WINEGARD®

TRAV'LER Automatic Multi-Satellite TV Antenna

Models SK-1000 DISH 1000 SK-3003 DIRECTV TRIPLE FEED INSTALLATION MANUAL

Made in the U.S.A.





SK-3003

SK-1000

Congratulations!

You have selected the Winegard® TRAV'LER Automatic Multi-Satellite TV Antenna. The TRAV'LER antenna will deliver the ability to view up to five satellites at the same time with unmatched signal strength, the lowest travel height on the market, maximum HD capabilities and easy to use functionality – just like you get at home. This manual provides important information on the installation and operation of your TRAV'LER Interface Box. Please take time to read the manual in it's entirety before installing or operating your antenna.

Icons appearing in the manual are used for important information and helpful tips.



Alert indicates important information regarding product use, product specifications or procedures.



Important tip offers helpful suggestions or refers you to a related topic in the manual.

Recommended Receivers:

The Winegard® TRAV'LER Automatic Multi-Satellite TV Antenna will work with any DISH Network™ or DIRECTV® receiver currently in production. However, we recommend:

DISH Network: models 311 and 211DIRECTV: models D11 and H20

Each receiver will require at least one coax cable. Refer to receiver manual for wiring details.

NOTE: DISH Network's primary HD satellite, the 129°, may not be available in all areas. Check with your programming provider for coverage in certain areas.

The SK-1000 is compatible with all DISH Network Dish Pro Plus Receivers and the SK-3003 is compatible with all DIRECTV Triple Feed Receivers. Consult your receiver manual or www.winegard.com if you have any questions about whether your receiver is compatible.

Before you begin please make sure you have received all necessary parts to properly install and operate your TRAV'LER antenna.

- Installation/Operation Manual
- Mount Base with 30' Cable Power/Control Cable
- TRAV'LER Interface Box
- Reflector, LNBF & Feed Arm
- 24" AC power cord
- TRAV'LER Power supply
- Gray Coax Cable 30'
- Black Coax Cable 30'
- Mounting Hardware bag
- Cable Entry Hardware bag

Selecting a Location for the TRAV'LER Antenna

Before removing the TRAV'LER antenna from its box, check with your RV Dealer or manufacturer. Your RV may be pre-wired or have a reinforced area for this system. **DO NOT install in a location where a gap of 3/16" or more exists, as it may damage the roof. See diagram at top of page 3.**

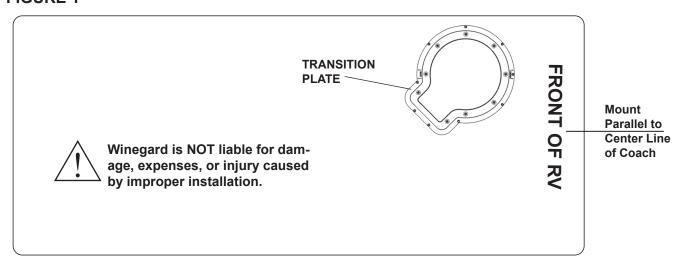


Plan your entire installation before you start. Determine the location of all of your equipment and make sure cable and wires are long enough to reach their destination points.



You must find a location on the roof that provides adequate space to allow the TRAV'LER antenna to operate. The TRAV'LER antenna has a Front and Back and must be mounted correctly to avoid damage to the TRAV'LER antenna or the coach. **The antenna must be mounted +/-3 degrees of level or the system may not function correctly.** The Transition plate for the TRAV'LER unit is marked "FRONT" and "BACK". See Figure 1.

