GeoSatFinder.com](http://www.GeoSatFinder.com)**

## Connect Receiver to a TV

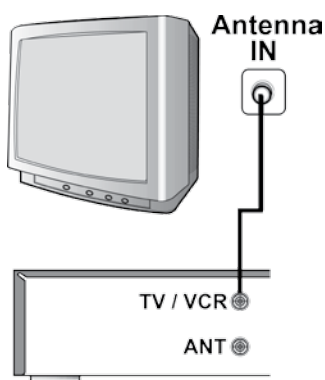


**CAUTION: DO NOT ATTEMPT TO OPERATE ELECTRONIC DEVICES IN AN UNSAFE LOCATION OR IN VIOLATION OF SAFEGUARDS PROVIDED IN THIS MANUAL OR ANY OTHER EQUIPMENT MANUAL PROVIDED WITH THIS GLORystAR SATELLITE SYSTEM.**

Remove the satellite receiver and remote control from the packaging. Inspect the unit before operation. If any equipment is damaged or if you have any questions, please immediately contact Glorystar or your reseller.

The easiest method to aim the satellite dish is to temporarily place the satellite receiver connected to a small television near the satellite dish. This method allows the installer to see the signal changes that occur with small dish movements. It is extremely difficult to install the satellite system if the TV is inside the home and out of the view of the installer. Attempting to communicate the signal readings with a second person viewing the TV can complicate the aiming process!

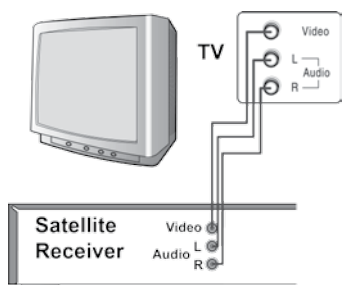
Install the two included AAA batteries into the remote control battery compartment..



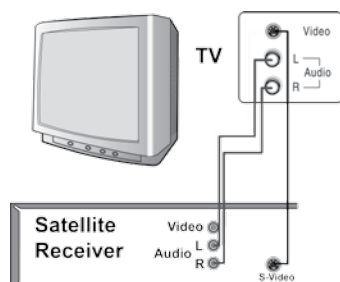
Connect the satellite receiver to the TV. The most basic connection is to locate the included 6' coax jumper with the plastic moulded ends and connect from the TV /VCR port on the satellite receiver to the Antenna connection on the TV. Plug the television power plug into a surge protected AC power strip. Turn the TV power ON and set the TV to channel 3. The TV is now ready to view the satellite receiver.

Plug the satellite receiver's AC power plug into the same power strip. Power ON the Master Power Switch on back of the receiver. The receiver will power on and the front panel will display "boot". The television will display the Language Selection Screen.

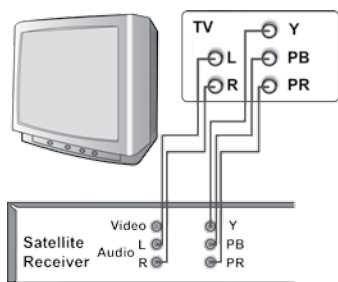
# Receiver Connection Examples



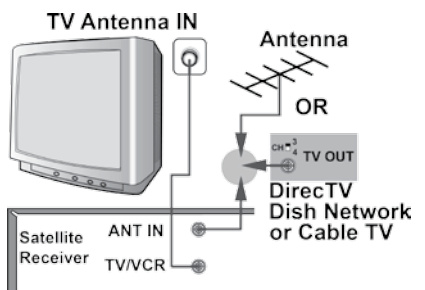
Audio / Video RCA



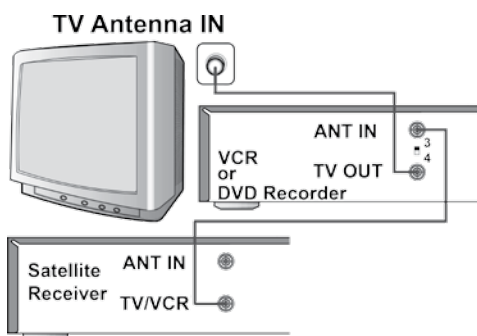
S-Video / Audio RCA



Component Video / Audio RCA



Cable, DirecTV, Dish or Antenna



VCR or DVD Recorder

Please consult the owners manual provided with TV, VCR or other device that will be connected to the Glorystar satellite receiver. The manual will include important connection and operational information. Questions regarding the connection to any other equipment should be directed to the manufacturer of that device.

