NZSAT® WIND-UP

RV WIND-UP Satellite Dish

Elevation Meter with colour display.

Warning ALARM if dish remains elevated while moving.

PARTS INCLUDED IN THIS BOX:

1 x 65cm REFLECTOR (to be fixed to main unit)

1 x NZSAT WIND-UP main mechanism.

1 x Digital elevation display & mounting box.

1 x NZSAT Cable entry plate/cover.

1 x LNB Arm parking plate.

1 x GPS sensor with lead.

1 x Ceiling kit (ceiling plate, azimuth handle, elevation winding handle)

1 x Installation guide and user manual

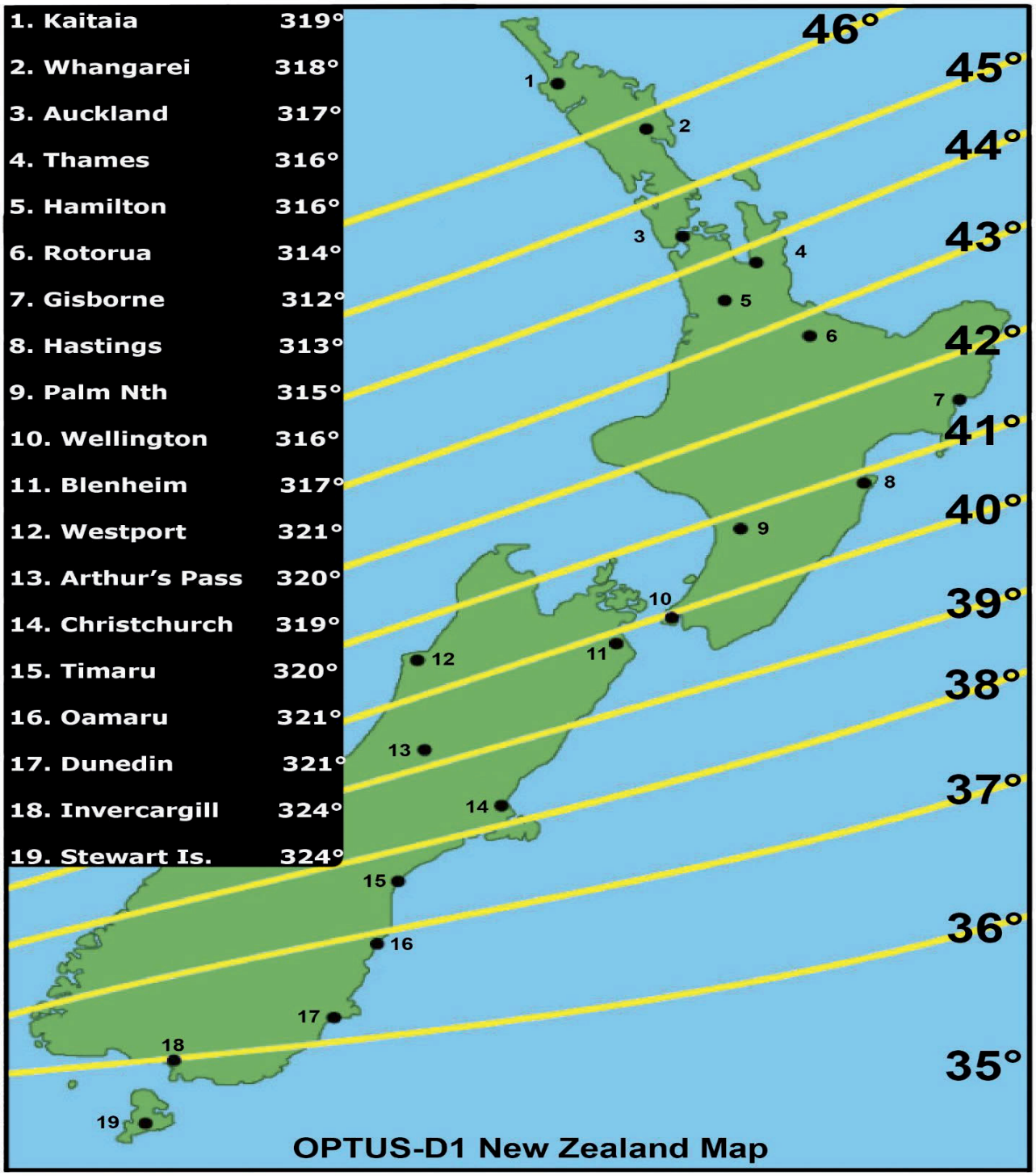


Fig A

Operation

Azimuth = Compass direction.
Elevation = Tilt of dish up or down.
LNB = Receiving head where coax connects to.

