IMPORTANT!

The satellite TV market is expanding and changing. The information in this manual was accurate at the
time of printing. If your Trac-King does not operate as outlined in this manual please call King Controls
at (800) 982-9920 or visit our website at www.kingcontrols.com.

DISH NETWORK™ - EXPRESSVU: If you plan to use the Trac-King with Dish Network or ExpressVu
programming, your receiver must be configured (see pages 8-9).

DIRECTV®: This Trac-King is factory ready to receive available HDTV programming from DIRECTV Ku
band satellites at 101° and 119°. This Trac-King will also receive available HDTV programming from the
DIRECTV Ku band satellite at 110°, but must include a properly installed HD converter accessory #9747.
It will not receive channels broadcast from DIRECTV's Ka band satellites at 99° and 103°.

Note: The following upgrade kit is available for this unit:

Upgrade Kit #9747: Enables viewing of HD broadcasts from the DIRECTV 110° satellite.

For more information, call the King Controls Sales Department at (800) 982-9920.

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ELECTRICAL HAZARD WARNING!

The coax cable that connects the dome unit to the tuner carries a 24 volt electrical current.
Exercise extreme caution when handling this cable. Do not cut, break, or splice this line.
Do not insert or connect any devices such as splitters or any other device for any reason.
This line is not compatible with any other equipment. Damage will occur to any device other
than the dome unit if connected to the antenna port on the tuner.

DIRECTV® is a registered trademark of DIRECTV, Inc.
Dish Network™ is an official trademark of Echostar Communications Corporation.
Bell ExpressVu is an official trademark of Bell Canada.
DVB® is a trademark of the DVB Digital Video Broadcast Project (1991-1996)
1. Turn on TV and satellite receiver. “Searching for Satellite Signal” or similar should appear on TV.

2. Press **ON**

   Unit powers up, performs a self-diagnostic and loads software.

   Unit begins searching for the selected satellite.

   Unit has locked onto the selected satellite.

Note: The Trac-King must remain powered on to maintain a signal. If you are going to be stationary and wish to continue watching TV, **DO NOT TURN THE SYSTEM OFF.**

IMPORTANT! There must be a clear “line of sight” to the satellite. Mountains, buildings, trees, telephone poles, etc. can all block the satellite signal from reaching the dish.

Note: This example is for the DTV 101 satellite in Region 2-North Central. The information on your controller will vary depending on the satellite and region you have chosen (see pages 4-5).
AUTOMATIC SATELLITE SWITCHING

DIRECTV: Before using the automatic switching feature, you must configure the Trac-King and your receiver for your desired option. For switching options see pages 6.

Dish Network - ExpressVu: Before using the automatic switching feature, you must configure the Trac-King and your receiver for your desired option. For switching options see pages 7.

Your receiver may have already been configured for automatic satellite switching by the installer. You can determine this by looking at the Check Switch Installation Summary screen in your receiver, or call the King Controls Service Department at (800) 982-9920.

1. Simply choose your desired channel using the receiver's remote control. The Trac-King will automatically switch to the appropriate satellite.

Dish Network HD: If you are unable to receive all of your HD programming, you will need to switch satellite trios. See page 7 for details on which trio to choose, and follow the instructions on pages 4, and 8-9.

SWITCH TRIOS ONLY IF YOU ARE UNABLE TO RECEIVE ALL OF YOUR HD PROGRAMMING.

Note: For better performance when using the automatic satellite switching feature, change channels by selecting your program from the channel guide rather than channel surfing.

It is common for the picture to pixel or display an error message when the antenna is switching between satellites, or the signal has been temporarily blocked. PLEASE BE PATIENT. THE PICTURE WILL RETURN.

If an error message appears for an extended period, selecting CANCEL may help clear the message more quickly.

The antenna can only receive programming from one satellite at a time. If you change channels on your main receiver, and the antenna has to change satellites, you may lose programming on other receivers.

Manual Switching: To disable automatic switching, manually select your desired satellite using the controller as shown on page 4.
**SET SATELLITE SERVICE**

**IMPORTANT!** If you choose any Dish Network or Bell ExpressVu option in steps 1-3 below, you must then run the check switch on pages 8-9.

All of the satellite options listed may not be available with your unit. If you cannot lock onto your chosen satellite(s), call the King Controls Service Department.