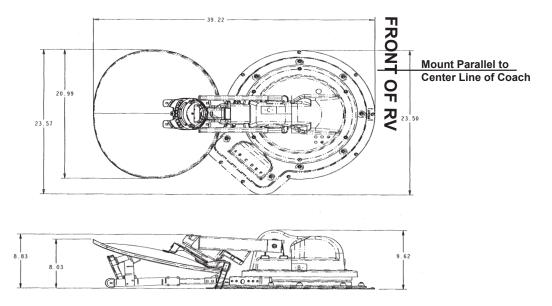
FIGURE 1



Once you have checked for this:

1. Choose a location on the roof of the RV that will allow the dish to raise and rotate without interference from other roof mounted equipment. **The TRAV'LER antenna may only be mounted parallel to the centerline of the coach.**

FIGURE 2



- 2. The minimum roof space required for the TRAV'LER antenna is 43" L x 24" W.
 - a. The operational space requires that no obstructions <u>taller</u> than 8 inches be mounted within a 62" diameter circle from the center of the unit.

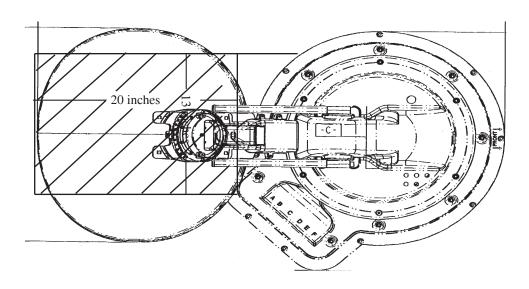
- 3. The unit must be within 3° of level for best operation.
- 4. Make sure that the location offers enough support to attach the TRAV'LER antenna securely.
- 5. Find a well ventilated location with a 110 V outlet for the TRAV'LER Interface inside the vehicle.

Make sure to clean the installation area before you begin.

You will want to decide where the wires will enter the vehicle. One coax cable per receiver and a control cable will need to be run into the vehicle.

Warning: Do not run the wires through the striped area shown. Consult your receiver manual for specifics in the diagram.

FIGURE 3



NOTE: Anything in the striped area will interfere with the operation of the TRAV'LER antenna and may cause damage to the object or the TRAV'LER antenna.

TRAV'LER Mount Installation

Verify that the "FRONT" of the transition plate is facing the front of the vehicle then place the TRAV'LER antenna mount on the roof where you plan to install it and **mark** the screw holes so you can see them. Move the TRAV'LER mount out of the installation area. It is recommended that you **don't** pre-drill theholes.

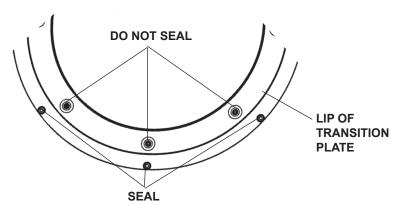
Use a solid bead of sealant to connect these marks in the shape of the base.

Replace the TRAV'LER antenna and screw it to the roof. Check with your vehicle manufacturer for any special screw requirements before using the supplied screws.

FIGURE 4



WARNING: DO NOT cut any wires when you drill the hole for your cables.



Run a solid bead of sealant around the transition plate, making sure to cover each screw head. Be careful not to get any sealant above the lip of the transition plate. See diagram of transition plate.

Cable Entry Plate Installation:

Decide the best location for the cables to enter the vehicle.



Winegard recommends installing the Accessory Detect Cable, this can provide a emergency stow function.

You will need to run:

A coax directly to each receiver location.

A control cable to the TRAV'LER Interface box.

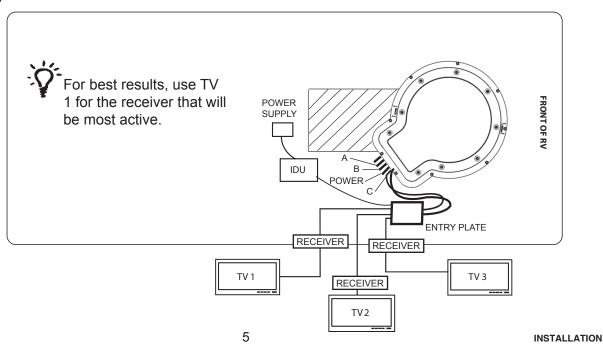
Drill a 1/2" hole in the roof and push the required wires through. (Installations for multiple receivers may require a larger hole or multiple holes as each receiver requires a dedicated coax cable.) Each receiver will require at least one coax cable. See receiver manual for wiring details.