STEP 1. Press the power button on the digital elevation meter **(Fig B)** & wind the dish up counter clockwise to the correct elevation for where you are located **(Fig A)**.

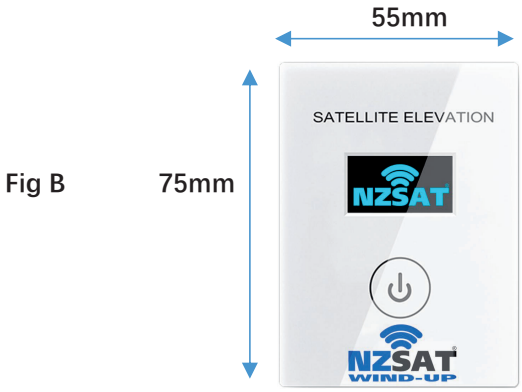
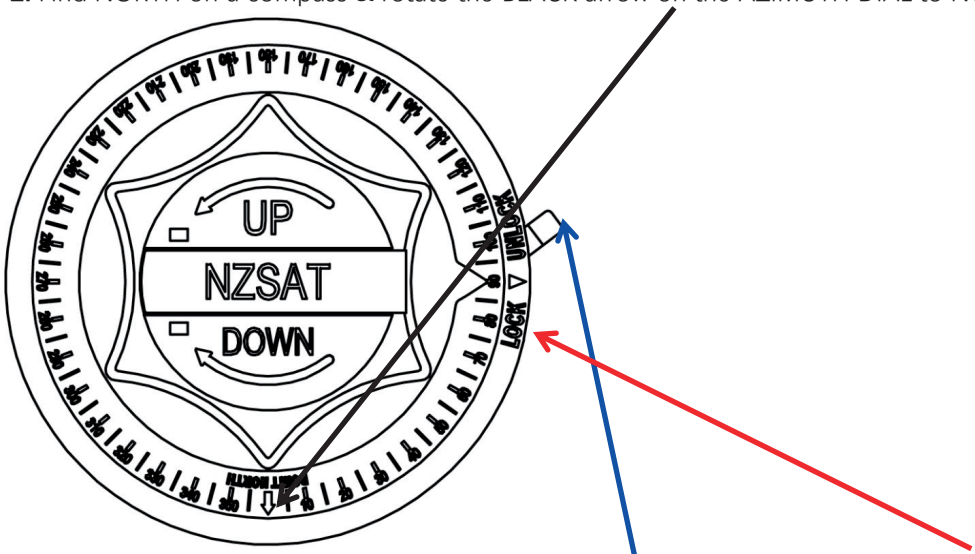


Fig B

STEP 2. Find NORTH on a compass & rotate the BLACK arrow on the AZIMUTH DIAL to NORTH **(Fig C)**



STEP 3. Move the LOCK-UNLOCK Lever to the UNLOCK position & rotate the RED Dish Direction Pointer to the correct Azimuth for your current location **(Fig C)**.

STEP 4. Check to make sure that the elevation is still correct on the meter. **(Fig B)**

STEP 5. Turn on your TV & Satellite Decoder & bring up on the screen the Signal meters.
NB. All units are different & this will vary, consult your manual on the products you have.

STEP 6. Move dish left & right of its current position VERY SLOWLY until satellite quality or picture is acquired.

NB. It pays to start this process at 1 degree less than needed, then raise the dish in 1 degree increments after each left & right movement. **Keep checking Elevation Meter to make sure elevation is correct.**

Special Notes: When you have satellite quality, adjust the dish up/down and left/right for the strongest quality on the Signal Quality Meter Display.