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**SATELLITE LIBRARY**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTV 101</td>
<td>DIRECTV at 101</td>
</tr>
<tr>
<td>DTV 101/ 110 hd</td>
<td>DIRECTV HDTV at 101 and 110*</td>
</tr>
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<td>DTV 101/ 119</td>
<td>DIRECTV HDTV at 101 and 119</td>
</tr>
<tr>
<td>Sat 110</td>
<td>Dish Network at 110</td>
</tr>
<tr>
<td>Sat 119</td>
<td>Dish Network at 119</td>
</tr>
<tr>
<td>DISH 61</td>
<td>Dish Network at 61</td>
</tr>
<tr>
<td>DISH 129</td>
<td>Dish Network at 129</td>
</tr>
<tr>
<td>DISH 148</td>
<td>Dish Network at 148</td>
</tr>
<tr>
<td>DISH 110/119</td>
<td>Dish Network at 110 and 119</td>
</tr>
<tr>
<td>DISH 1000</td>
<td>Dish Network HDTV at 110, 119, and 129</td>
</tr>
<tr>
<td>DISH 1000a</td>
<td>Dish Network HDTV at 61, 110, and 119</td>
</tr>
<tr>
<td>EXPVU 82</td>
<td>Bell ExpressVu at 82</td>
</tr>
<tr>
<td>EXPVU 91</td>
<td>Bell ExpressVu at 91</td>
</tr>
<tr>
<td>DISH 72.5</td>
<td>Dish Network at 72.5</td>
</tr>
<tr>
<td>DISH 77</td>
<td>Dish Network at 77</td>
</tr>
<tr>
<td>BEV 82/91</td>
<td>Bell ExpressVu at 82 and 91</td>
</tr>
</tbody>
</table>

*Note: The King Controls HD TV Converter Box (#9747 or #9747-AM) is required to receive HD programming from the DIRECTV satellite at 110.*

---

1. Press **Unit goes into SET SATELLITE menu.**

2. Press **Use the plus and minus buttons to display your selected satellite on the controller.**

3. Press **Sets satellite in memory. Unit moves to new selected satellite.**

---

Page 4
SET REGION (OPTIONAL)

Note: To reduce satellite acquisition time, you can set your current region.

1. Press **ON** Unit goes into IDLE/HOLD mode.

2. Press **MAIN** Unit goes into USER SETUP menu.

3. Press **→** Unit goes into SET REGION menu.

4. Press **+** or **−** Find your location on the map below and determine which region you are in. Use the plus and minus buttons to display your region on the controller.

5. Press **ENTER** Sets REGION into memory.

6. Press **ON** Unit searches based on new REGION.

REGION OPTIONS:

1. NORTH WEST
2. NORTH CENTRAL
3. NORTH EAST
4. CENTRAL WEST
5. MIDDLE CENTRAL
6. CENTRAL EAST
7. SOUTH WEST
8. SOUTH CENTRAL
9. SOUTH EAST
ALL REGIONS
0. RECALIBRATE

IDLE/HOLD SXX
NOW on 101 ➤

USER SETUP ➤
Rev xxxxx sn xxxxx

SET REGION

Display your region on the controller.

IDLE/HOLD SXX
NOW on 101 ➤

RUN: SCAN ALIGN
DTV 101
DIRECTV 101 SATELLITE ONLY

To receive programming from the DIRECTV 101 satellite only, choose the DTV 101 option (see page 4), and make sure your receiver is set for round dish-1 satellite (do this through the receiver’s satellite set-up menu screens).

101/119 AUTOMATIC SATELLITE SWITCHING

To automatically switch between the 101 and 119 satellites for DIRECTV, choose the DTV 101/119 option (see page 4), and make sure your receiver is set for oval dish-2 satellites (do this through the receiver’s satellite set-up menu screens).

HD PROGRAMMING FROM THE 110 SATELLITE

IMPORTANT! This Trac-King is factory ready to receive available HDTV programming from DIRECTV Ku band satellites at 101° and 119°. This Trac-King will also receive available HDTV programming from the DIRECTV Ku band satellite at 110°, but must include a properly installed HD converter accessory #9747. It will not receive channels broadcast from DIRECTV’s Ka band satellites at 99° and 103°.

With the properly installed HDTV Converter (sold separately by King Controls), this Trac-King will allow you to receive the specially formatted HD signals from DIRECTV’s 110° satellite and automatically switch between satellites 101/110 or 101/119 when simply changing channels. When selecting a channel from the program guide results in a “Searching for Satellite” message or a different channel than selected appearing on the TV screen, pressing the (+) button on the controller will change the switching pair between 101/110 and 101/119 as necessary. Contact the King Controls Sales Department for details.

Note: Any receiver can control the antenna switching if the last channel selected on all other receivers was on an odd transponder on the 101 satellite such as channel 202. (At the time of publication, channel 202 is broadcast on an odd transponder on satellite 101. This is subject to change. If in doubt whether channel 202 is still on an odd transponder, contact DIRECTV or call King Controls.)