Place the cable entry plate supplied in hardware bag over the hole and cables. Screw the plate in place and seal the plate and screw holes with approved sealant (not included).

Depending on the length of the cable on the roof, you may need to use cable clamps between the unit and your cable entry plate. Clamping every 12-16" should eliminate any unnecessary cable movement.

FIGURE 5

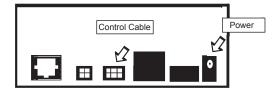
OVERALL INSTALLATION DRAWING



Cable installation:

Connect the control cable and power cable to the back of the TRAV'LER Interface box as shown below. **Note:** For cable runs longer than 25' an extension may be purchased. Do not exceed 50' of cable.

FIGURE 5



Attach the TRAV'LER control cable to the TRAV'LER Interface Box, as shown in Figure 5.

Attach the output cable from the Power supply to the TRAV'LER Interface Box. See above.

Finally, connect a coax cable from the TRAV'LER mount to each of the receivers being used with the TRAV'LER Automatic Satellite Dish. See Appendix for information on properly installing a Hex Connector.

Find a location to plug in the TRAV'LER Power supply and plug it in.

Reflector Installation:

Once the wires are run and the sealant has started to cure:

Check to be sure that there is nothing above the TRAV'LER that might prevent it from raising. You will need at least 40" of clearance above the TRAV'LER Mount to ensure that you have room to install the reflector.

Steps 1-7 explain how to use the TRAV'LER Interface box to raise the mount to install the reflector.

1. Press [POWER] and hold for 1 second to turn "ON" the TRAV'LER Interface Box. Wait until the Interface Box finishes "connecting to antenna".

UPDATE: You have "10 SECONDS" to do Step 2 or, the "Search Routine" starts. (See NOTE)

- 2. Press [ENTER] and hold for 2 seconds or until the unit enters its Menu Mode.
- 3. Press [SELECT] to move the asterisk to [INSTALLATION].
- 4. Press [ENTER]. You will be asked to provide a code to enter the Installation Menu.
- 5. Press [ENTER] 4 times to enter code 0000.
- 6. Press [SELECT] to move the asterisk to [RAISE DISH].
- **7. Press [ENTER]** the **TRAV'LER mount** will raise up about half way, to make it possible to **attach** the reflector.

NOTE: If the TRAV'LER enters the "Search Routine" you can still enter the "Menu Mode". See steps A & B.

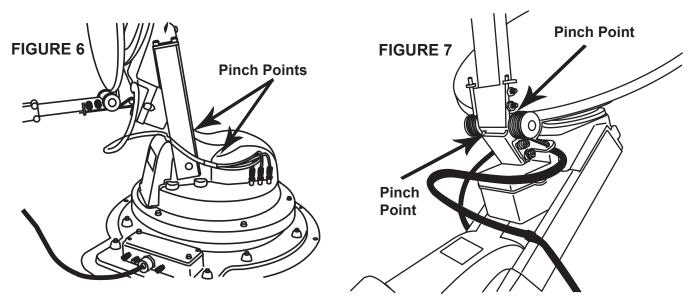
If the TRAV'LER Mount rises past 1/2 way before [RAISE DISH] is selected (See Step 6) the TRAV'LER will hit its Upper Hard Stop and "Motor Stall" appears. This is Normal!

The "Motor Stall" means the TRAV'LER is all the way up & mount can rise no more. There are two easy ways to clear the "Motor Stall". Either is okay. (See Steps A & B).

A. Press [ENTER] the TRAV'LER will return to the "Installation Menu" or

B. Press [POWER] the TRAV'LER will stow and turn "OFF" (Restart at Step 1).

WARNING: Pay attention to these Pinch Points as the antenna raises.



Using the (4) bolts and nuts provided, attach the reflector to the mounting bracket.