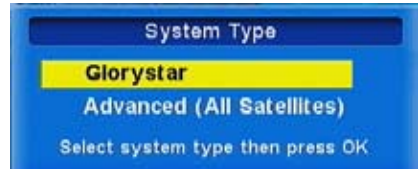
## Activating the Glorystar Receiver



### Remote Control Navigation Buttons

Highlight the language for the receiver menus. If required, press the remote control navigation **DOWN** arrow to select alternative languages. Press **OK** to accept the language and go to next screen.

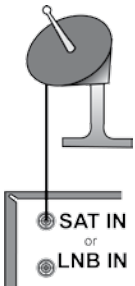
Highlight the System Type **GLORYSTAR**. Press **OK** to proceed to next screen.



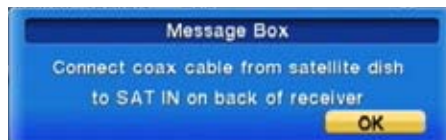
Select your regional Time Zone for automatic time setting. Press the **RIGHT** or **LEFT** arrow and highlight your time zone.

Press the **Down** arrow to select Daylight Savings. Press the **RIGHT** arrow to select ON if

local time is in Daylight Savings Time. The time is automatically set via the satellite at the completion of the install. Press the **Down** arrow to highlight NEXT then press **OK** to go to the next screen.

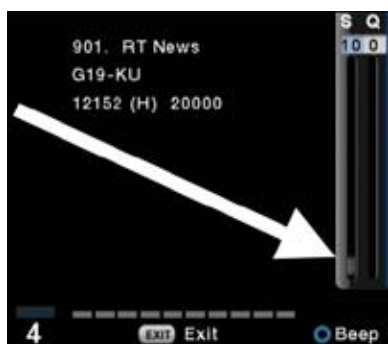


Connect the coaxial cable from the LNBF on the dish antenna to the SAT IN port on the back of the satellite receiver. Press **OK** to proceed to next screen.



The Glorystar receiver will automatically tune to **Channel 901, RT News Channel**. A Signal Strength and Signal Quality meter is now displayed on the connected television screen with a loud beeping sound emitted from the TV speakers. The beeping pitch will change when the correct satellite signal is detected. Now it is time to find the satellite.

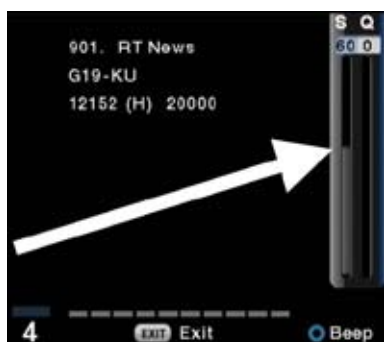
*The Signal Level (S) is important when determining if the receiver is connected to a working LNBF. A Signal Level reading of 50% or higher indicates a connection to a working LNBF, but not indicate finding the correct satellite.*



This screen shot shows a receiver that is not properly connected to the dish. A Signal Level (S) of 0-10% indicates that there is not a good connection between the receiver and the LNBF. Verify that a coax cable is directly attached from the SAT IN port on the rear of the satellite receiver to the LNBF on the satellite dish.

**Do not attempt to use pre wire or previously used coax cables or switches. Do not use splitters for multiple receivers.**

**Splitters DO NOT work!**



A **Signal Level (S)** reading of 50% or better indicates that the receiver is connected to a working LNBF. The low **Signal Quality (Q)** reading at or below 30% indicates that the dish is not properly aimed or the LNBF is not properly rotated to receive the satellite signal.