You can selectively disable automatic satellite switching on individual receivers with the use of one or more tone block accessories. Please contact King Controls for configuration options.
SECTION 3  AUTOMATIC SATELLITE SWITCHING
Dish Network - ExpressVu

DISH 500 FOR DISH NETWORK

The Trac-King will automatically switch between the 110 and 119 satellites for Dish Network by using the receiver’s remote control, after the receiver has been properly configured. Choose the Dish 110/119 option (see page 4) and then follow the instructions on pages 8-9.

DISH 1000/1000a FOR DISH NETWORK HDTV

Dish Network HD programming is broadcast from 4 satellites (61,110,119,129). The 61 and 129 satellites broadcast identical programming. The 61 is generally stronger in the eastern U.S. and the 129 in the western U.S. The map below shows the approximate coverage for each satellite.

Your Trac-King antenna can be easily configured to work with two different satellite trios (DISH 1000a: 61,110,119 or DISH 1000: 110,119,129). By choosing the appropriate trio that includes either the 61 or the 129 satellite based on where you are, you can receive all of your desired programming. Choose either Dish 1000 or Dish 1000a (see page 4) and then follow the instructions on pages 8-9.

SATELLITES 61 AND 129 COVERAGE MAP

Note: This map is an approximation only. Which trio works best in a given location may differ from what is indicated on the map.

129 Approximate coverage  61 Approximate coverage  129 Approximate blackout area

BELL EXPRESSVU HD (May not be available in all areas due to service provider limitations.)

The Trac-King will automatically switch between the 82 and 91 satellites for Bell ExpressVu by using the receiver’s remote control, after the receiver has been properly configured. Choose BEV 82/91 (see page 4) and follow the instructions on pages 8-9.
SECTION 4 CHECK SWITCH PROCEDURE
Dish Network - ExpressVu

IMPORTANT! For automatic satellite switching, King Controls recommends using a Dish Network model 311 receiver for Dish 500, and a Dish Network model VIP211 or a VIP211k HDTV receiver for Dish 1000/1000a. Do not use dual tuner receivers or recorders.

If you do not have a clear view of the satellites, the switch will not load.

In order for all receivers to work properly, each one must be configured separately while connected to the MAIN port on the Trac-King.

Note: The SW21 and SW64 switches are a receiver software configuration that is loaded into the receiver after running a check switch test with the dish locked on and configured for the appropriate service.

This one time procedure will not need to be repeated after successful installation, unless a) check switch test is run again while connected to a home dish system, b) check switch is run when a receiver is not connected, or c) you travel outside the coverage area of the pre-set satellite trio (Dish 1000/1000a only).

1. Make sure the Trac-King has locked onto the satellite(s) from the selection you made on page 4 by verifying the satellite option in the controller’s display window.

2. On the receiver remote, press menu, 6, 1, 1.

3. Highlight Check Switch and press Select.

4. Make sure Superdish and Alternate boxes are NOT selected.

5. Highlight Test and press Select.

The unit will perform a check switch test, and the dish will periodically move back and forth. (This process will take several minutes.)
6. When test is complete, a screen similar to one of the following should appear: (Screen graphics may vary.)

7. Save the settings, exit to the main menu screen and wait for your programming to download.

8. **DISH 1000/1000a ONLY:** Verify your saved settings show your desired satellite trio (110, 119, 129 or 110, 119, 61).

