

EZ-2000 / EZ-2100
SATELLITE ANTENNA
POSITIONER
USER MANUAL

WARNING

- **To prevent fire or shock hazard, do not expose this product to rain or moisture.**
- **To avoid electric shock, do not open the cabinet.**
- **Refer service to qualify person only.**

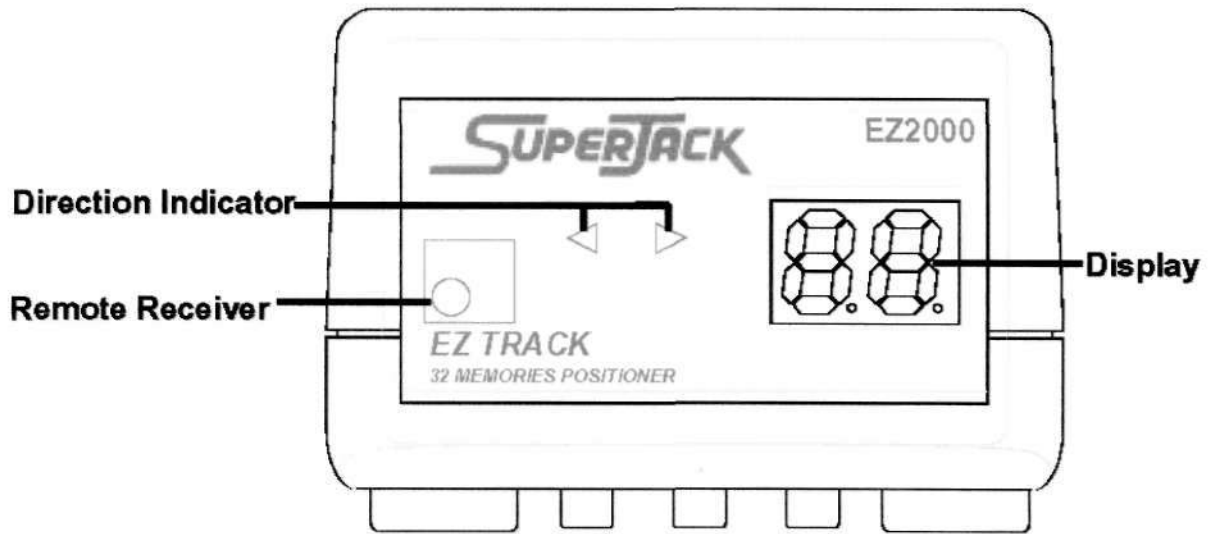
SAFETY INSTRUCTIONS

1. Read and understand all instructions. Follow all warnings and instructions marked on this product.
2. This product should be operated only from the type of power source indicated on the marking label.
3. Do not place this product in a location near a heat source such as radiators or airducts, or in a place subject to direct sunlight, excessive dust, moisture, rain, mechanical vibration, or shock.
4. Slots and openings in the cabinet are provided for ventilation. To protect it from overheating, these openings must not be blocked or covered.
5. Never push any kind of objects into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
6. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