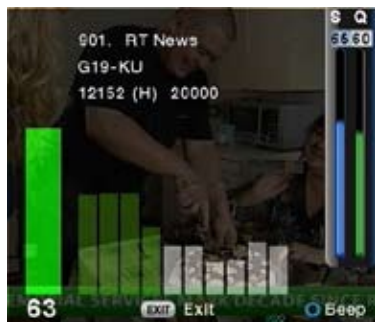
## Locate and Peak Satellite Signal

The Orange Signal Button on the top of the remote toggles the Signal Meter ON/OFF. The Blue Button on the remote toggles the meter beeping sound ON/OFF.

Aim the dish towards the distant landmark which corresponds with the compass reading for the satellite. Observe the Signal Quality (Q) reading on **Channel 901, RT News Channel** and very slowly pan the dish.

If the dish is panned beyond 15 degrees from the satellite compass reading and no Signal Quality (Q) is detected or television programming displayed, return the dish to the starting position then slowly sweep 15 degrees in the opposite direction.

When the correct satellite is found the beeping sound changes to a higher tone and the Signal Quality (Q) bar turns Green. The meter will display an increased Signal Quality (Q) reading. **RT News Channel** programming will be visible.



If no Green Signal Quality (Q) reading is detected, increase or decrease the elevation by one degree increments and repeat the slow sweep. The elevation may need to be adjusted  $\pm 5$  degrees depending on the post being plumb. Move the dish very slowly to allow the receiver to process the signal information. A movement of just 1/16th of an inch can result in a perfect or no signal. This process may need to be repeated many times to aim and peak the quality of the signal.

When the dish is correctly aimed, the **RT News Channel** television programming will be displayed and the Signal Quality (Q) reading will read 50% or higher. A stable level on the 6 second bar graph indicates good LNBF and dish alignment.





Press the CH/DOWN arrow button on the remote control to **Channel 106, 3ABN**. Verify the Signal Quality (**Q**) reading is at least 50% and displaying 3ABN programming. If the Signal Quality (**Q**) is less than 50%, make very small adjustments to fine tune the dish elevation and azimuth (side to side).

Place the receiver on **Channel 113 , Cornerstone TV**. Verify the Signal Quality (**Q**) reading is at least 50% and displaying a picture. If the Signal Quality (**Q**) is less than 50%, make very small adjustments to fine tune the dish.



Slight clockwise or counter clockwise adjustments to the LNBF rotation or sliding the LNBF towards the reflector or away from the reflector may also provide increased Signal Quality (**Q**) readings.

Change between **Channels 901, 106 and 113** and balance for peak Signal Quality (**Q**) readings. The Glorystar system will have the best performance when the Signal Quality (**Q**) Levels are peaked and balanced on all channels and weakest channel has a Signal Quality (**Q**) reading at or above 50%.

If any channel displays a Signal Quality (**Q**) reading below 50%, additional fine tuning adjustments must be made.

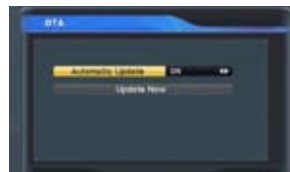
The higher the Signal Quality (**Q**) reading, the better the reception. If the Signal Quality (**Q**) reading is too low, the picture will break up into little squares and the sound may become garbled, out of sync, choppy or disappear completely!

## Updating the Glorystar Channel List

This Glorystar satellite receiver has been preprogrammed with a basic list of channels necessary for installation. Before attempting to update the Glorystar Channel List, verify Signal Quality (**Q**) of at least 50% on **Channel 113, Cornerstone TV**. The Automatic Channel Update feature requires a 50% Signal Quality (**Q**) Reading on Channel 113 and displaying the Cornerstone programming to reliably update the receiver. If the Signal Quality (**Q**) is less than 50% on **Channels 901, 106 and 113**, follow the aiming instructions on pages 47 - 48.

To manually update the receiver with the current list of all available Glorystar channels use this simple **UPDATE NOW** feature.