STEP 7 . LOCK dish in place

Parking dish ready to travel

STEP 1. Set Lock-Unlock lever to UNLOCK position. **(Fig C)**

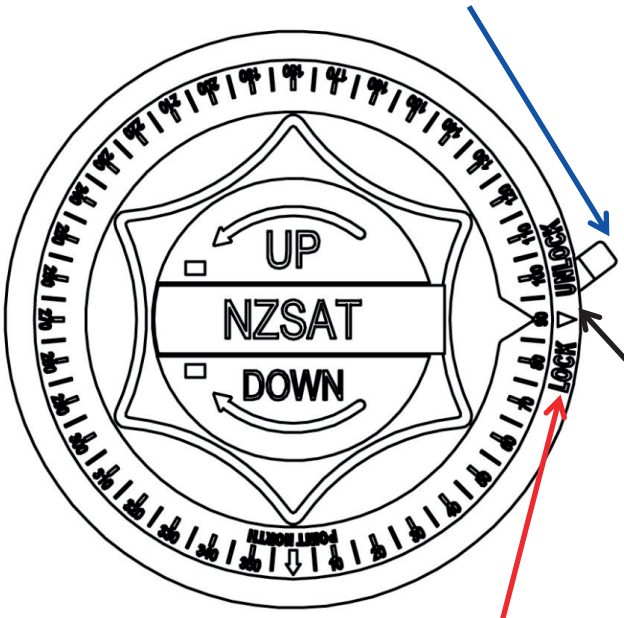


Fig C

STEP 2. Rotate the dish direction pointer to the rear of your vehicle.
(which should be the arrow between LOCK & UNLOCK, if installed correctly)

STEP 3. Set Lock-Unlock lever to LOCK position to keep dish in it's parked position.

STEP 4. Wind the dish down CLOCKWISE until it's folded right down onto the LNB Arm Cradle on top of your vehicle. The Elevation Meter should now indicate that the dish is parked.

STEP 5. Fold winding handle away.

STEP 6. Visually check outside to make sure your NZSAT Wind-Up is folded down in the Park/Travel position.

IMPORTANT

NB. If you drive away with the dish still elevated at a speed above 15km/h a WARNING ALARM will sound.

STOP and park dish correctly.

Disclaimer:

This is only as a backup! This should not be relied upon as normal operating procedure is to park the dish prior to moving the vehicle.

Troubleshooting

FAULT	POSSIBLE CAUSE
1.NO signal, quality or picture.	Not aligned correctly. Not on correct input on TV. Parked under an obstruction. Bad or faulty connection. Faulty LNB.
2.Dish doesn't rotate or rotate easily, or doesn't wind-up or wind-up easily.	Inspect dish on roof for signs of visible damage. Cables may be binding/tangling while turning. Contact your nearest NZSAT Wind-Up dealer.
3.Elevation Meter will not display anything.	No power getting to meter.

Powered ON

Elevation as you wind it up

Reference elevation &azimuth guide for where you are.

Maximum elevation (stop winding).

Dish is in upright position WARNING ALARM will be heard.

Elevation sensor not connected.

Assembly & Installation

Tools you will need:

38mm hole saw
Metric socket set
Metric Allen key set

Side cutters
Drill bit set
Phillips screw driver
Flat blade screw driver

Tape measure
Top quality adhesive/ sealer
Check what is suitable for the roof of your particular vehicle.