Check switch is complete.
### Section 5: Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Solution</th>
</tr>
</thead>
</table>
| Controller does not power up. | Check: tuner is connected to power supply.  
controller is connected to tuner.  
power supply is plugged into 110 VAC outlet. |
| Controller remains in one of the following conditions:  
POWER TRIP  
ANT COM ERROR?  
TUNER COM ERROR? | Unplug tuner for 10 seconds, then plug back in.  
Check coax cables and connections between tuner and dome unit.  
Verify voltage on coax at dome unit is 24 volts.  
Inspect all coax cables for kinks and verify connections are snug but not overly tight (inside and outside dome unit). |
| Controller displays AZ FAULT.  
Dish cannot rotate. | Make sure shipping bolts are removed.  
Make sure shipping tie strap is removed.  
Disconnect power supply for 15 seconds, then reconnect.  
Perform Mechanical Calibration.  
Perform OPTION 21 RE-INITIALIZE and 0-RECALIBRATE.  
Reseat ribbon cables (inside dome unit). |
| Display reads EL FAULT. | Make sure shipping tie strap is removed.  
Disconnect power supply for 15 seconds, then reconnect.  
Perform Mechanical Calibration.  
Restart system. If problem persists, perform OPTION 21 RE-INITIALIZE and 0-RECALIBRATE.  
Reseat ribbon cables (inside dome unit). |
<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only getting signal on 1/2 of transponders.</td>
<td>Kinked or sharply bent coax cable.</td>
</tr>
<tr>
<td></td>
<td>Verify coax cables are properly terminated with SNAP-N-SEAL® connectors only.</td>
</tr>
<tr>
<td></td>
<td>Verify receiver is operating properly.</td>
</tr>
<tr>
<td></td>
<td>Verify LNB type is set correctly.</td>
</tr>
<tr>
<td>Unit never locks on or locks on and drifts off of satellite.</td>
<td>Atmospheric moisture. Unit will lock on as weather improves.</td>
</tr>
<tr>
<td></td>
<td>Check for obstruction in sky in direction of satellite. Select another satellite</td>
</tr>
<tr>
<td></td>
<td>and verify unit locks on.</td>
</tr>
<tr>
<td></td>
<td>Verify coax cables are properly terminated with SNAP-N-SEAL® connectors only.</td>
</tr>
<tr>
<td></td>
<td>Perform <strong>OPTION 21 RE-INITIALIZE and 0-RECALIBRATE.</strong></td>
</tr>
<tr>
<td></td>
<td>Inspect all coax cables for kinks and verify connections are snug but not overly</td>
</tr>
<tr>
<td></td>
<td>tight (inside and outside dome unit).</td>
</tr>
<tr>
<td></td>
<td>Perform <strong>Temperature Calibration (CALL KING CONTROLS FIRST).</strong></td>
</tr>
<tr>
<td>Can't get SW21 or SW 64 switch to load properly.</td>
<td>Check for line of sight obstruction.</td>
</tr>
<tr>
<td></td>
<td>Check for low signal strength.</td>
</tr>
<tr>
<td></td>
<td>Current location might be out of service area.</td>
</tr>
<tr>
<td></td>
<td>Select alternate trio of satellites (SW64) and try again.</td>
</tr>
<tr>
<td></td>
<td>Atmospheric moisture. Wait for weather to improve.</td>
</tr>
<tr>
<td>Trying to load the SW21 or SW64 results in error or no satellite.</td>
<td>Disconnect DIRECTV HDTV Converter if present.</td>
</tr>
</tbody>
</table>
The King-Dome Satellite System has been designed to be maintenance and trouble free.

For optimum signal strength, keep the dome clean from dirt, bugs, and other debris. Periodic washing of the dome with mild soap and water is recommended.

If you plan on storing your vehicle for long periods of time, it is recommended that the system be put through a search procedure on a quarterly basis to keep all moving parts in good working order.

If you have any comments or questions, please contact the King Controls Service Department at (800) 982-9920, or email King Controls at info@kingcontrols.com

Rain Fade

Rain or dew on the dome can cause signal interference and make the digital picture freeze, pixel or go out altogether. This loss of signal is commonly referred to as “rain fade” and is caused by the combination of water in the atmosphere and water on the dome surface.

To minimize this issue and eliminate the effects of water on the dome, apply King Controls Dome Magic® rain fade solution to the dome. This will prevent water from sticking to the dome surface and blocking the signal. For additional details on Dome Magic® rain fade solution please contact your authorized King-Dome dealer or call King Controls at (800) 982-9920.
SECTION 7  LIMITED WARRANTY

Every King-Dome Satellite System is thoroughly inspected and tested before leaving the factory. It is covered by a two year parts and one year labor limited warranty from the date of original purchase. This warranty does not cover installation and external wiring or refurbished units.

Should any trouble develop during the warranty period, contact King Controls. Only King Controls and certified dealers are authorized to perform warranty evaluations and repairs.

If it is determined that the unit needs to be returned, return COMPLETE product, freight prepaid, to: King Controls, 11200 Hampshire Ave. S., Bloomington, MN 55438-2453.

If inspection shows the trouble is caused by defective workmanship or material, King Controls will repair (or at its option, replace) without charge.

This warranty does not apply where:

• The product has been abused, misused, improperly installed or improperly maintained.
• Repairs have been made or attempted by others that are not certified by King Controls to do such repairs.
• Repairs are required because of normal wear and tear.
• Alterations have been made to the product.

In no event shall King Controls be liable for any indirect, incidental, or consequential damages from the sale or use of the product. This disclaimer applies both during and after the term of the warranty.

King Controls disclaims liability for any implied warranties, including implied warranties of “merchantability” and “fitness for a specific purpose,” after the one year term of this warranty.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.