- Press **Menu**
- Press **Left Arrow** to **Accessory Menu**
- Highlight **OTA**. Press **OK**
- Verify **OTA Update** feature is **ON**  
(if not, press the **Right Arrow** to select **ON**)
- Highlight **UPDATE NOW**
- Press **OK**
- Confirm **Signal: OK** (if fail, adjust the dish following the aiming instructions on pages 47-48)
- Press **OK** to update
- The update will take several minutes. The receiver will restart on Glorystar Channel #1. Leave the receiver tuned to Channel #1 for at least 10 - 15 seconds and the time will automatically be set.

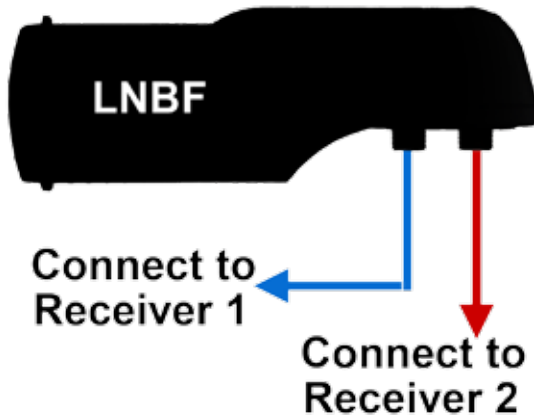


The receiver is now updated with the most current Glorystar channels and each week automatically check for an updated channel list from the satellite.

### Important Notice: Do not turn off Automatic Update!

If the Automatic Update feature is turned OFF, the channel list will not be automatically updated. New features cannot be added to the receiver and the Glorystar informational channels will not be updated with special announcements and new programming.

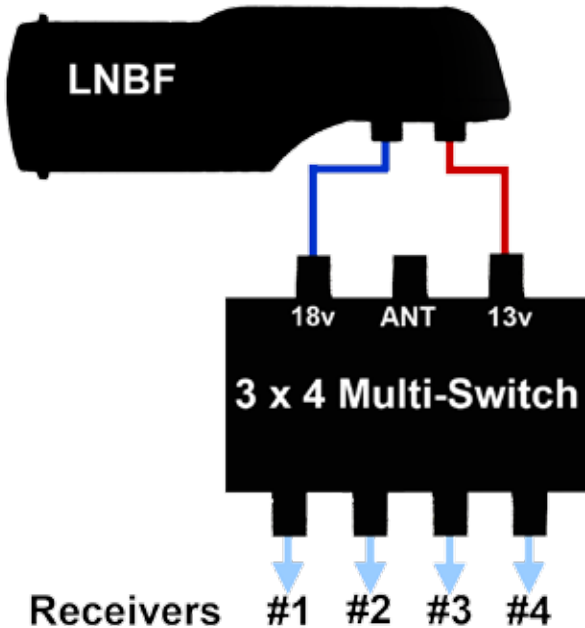
## Two Room Install - (optional)



Do not use existing coax cables or switches. It is not possible use splitters to connect a single output LNBF to multiple receivers.

Splitters **DO NOT** work!

## Multiple Room Install - (optional)



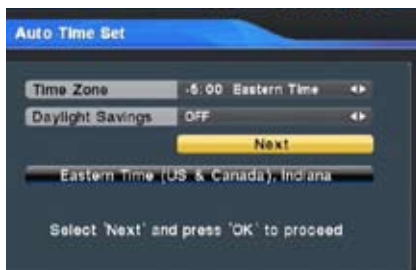
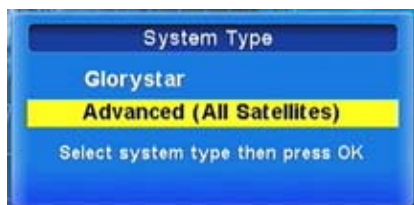
Glorystar systems support multi-room systems for any size of facility. One receiver or hundreds of receivers, Glorystar has a solution!