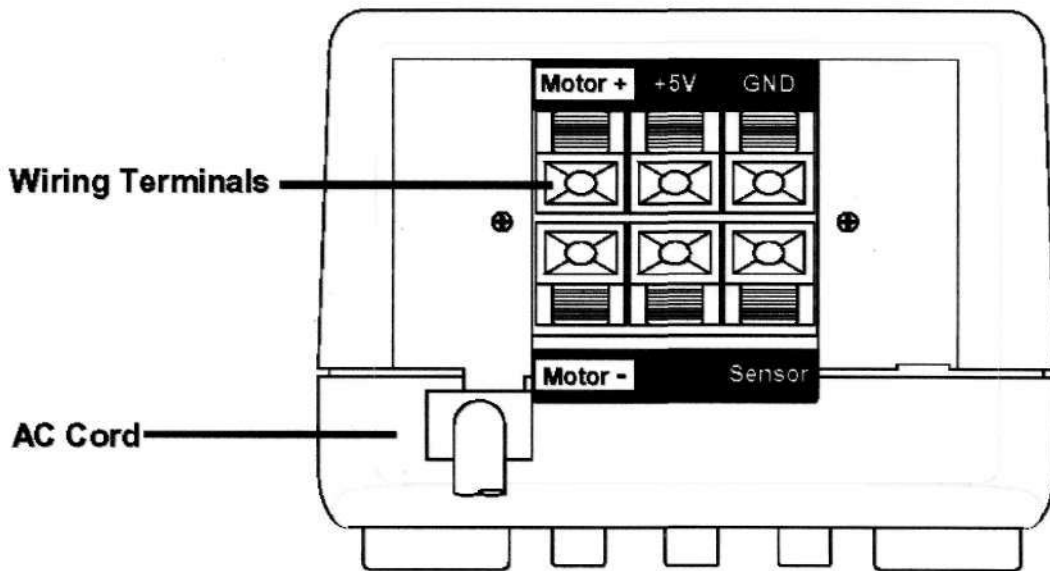
INCLUSIONS

1. EZ-2000 / EZ-2100 Positioner
2. Remote Control
3. Two AA (SUM-3) batteries
4. This instruction manual

FRONT PANEL



REAR PANEL



Description of Wiring Terminals:

Motor + / Motor -

Connect with motor wires.

+5V

Connect with optical / Hall effect sensor +5V wire.

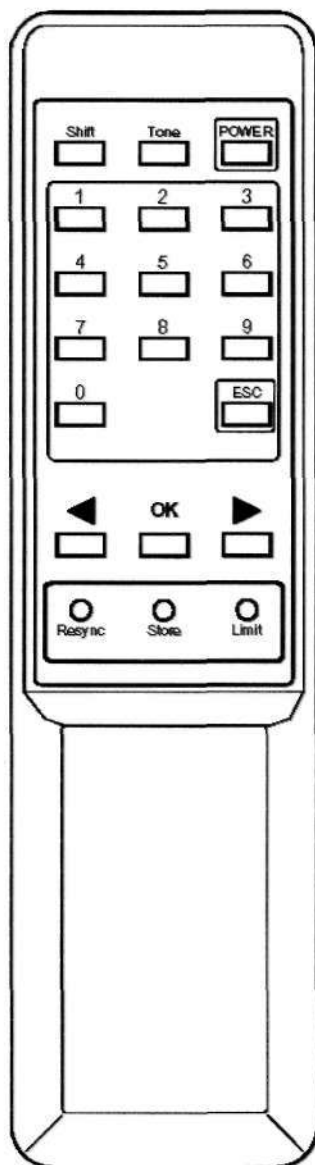
GND

Connect with reed sensor, or optical / Hall effect sensor ground wire.

Sensor

Connect with actuator reed sensor, or optical / Hall effect sensor pulse output wire.

REMOTE CONTROL



POWER :

Switch EZ-2000 / EZ-2100 between stand-by or ready.

0 - 9 numeric keys :

Assign the satellite position to be operated. Such like moving, storing or re-synchronizing to a specific satellite position, or used to set designated antenna travel limits.

ESC :

Cancel current operation and programming mode;
Stop antenna moving.

◀, ▶ Manual keys :

Manually move the antenna.

OK :

Confirm the current operation. Such like recall, store, re-synchronize satellite antenna position or set antenna travel limits.

Resync :

Re-synchronize designated satellite positions.

Store :

Save current location as a designated satellite position.

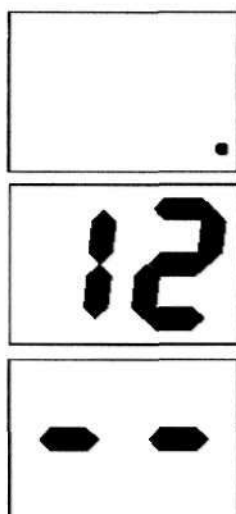
Limit :

Program antenna travel limits.

Shift, Tone :

Reserved keys for other applications.

STARTING OPERATION



1 Plug the AC plug into the wall outlet, the display will show a dot on the right bottom.

2 Press **POWER**.

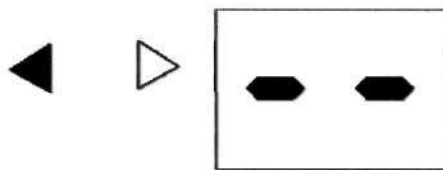
The display will show '12' and it's ready for your operation.