Press [POWER] to lower the antenna to the travel position. Note: The nuts securing the dish should be tightened to 6-8 lb.ft.

Receiver Setup:

If you are not able to see all of your channels or the receiver displays an error, it may be necessary to go through the receiver set up once the TRAV'LER has finished a successful search.

For DISH Network users:

First, access your Signal Strength screen: Press MENU button. Select "System Setup" (6), "Installation" (1), "Point Dish/Signal" (1).

Next perform a Check Switch: You won't need to perform this test again, unless check switch is performed on another dish.

- 1. From the "Point Dish/Signal Meter" Screen, use arrow buttons on remote to select "Check Switch".
- 2. Select "Test" on this screen to begin.
- 3. This test should find A DPP 1K.2 switch.
- 4. Select "Cancel" from each menu until you are watching television.

Note: The Procedure may change subtly from model to model, please consult your receiver manual for details.

For DIRECTV users:

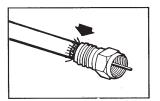
Please refer to your Receiver Manual to enter the Guided Setup, using oval dish three satellite locations for antenna type.

Appendix:

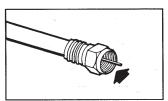
Making the Right Connection with FC-5910 Hex Connectors

Making a coaxial cable connection is critical. If you have the basic technique right you can modify it to your own personal taste. Whether you use a knife, stripping tool or diagonal cutter, the important thing is to make a good clean cut. A hex crimping tool is required for hex connectors, for maximum RF transmission.

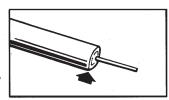
As mentioned before, the choice of tools is yours. Be sure you do a precise job. Failure to do so can cost you time and money in trying to locate a system problem.



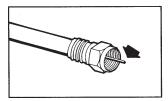
Slide FC -5910 connector onto coax. Trim off excess braid.



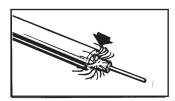
Look into end of connector to make sure no braid or aluminum foil touches or has the possibility of touching the center conductor. Shorting can result if either comes in contact with center conductor. Close crimping tool making correct crimp.



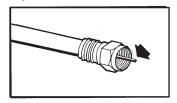
Cut the cable flush. Strip the outer jacket off 1/2", then trim the dielectric by cutting partially thru. DO NOT NICK THE CENTER CONDUCTOR! Twist and pull off leaving a 1/2" minumum of exposed center conductor.



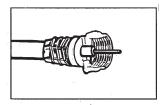
IN HOT WEATHER: Trim off center conductor leaving 3/16" beyond the connector. The center conductor expands at higher temperatures. If a little extra is not provided, it may contract enough in the winter to create an open connection and result in loss of picture.

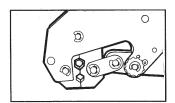


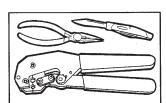
Remove additional 1/4" of the outer jacket.Pull the braid away from th dielectric and fold over the jacket. If there's any residue on the center conductor scrape off with non-metallic chiect



IN COLD WEATHER OR INDOORS: Trim off center conductor leaving it extended 1/16" of an inch beyond the connector. (Use diagonal pliers for cutting center conductor).







DO NOT paint this antenna!
Painting the TRAV'LER antenna
will void your warranty.

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WINEGARD MOBILE PRODUCTS LIMITED WARRANTY (2 YEARS PARTS; 1 YEAR LABOR)

Winegard Company warrants this product against defects in materials or workmanship for a period of two (2) years from the date of original purchase. During year one (1) of such warranty, Winegard Company will also pay authorized labor costs to an authorized Winegard dealer to repair or replace defective products. No warranty claim will be honored unless at the time the claim is made, Customer presents proof of purchase to an authorized Winegard dealer (to locate the nearest authorized Winegard dealer, contact Winegard Company, 3000 Kirkwood Street, Burlington, Iowa 52601, Telephone 319-754-0600 or visit www.winegard.com). Customer must provide proof of purchase with a dated sales receipt for the Winegard product to verify the product is under warranty. If the date of purchase cannot be verified, the warranty period shall be considered to begin thirty (30) days after the date of manufacture.