# FTA Installation Guide

## Advanced / Hobbyist



2. Highlight the System Type Advanced (All Satellites). Press **OK** to accept and go to next screen.



3. Select your Time Zone by pressing the **RIGHT** or **LEFT** arrow.

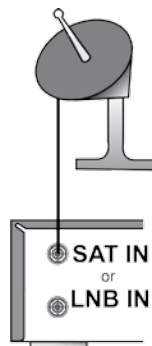
4. Press the **Down** arrow to select Daylight Savings. Press the **RIGHT** arrow to select ON if the current time is in Daylight

Savings Time. The local time will be synchronized via the satellite at the end of the installation from channel one in the channel list.

5. Press the **Down** arrow to highlight NEXT. Press **OK** to accept and go to next screen.



6. Connect the coaxial cable from the LNBF on the dish antenna to the SAT IN port on receiver rear panel. Press **OK** to go to next screen.





7. Press the **RIGHT** arrow to select Installation Menu. Press the **Down** arrow to select Channel Search. Press **OK** to accept and go to next screen.

The receiver must be configured for the satellite that you wish to receive and the satellite equipment that is connected.

Before programming the receiver you will need to know what satellite carries the channels that you wish to receive. If you do not know the name of the satellite, visit [www.satelliteguys.us/thelist/](http://www.satelliteguys.us/thelist/) for a list of satellites and channels. The majority of free channels in North America are found on satellite Galaxy 19 97W (G19-KU). For this installation example, we will use satellite G19 and select an active transponder on that satellite of 12152MHz.

8. Enter **Password** (default **0, 0, 0, 0**)



9. **Satellite** - Press **OK** to display list of satellites. Select the proper satellite (G19-KU). Press **OK**.

10. **TP Frequency** - Press **OK** to list preprogrammed transponders. Select an active frequency (12152). Press **OK**.

Determine the type of LNB that will be connected. The LNB type or LO frequency is normally printed on the LNB label or packaging. A Standard type LNB LO frequency is 10750 and an Universal 1 type LNB LO frequency is 9750/10600. For this example we will use Standard type LO 10750.

11. **LNB** - Press **OK** list LNB LO type or frequency. Select LO type or frequency (10750). Press **OK**

**12. Adjust LNBF Rotation** - Set the Skew Angle to the angle provided with the aiming instructions provided with your system or visit [www.GeoSatFinder.com](http://www.GeoSatFinder.com) to calculate the aiming coordinates for your area. Rotate the LNBF in the circular clamp until the centering line on the LNBF aligns with the LNBF Rotation angle.



**Example: Positive +20°**



Standing in front of the dish looking towards the reflector, rotate the LNBF counter clockwise (left) for a positive (+) LNBF Rotation setting and Clockwise (right) for a negative (-) LNBF Rotation setting.

**13. Adjust Dish** - Aim the dish using the elevation and azimuth coordinates provided with your system or at [www.GeoSatFinder.com](http://www.GeoSatFinder.com). While viewing the Signal Quality (Q) meter reading, Adjust the dish until the highest (Q) reading is displayed. Peak the (Q) reading with slight LNBF placement and rotation adjustments.

**14. Search** - When the Signal Quality (Q) meter is displaying a reading above 50%, Press **OK** to scan for all available Free channels from the preprogrammed transponders. If prompted, press **OK** to confirm changes.



**Not Aimed    Correctly Aimed**



**15. Channel Search Completed** - Press **OK** to save found channels. Press **Exit** two times to exit the menus and view scanned TV and Radio channels.



## Using Satellite Meters

Inexpensive satellite meters can speed up the installation process, but they only display the signal strength of a satellite. It is important to understand that signal strength satellite meters do not indicate if the dish is aimed at the correct satellite and they will not be useful for fine tuning the dish aiming or adjusting LNBF skew (rotation). Signal strength meters must be used along with the satellite receiver to determine if the dish is aimed at the correct satellite.



A digital identification meter such as a SatBuddy or BirDog will simplify the installation process. Please consult with the owners manual for correct operation. We recommend the Super SatBuddy.