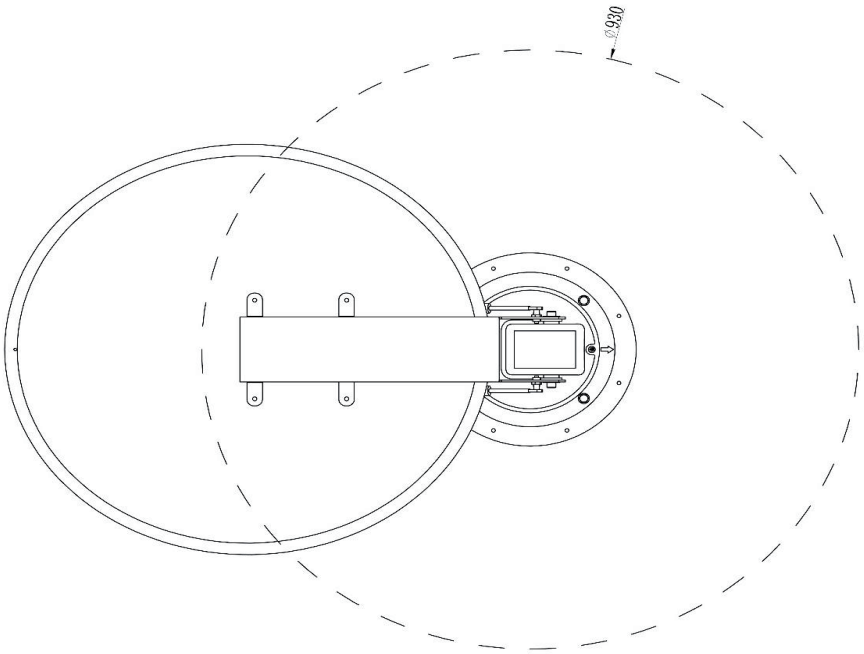


Fig E

NZSAT Wind-Up must be level for proper operation!

STEP 1. Determine a suitable position on the roof of your vehicle by measuring and using the dimensions and template provided. **(Roof surface and ceiling surface must be parallel to each other and also a flat surface for ease of operation and installation).**

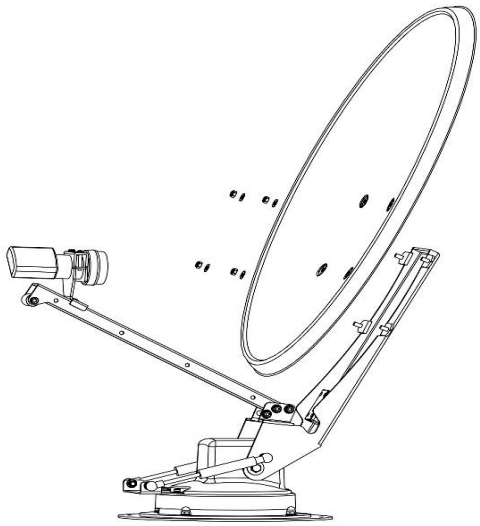
STEP 2. Drill a 38mm diameter hole through the roof once you have confirmed where you will mount this item.

NB: Be careful not to drill through existing wiring, plumbing or other essential items within your vehicle. We highly recommend the dish be mounted on the centre-line of the roof, however this is not essential.

STEP 3. Attach dish to main unit **(Fig F).**

STEP 4. Mount dish on roof in upright position then rotate so that the dish is facing the rear of the vehicle.

Fig F



NB: Dish will point towards the back of vehicle when in the Park/Travel position. Secure to roof using screws provided.

STEP 5. The LNB Arm Cradle Bracket should be mounted to roof 220mm from base plate of dish, toward rear of the vehicle **(Fig G).**

NB: Apply adhesive sealer to screw heads, coax access hole & edge of gasket under mounting base.