If a defect in material or workmanship is discovered, Customer may take the product to an authorized Winegard dealer for service. Customer must provide proof of purchase to verify the product is under warranty. If the product is brought to an authorized Winegard dealer for service prior to expiration of year one (1) of the warranty period and a defect in material or workmanship is verified by Winegard Technical Services, Winegard Company will cover the Winegard dealer's labor charges for warranty service. The Winegard dealer must contact Winegard Technical Services in advance for pre-approval of the service. Approval of the service is at the sole discretion of Winegard Company.

Alternatively, Customer may ship the product prepaid to Winegard Technical Services (located at 3000 Kirkwood Street, Burlington, Iowa 52601, Telephone 319-754-0600). Customer must return the product along with a brief description of the problem and provide Winegard Technical Services with Customer's name, address, and phone number. Customer must also provide proof of purchase to verify the product is under warranty. If the product is returned before the expiration of the warranty period, Winegard Company will (at its option) either repair or replace the product.

This Limited Warranty does not apply if the product has been damaged, deteriorates, malfunctions or fails from: improper installation, misuse, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Winegard in any manner whatsoever, removing or defacing any serial number, usage not in accordance with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain.

RETURN AUTHORIZATION POLICY

A Return Material Authorization (RMA) is required prior to returning any product to Winegard Company or Winegard Warranty Services under this warranty policy. Please call our Technical Services Department at (800) 788-4417 or send an e-mail to warranty@winegard.com to obtain the RMA number. Please furnish the date of purchase when requesting an RMA number. Enclose the product in a prepaid package and write the RMA number in large, clear letters on the outside of the package. To avoid confusion or misunderstanding, a shipment(s) without an RMA number(s) or an unauthorized return(s) will be refused and returned to Customer freight collect.

WINEGARD COMPANY DOES NOT ASSUME ANY LIABILITIES FOR ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, MADE BY ANY OTHER PERSON.

ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE LIMITED TO THE TWO YEAR PERIOD OF THIS WARRANTY.

In states that do not allow limitations on implied warranties, or the exclusion of limitation of incidental or consequential damages, the above limitations or exclusions do not apply.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives Customer specific legal rights. Customer may also have other rights that may vary from state to state.

SATELLITE RECEIVER WARRANTY:

See manufacturer's limited warranty policy.

WINEGARD®

TRAV'LER...

Automatic Multi-Satellite TV Antenna

Models SK-1000 DISH 1000 SK-3003 DIRECTV TRIPLE FEED OPERATION MANUAL

Made in the U.S.A.







SK-1000

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Important tip offers helpful suggestions or refers you to a related topic in the manual.

For Winegard Warranty Information:

Att: Technical Services Winegard Company 3000 Kirkwood St. Burlington, IA 52601 800-788-4417

Disclaimer

Although every effort has been made to insure the information in this manual is correct and complete, no company shall be held liable for any errors or omissions in this manual. All information contained in this manual is subject to change without notice. No warranty of any kind is made with regard to the information included in this manual. The Satellite Interface is designed specifically for use with motorized recreational vehicles and information contained herein is provided for that purpose only.

Trademarks

*Winegard, TRAV'LER is a trademark of Winegard Company. DISH Network is a registered trademark of EchoStar Satellite L.L.C. DIRECTV is a registered trademark of DIRECTV, Inc., a unit of Hughes Electronics Corp. ExpressVu is a registered trademark of Bell Canada, Inc. All trademarks contained in this manual are property of their respective owners. Reference made to products or services provided by companies, other than Winegard Company, does not represent any endorsement of those products or services.

Operation

The TRAV'LER offers a simple one button operation that is also protected from accidental searches by a careful delay. Simply pressing the [Power] button will not start a search.

To start a search:

Press and Hold [Power] for two seconds or until the TRAV'LER interface displays "POWER ON".