### Install Procedure with a Signal Identification Meter

Connect LNBF and use a data set for standard LNB type LO 10750, KU, Galaxy 19 97W, Horizontal and Vertical transponders. Peak and Balance for maximum Signal Quality (**Q**) for G 19. Verify the Signal Quality averaged above 50% on the Glorystar receiver channels 901, 106 and 113. Perform an OTA update following directions on Page 49 of this guide to update the channel list.

**Note:** Birdog meters may have difficulty detecting weaker FSS type signals and must have the BER setting changed in the main set-up menu. Change the BER setting to LOG (logarithmic) and the meter will become much more sensitive to the weaker FSS type satellites.

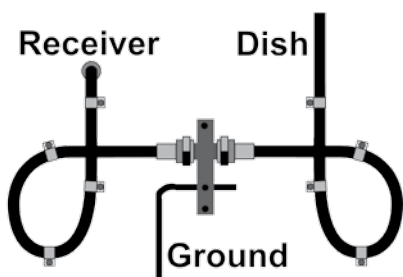
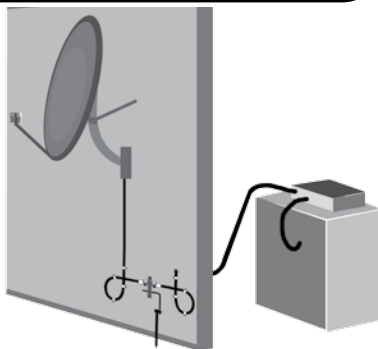
### Professional Installer Tip:

If you are having trouble locating the satellite, remove the Glorystar standard linear polarity LNBF from the clamp and install a DirecTV circular polarity LNBF. Locate the DirecTV 101w satellite with your meter or a DirecTV receiver. Mark the mast and mast clamp with the 101W satellite position. Replace the Glorystar linear polarity LNBF into the clamp and set the skew. Rotate the dish approximately 6 degrees to the East (1/4" on the mast marking). The dish is now roughly aimed and will only require fine AZ/EL tuning for optimal reception of the Galaxy 19 satellite @ orbital slot 97W.



## Completing the Install and Grounding

Carefully route the coax cable from the dish to the ground block then to the satellite receiver. Secure all cables using appropriate cable clips and nylon zip ties. Avoid using wire staples as they can dimple or penetrate the cable and can cause loss of signal! Form drip loops and cable loops as needed to prevent water from running down the cables and entering cable connection fittings or into wall penetrations. Remember to seal all exterior wall and/or roof holes with a quality sealant or silicone caulking.



Install the grounding block and wire while observing all NEC, National Electrical Code and local codes. Connect the ground wire to the structure ground. If you are unsure of how to properly ground your satellite system, please consult with a local professional. Copies of the NEC are available at your local library or online.

**Important Notice:** GEOSATpro recommends that you **DO NOT** use existing coaxial cabling that has been pre-wired or previously used in your home. Often these cables are low quality RG-59, not rated for satellite applications or have splitters and other devices that are not compatible. Always connect the RG-6 type coax cable directly from the satellite dish LNB through the grounding block and attach to the LNB IN Digital connection on the rear of the Satellite Receiver.

Cable splitters and other devices in the coax line may cause the satellite receiver to shut down or malfunction. Do not use any device in the coax line unless approved for satellite installation. Multiple receiver installations must use a multiple output LNB to avoid tuning conflicts between the receivers. Splitters will not work!

## FAQ – Frequently Asked Questions

**How are new Glorystar channels added to the channel list?** The receiver will automatically download any new Glorystar channels during the weekly receiver satellite update. If you do not want the channel list to be automatically updated, see the OTA Updating section on page 25 for instructions on disabling the OTA updating feature.

**Satellite receiver displays “Warning - Do NOT power off Software Download” for more than 1/2 hour.** The satellite signal may have been interrupted during the automatic updating process. Reset Master Power switch on rear of the receiver. Place receiver on channel 1 and press the Signal button on the remote. If the Signal Quality is below 50% the receiver will not update and require dish adjustment.