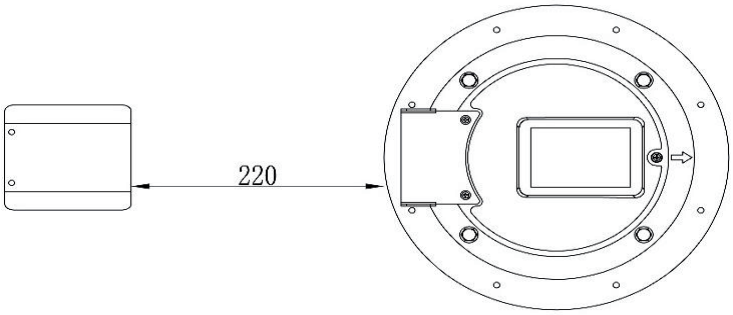
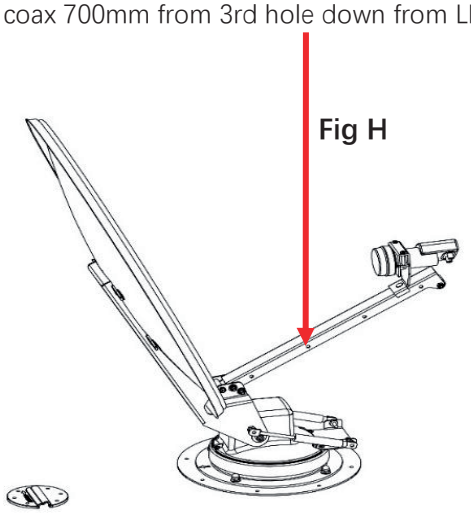
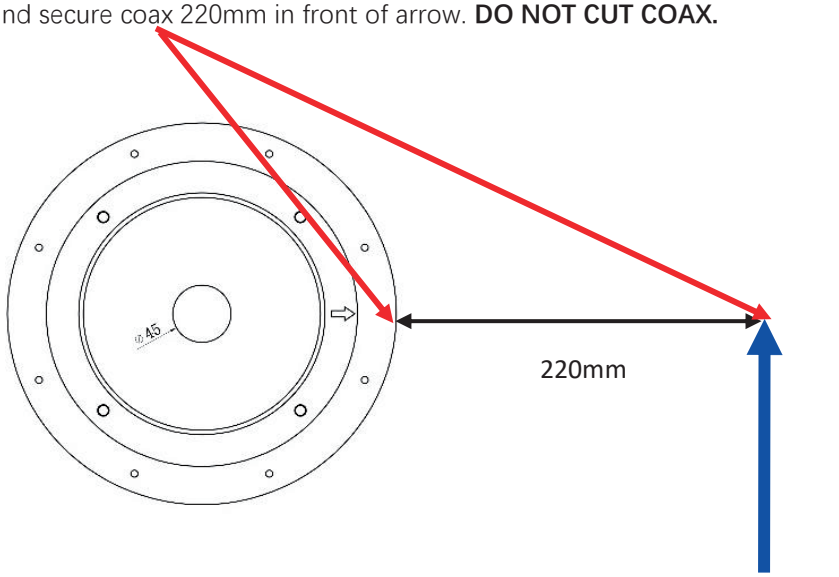


Fig G

STEP 6. Facing the front of the dish, the coax & sensor cable attached to the side of the feed arm. Measure coax 700mm from 3rd hole down from LNB and secure coax 220mm in front of arrow. **DO NOT CUT COAX.**

Fig H

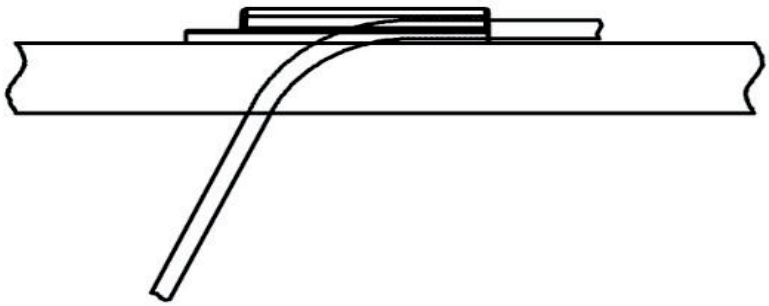




Secure cable with suitable P-Clip here

STEP 7. After drilling a hole through the roof, feed the coax & sensor wires through into the vehicle, then using the cable entry/cover plate (included) to cover the wires & hole, apply sealer under the lip of cable entry plate and where cable enters roof. **(Fig I)**

Fig I



STEP 8. Attach the plate to roof with screws provided in the correct orientation as indicated **(Fig J)**.