WINEGARD COMPANY

POWER ON

Now the power is ON and the button may be released.

CONNECTING

TO ANTENNA

Once the power is on, the TRAV'LER interface will try to determine the type of dish that it is working with. The TRAV'LER Interface will display the type of satellite dish on the top line and the action it is taking on the bottom. See below.

DIRECTV USERS

DIRECTY TRIPLE

READY MULTI-SAT

DISH NETWORK USERS

DISH 1000

READY MULTI-SAT

The TRAV'LER will enter the search mode as part of its normal operation. The first part of the search is for the TRAV'LER to find its "Home" position. Once it finds it home position it will begin to look for a satellite.

DIRECTY TRIPLE

HOME EL

DISH 1000

HOME EL

DIRECTY TRIPLE

HOME AZ/SK

DISH 1000

HOME AZ/SK

When the TRAV'LER finds a satellite it will fine tune or "Peak" on the signal and determine which of the satellites it has found. Once the TRAV'LER knows which satellite it has found, it can move directly to the correct satellite(s).

The TRAV'LER in its automatic search mode will lock onto three different satellites. As it finishes its search, the TRAV'LER will display an "*" for each of the satellites it found. See below.

DIRECTV TRIPLE

*101 *110 *119

DISH 1000

*110 *119 *129

Now you are ready to watch TV.

Ready to Travel?

To stow the unit when you are ready to travel:

Press [Power] one time.

DIRECTV TRIPLE
STOWING

DISH 1000 STOWING

The unit will stop what it is doing and begin to return to the stowed position. This takes about two minutes. The TRAV'LER Interface WILL NOT TURN OFF unless the TRAV'LER mount is successfully stowed.

Manual Mode:

The TRAV'LER is an extremely versatile satellite antenna and can be manually set to find many different satellites individually. **NOTE: This function is rarely used.**

To enter the Manual Search Mode while the TRAV'LER is stowed:

Press the [Power] button and hold it for two seconds to turn the unit on. While the Trav'ler Interface reads:

WINEGARD BURLINGTON
POWER ON

Press and hold the [Enter] button for two seconds.

The TRAV'LER Interface will ask if you wish to enter the User Menu:

ENTER USER MENU
YES *NO

Press [Select] to choose YES and then press [Enter].

The User Menu consists of four choices:

Search Mode Diagnostics Installation Exit

NOTE: Diagnostic and Installation Menus are not required for normal operation and should only be entered by a trained professional.

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To use the Manual Search Mode to select a specific satellite, choose Search Mode by pressing the [Enter] button.

Once in the Search Menu you may choose from:

MULTISAT MODE (The normal search mode)

MANUAL 61

MANUAL 72

MANUAL 82

MANUAL 91

MANUAL 101

MANUAL 110

MANUAL 119

MANUAL 129

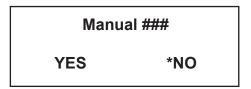
MANUAL 148

MAIN MENU (returns to the User Menu)

EXIT (Enters the Search Routine)

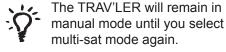
Press [Select] to cycle through each of these satellites until the asterisk is next to the satellite you wish to find. Then press [Enter].

The TRAV'LER Interface will ask you to confirm the change:



Press [Select] to move the asterisk to YES.

The Trav'ler Interface will acknowledge your selection and ask:





Pressing [Enter] or choosing YES, will stow the TRAV'LER and turn it off.

Pressing [Select] then [Enter] or choosing NO will start a new search for your chosen satellite.

EMERGENCY OFF:

The Winegard TRAV'LER antenna comes with an emergency Power Off feature. To activate it, press and hold [POWER] and then press [SELECT] while still holding [POWER]. The TRAV'LER antenna will stop where it is and turn off.

If the Emergency Power Off is used, the TRAV'LER antenna may not be in a safe position for travel. **DO NOT MOVE THE VEHICLE UNTIL YOU ARE ABLE TO STOW THE UNIT.**

For ExpressVU Users:

To enter the Installation Menu:

while the TRAV'LER is stowed.