**Remote doesn’t work but receiver front panel buttons may turn on/off and change channels.** Check batteries. Press any remote key and observe if the remote control POWER button. If the POWER button lights, the batteries should be strong enough to operate. Is the remote aimed at the receiver? The remote will not work through walls, cabinet doors, etc. Reset Master Power switch on rear of the receiver.

**No lights on receiver.** Check power plug make sure that it is plugged into a working electrical outlet. Always plug the receiver into a surge protector power strip to help prevent damage by power line surges and lightning strikes. Reset Master Power switch.

**Receiver displays 50% or better Signal Level (S), but no Signal Quality (Q) on all channels.** The receiver is connected to a LNBF, but the dish might be pointed at the wrong satellite or there may be an obstruction in the line of sight between the dish and satellite. Mounting mast may be loose or moved.

**Meters display 0% signal level and no quality.** Coax not connected from LNBF on dish to SAT INPUT on receiver. Dish not properly aimed. Bad coax, connectors or LNBF failure.

**Picture breaks up into big blocks and the audio is garbled.** The antenna might be slightly out of alignment.. Satellite view partially obstructed. Damaged coax or connections.

**Satellite receiver has a channel number on front panel, but TV displays snow.** Tune TV to channel 3/4 if using the TV/VCR coax cable to attach to the TV and press the OK button on the remote two times. Select the AV, COMPONENT, S-VHS input on the TV if using the these types of connections.

**No audio on any satellite channels.** Set satellite receiver audio level to 75% then use the TV volume control to adjust volume.

**Local or cable TV channels are fuzzy and channel number is displayed on front panel.** Turn off the satellite receiver or press the ANT/SAT button when watching local or cable channels. Loop through function for antenna or cable is only available using the TV/VCR coax connection to a TV. Antenna or cable signal are not passed through the Composite, Component or S-VHS video connectors.

**Picture breaks up during rain and snow.** Heavy rain or clouds may affect the strength of the satellite signal. A properly installed dish will rarely lose signal during extreme weather. Snow or ice build up can interfere with the satellite signal. Mount the dish where snow can be gently brushed off. Dish covers and heaters are available for locations with regular ice and snow accumulations.

**Satellite receiver displays “No Signal” only during very hot or cold weather.** An aging or defective LNBF can drift off frequency and cause the loss of reception during the heat of the day or coolness of the night. Replace the LNBF.

**Satellite receiver displays “No Signal” or the picture breaks up during high winds.** Strong winds can move the dish out of alignment and cause the signal to be reduced or lost. Make sure the mast support legs have been installed and the mast is secure and not moving. Once the mast is stable, follow the aiming instructions to re aim the dish and tighten all hardware to prevent any movement.

**Are more channels available on Galaxy 19?** Many more free channels are available for viewing on this and other satellites. This receiver is capable of receiving the additional free TV and Radio channels on Galaxy 19. Glorystar will only provide the warranty free technical support for the reception of the Glorystar programming in the Glorystar mode. The Automatic channel updating feature (OTA) must be turned off to prevent the weekly OTA automatic updates from erasing the additional channels (see the OTA Updating section on page 25). The customer will be responsible for manually updating the receiver with any new channels or firmware upgrades.

### **Scanning the Satellite for Additional Channels (optional)**

1. Press MENU on the remote control.
2. Press VOLUME RIGHT arrow to enter the Installations Menu.
3. Highlight Channel Search and press OK
4. Enter Password 0,0,0,0
5. Highlight Satellite and select Galaxy 19-KU
6. Highlight Search Options and change setting to Blind Scan
7. Highlight Search and press OK
8. Highlight Search Options and select FTA
9. Highlight Search and press OK to begin satellite scan. This process will take approximately 10 minutes
10. After the Scanning is complete, select YES to save the found channels
11. Press EXIT on the remote to begin viewing channels.

Do not call to activate programming or subscription. All scanned channels are free to air and available with no monthly charge. The receiver assigns channel numbers while scanning; therefore, no uniform channel line-up will be available after a scan is performed.