3 You should begin to check if your installation is correct by the following:

Press the ◀, ▶ keys to see if you could see different satellite's program. (If not, please referred to the trouble-shooting guide to re-install the positioner.)

MOVE THE ANTENNA

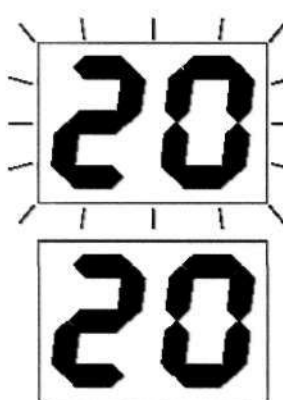
Manual Move



- 1 Keep pressing ◀ or ▶ until reaching the designated satellite position
The display will show '— —' and the corresponding direction indicator is on.
- 2 The direction indicator will turn off once you release the ◀ or ▶ key.

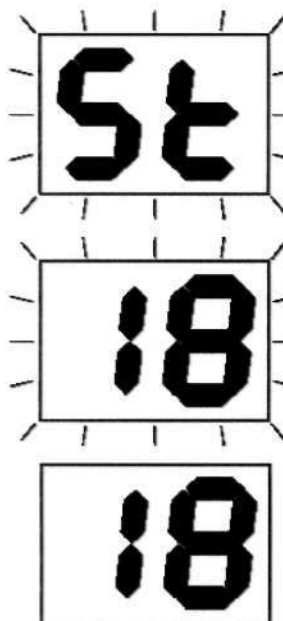
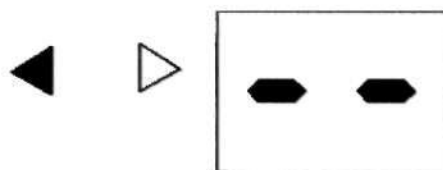
Recall Saved Satellite Position

Before you complete "Store Satellite Position" procedure, this operation will move the antenna to the factory preset position that may not point to any satellite.



- 1 Enter the satellite position number. The display will flash the entered number.
- 2 Press **OK** to confirm your entered number.
The antenna motor will move to the designated satellite position. The display will flash the entered number and the corresponding direction indicator light is on.
The display will stop flashing and the indicator will turn off while reaching the designated satellite position.

STORE SATELLITE POSITION

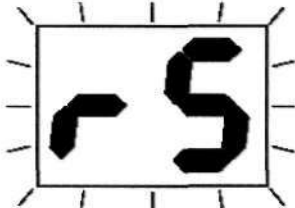
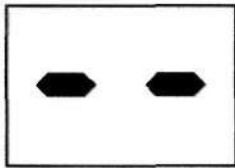


- 1 Press ◀ or ▶ key to move antenna to the designated satellite. The display will show '— —' and the corresponding indicator is on while pressing ◀ or ▶.
- 2 Press **Store** .
The display will flash 'St' and waiting for designated number being input.
- 3 Enter the satellite position number.
Before pressing **OK**, the display will show 'St' and the entered satellite position number in turn.
- 4 Press **OK** .
The display will show the number you entered. The designated satellite position is stored into the number you input.

NOTE If you don't press any key for 6 seconds after completing step 2 or 3, the display will go back to '— —'.

RESYNC SATELLITE POSITION

The "Resync" function could correct the shift error which caused by the accumulated mechanism backlash or by other reasons. You should conduct the "Resync" function while the satellite position become not accurate for certain time of uses.



1 Press **←, →** key to move antenna to the designated satellite position. The display will show '--'.

2 Press **Resync** .

The display will flash 'rS' and waiting for the originally stored satellite position number being input.

3 Enter the originally stored satellite position number .

Before pressing **OK**, the display will show 'rS' and the entered original satellite position number in turn.

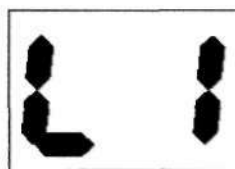
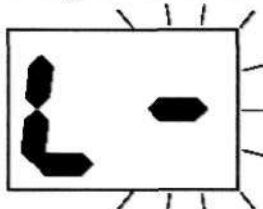
4 Press **OK** .

The display will show the number you entered and all the inaccurate satellite positions caused by mechanism back-lash are corrected

NOTE If you don't press any key for 6 seconds after completing step 2 or 3, the display will go back to '--'.