Press the [Power] button and hold it for two seconds to turn the unit on. While the TRAV'LER Interface reads:

WINEGARD BURLINGTON
POWER ON

Press and hold the [Enter] button for two seconds.

The TRAV'LER Interface will ask if you wish to enter the User Menu:

ENTER USER MENU
YES *NO

Press [Select] to choose YES and then press [Enter].

The User Menu consists of four choices: Search Mode Diagnostics Installation

Exit

Press [Select] to move the asterisk to INSTALLATION then press [Enter]. the TRAV'LER Interface will ask for a code. Enter 0000.

Make sure the asterisk is next to SELECT ANTENNA then press [Enter].

The TRAV'LER antenna may be set for:

DISH 1000 DIRECTV TRIPLE DIRECTV SLIMLINE EXPRESSVU

Press [Select] to move the asterisk to EXPRESSVU then press [Enter]. The TRAV'LER Interface will ask you to confirm the change:

EXPRESSVU YES *NO

Press [Select] to move the asterisk to YES.

TROUBLESHOOTING: ERROR CODE:

POSSIBLE SOLUTION:

LKKOK CODE.	1 0001522 0020 11011.
"ANTENNA CONNECTION FAILED"	Check the data cable connection on the back of the Trav'ler Interface. It may not be connected properly.
"EL MOTOR HOME FAILURE"	Something is preventing the TRAV'LER Mount from raising as it attempted to find the HOME position, look for obstructions.
"AZ MOTOR STALLED"	Something is preventing the TRAV'LER Mount from rotating, look for obstructions. If no obvious obstruction, contact Winegard Technical Support 1-(800) 788-4417
"EL MOTOR STALLED"	Something is preventing the TRAV'LER Mount from raising or lowering, look for obstructions. If no obvious obstruction, contact Winegard Technical Support 1-(800) 788-4417
"SK MOTOR STALLED"	Something is preventing the TRAV'LER reflector and LNBF from rotating, look for obstructions. If no obvious obstruction, contact Winegard Technical Support 1-(800) 788-4417
"STOW FAILURE ANT NOT STOWED"	The TRAV'LER is not stowed. Do not try to move the vehicle. Try to stow the Trav'ler again. If it fails again, check for obstructions.
"STOW FAILURE STOW UNKNOWN"	Check the data cable connection on the back of the Trav'ler Interface. It may not be connected properly.
"AZ MOTOR RUN REVERSE"	Contact Winegard Technical Support 1-(800) 788-4417
"EL MOTOR RUN REVERSE"	Contact Winegard Technical Support 1-(800) 788-4417
"SK MOTOR RUN REVERSE"	Contact Winegard Technical Support 1-(800) 788-4417
"AZ MOTOR RUNAWAY"	Contact Winegard Technical Support 1-(800) 788-4417
"EL MOTOR RUNAWAY"	Contact Winegard Technical Support 1-(800) 788-4417
"SK MOTOR RUNAWAY"	Contact Winegard Technical Support 1-(800) 788-4417
"NO LNB VOLTAGE"	The TRAV'LER is not seeing the required 12-18VDC needed to power the LNBF. Check the coax connections. If these are all connected properly Contact Winegard Technical Support 1-(800) 788-4417
"UNKNOWN ERROR ######"	Contact Winegard Technical Support 1-(800) 788-4417
"DC MOTOR NOT FOUND"	Contact Winegard Technical Support 1-(800) 788-4417



Note: Weather and vehicle location can impact the ability of the TRAV'LER to locate all of the required satellites.



The Dish 1000's 129 satellite is not available in all parts of the country and rain or snow will reduce the strength of the 129 satellite. Winegard recommends checking with DISH Network for coverage areas.



Obstructions such as buildings or tree limbs can block the satellite signals and prevent the TRAV'LER from successfully locating all of the satellites for Multi-Sat Mode. Make sure you have a clear view of the Southern sky.