## **FAQ - DVR1100c**

**Picture is skipping and/or audio jumps during DVR functions.** A USB device may not have enough transfer speed to handle the DVR function. Make sure that the USB device is 2.0 type. Try another USB drive with better processing speed. Thumb drives often cannot process the data and the picture pixilates or freezes.

**Message window displays “NTFS: Not supported” or “Not Hi-Speed” when trying to record.** The connected USB device is not formatted to FAT32 type. Use the receiver USB format function to format to FAT32 type.

## FAQ - DVR1100c - cont.

**USB drive mounts and dismounts repeatedly.** The connected drive has a automatic power saving feature or the sleep function is activated. Follow the directions provided with the drive or provided by the drive manufacturer to disable this function.

**USB drive cannot be formatted to a FAT32 type with the receiver.** A drive may not be compatible with DVR systems. When choosing a drive, verify that the drive is FAT32 compatible (often displaying MAC computer compatibility). Avoid drives with auto back-up or power saving sleep features which cannot be disabled. Drives that are not able to be formatted with the receiver often can be formatted to FAT32 type with a MAC computer or with a PC running a disk utility software such as SwissKnife available for free at [www.compuapps.com](http://www.compuapps.com).

**Message window displays “Not Enough Room” when trying to record.** The connected USB device is either out of file space or the USB drive is entering a power-saving sleep mode. This model may not be compatible with the DVR. Please consult with the drive manufacturer.

***Glorystar customers may purchase an optional telephone technical support contract for an annual fee of \$19.95.***

## Accessories

Your GEOSATpro reseller carries a large selection of satellite accessories and replacement items. Please consider these GEOSATpro accessories for your installation.



Satellite Finder Meter  
Installs Faster, Easier



Replacement LNB  
One or Two Output



Under Eave Mount  
Tile or no Holes Roof Mount



Extra Satellite Receiver  
Replace or Add a Room



Non-Penetrating Roof Mount  
No Holes or Temporary

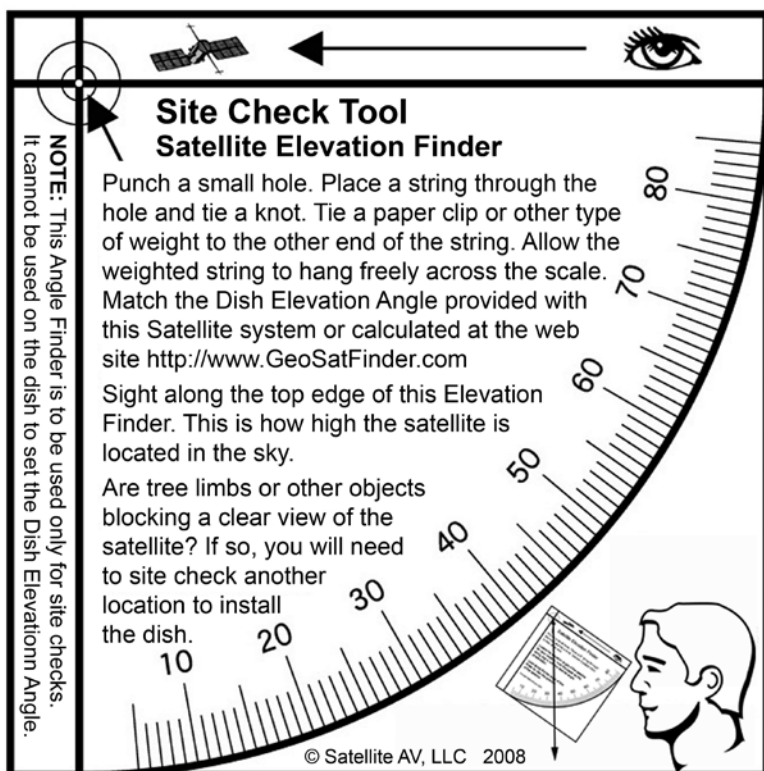


Dish 1.2 Meter  
Reliable Fringe Area Reception

# Cut Here



FOLD  
HERE



FOLD  
HERE