SETTING ANTENNA TRAVEL LIMIT

The function is recommended executed by the installer. Besides the built-in limit switches in the motorized system (Actuator, Mount). EZ-2000/EZ-2100 can also be set up the motorized system with one, or two travel limits to prevent the antenna from hitting the obstacle around itself or the motor from the unnecessary traveling.



1 Press **Limit** .

The display will show 'L-', and the '-' will flash.

2 Use **←, →** key to move antenna to the limit position you desired.

3 Press **1** or **2** .

If setting '**←**' direction limit, press **1**. If setting '**→**' direction limit, press **2**. The entered number "1" or "2" will flash.

4 Press **OK** .

The designated travel limit is programmed. The antenna will automatically stop at the limit position you set up.

NOTE If you don't press any key for 6 seconds after completing step 2 or 3, the display will go back to '--'.

TROUBLE SHOOTING

| Problem | Cause and / or remedy |
|--|---|
| <p>You can't locate the satellite after completing the installation.</p> | <p>1 The display is blank.</p> <p style="padding-left: 20px;">1-1 Please check the positioner plug for looseness.</p> <p style="padding-left: 20px;">1-2 Please make sure the outlet with electricity.</p> <p>2 The display (dot) is on and without "nP" shown on the display.</p> <p style="padding-left: 20px;">2-1 Please check if batteries put into the remote controller.</p> <p style="padding-left: 20px;">2-2 Please check if the batteries are out of electricity.</p> <p>If you have made the corrections above and can't solve the problem, please call your installer or dealer.</p> |
| <p>"nP" shown on the display. (nP: no pulse)</p> | <p>1 Make sure all the necessary wiring is connected correctly and firmly.</p> <p>2 If the "nP" still shown on the display after you've checked the wiring. The possible causes could be problem from the motorized system (actuator, mount) or the positioner itself. Please check with your installer or dealer.</p> |

| | |
|--|--|
| <p>The TV picture is ambiguous or dis-appeared when you move the antenna to your stored satellite position.</p> | <p>Please check if the same situation happened when moving the antenna to other stored positions.</p> <ol style="list-style-type: none"> 1 If picture of the other stored positions is the same as before. Please re-do the "Store Satellite Position" to re-store this satellite position. 2 If all the pictures of the stored positions have the same symptom, please do the "Resync Satellite Position" to recover this problem. <p>If there is no picture while you press ◀ or ▶ during the "Resync" procedure. The ambiguous or none picture problem will be possibly happened from the other reception devices like TV, Receiver, LNB etc. Please check this problem with you installer or dealer.</p> |
| <p>The TV picture is ambiguous or dis-appeared when you move the antenna to your stored satellite position (Cont.)</p> | <p>It's possible that you saved two or more antenna positions into one number, thus, the former saved antenna position was replaced by the latest saved one. Please re-do the "Store Satellite Position" procedure.</p> |
| <p>When go to the saved antenna position and there is another satellite's program other than the originally saved shown on this position</p> | <p>The possible cause is that you set up the travel limit after you completed the "Store Satellite Position" and originally saved antenna position(s) is outside of the "L1" and "L2". Please re-do the "Setting Antenna Travel Limit" to re-set the travel limit.</p> |
| <p>The antenna can't go to the saved antenna positions and there is "L1" or "L2" shown on the display.</p> | <p>Any problems that are not listed on the above.</p> |
| <p>Any problems that are not listed on the above.</p> | <p>Call and check with the dealer.</p> |

SPECIFICATIONS

| | |
|--------------------------|---|
| Mains Voltage | AC230V ±10% / 50Hz |
| Power Consumption | EZ-2000 80 W max. EZ-2100 150 W max. |

| | |
|--------------------------|--|
| Dimensions | 98mm x 252mm x 74mm |
| Weight | EZ-2000 1.4 kg EZ-2100 2.0 kg |
| Wiring Terminals: | |
| Motor Voltage | EZ-2000 30V/1.7A EZ-2100 30V/3.1 A |
| Sensor Voltage | +5V/100mA |
| SensorType | Reed sensor, optical sensor or Hall effect sensor. |
| Remote Control: | |
| Function key | 20 keys (Include 2 reserved keys). |
| Battery | AA(SUM-3)x2. |

- Specifications are subject to change without notice