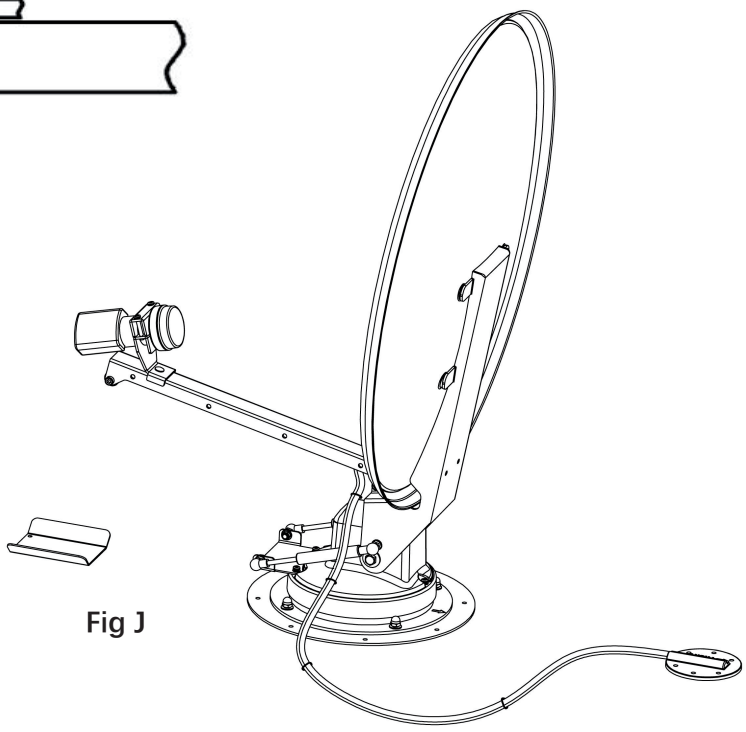


Fig J

INSTALLATION DETAILS FOR INSIDE VEHICLE

STEP 9. Install the ceiling plate. The lock - unlock lever must point toward the rear of the vehicle.

Be sure Lock - Unlock lever is pointing towards the rear of the vehicle and hole in ceiling plate aligns with hole in the ceiling.

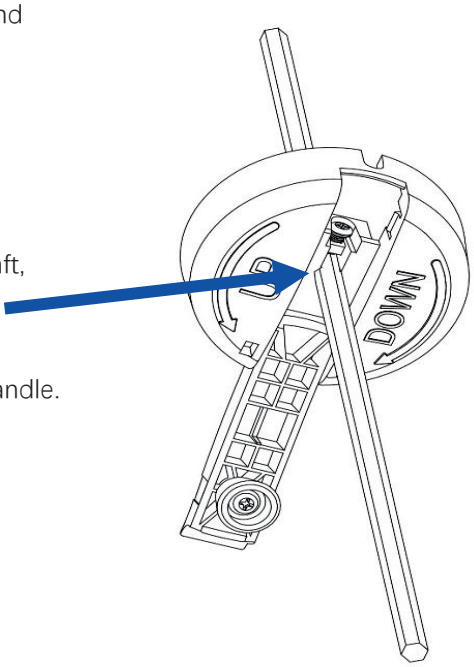
STEP 10. Refer to the ROOF THICKNESS CHART (on next page) for the correct length for the directional handle.

NOTE: Pipe or Tube cutter is recommended for cutting the directional handle. This gives a square cut; a hacksaw does not.

NOTE: Be sure large and small keyways line up in the hub and directional handle!

STEP 11. Insert the directional handle in through hole and up onto the keyed shaft (only fits one way) this is a great time to re-check the correct length and that the arrow points the same direction as the dish faces!

STEP 12. Place the Elevation Winding Handle onto hexagonal shaft with spring and washer fitted with the spring and washer fitted.



CUTTING the HEXAGONAL SHAFT LENGTH

STEP 13. Flip down handle on the elevation winding handle to see hexagonal shaft, mark the shaft at the inside bottom edge where it protrudes through the handle.

STEP 14. Remove the elevation winding handle and cut shaft, reinstall winding handle.

STEP 15. Re-Install the elevation winding handle and secure with screw.

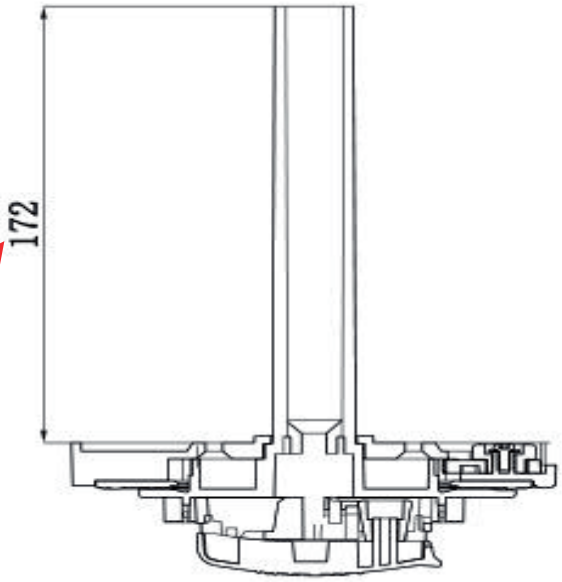
CAUTION!

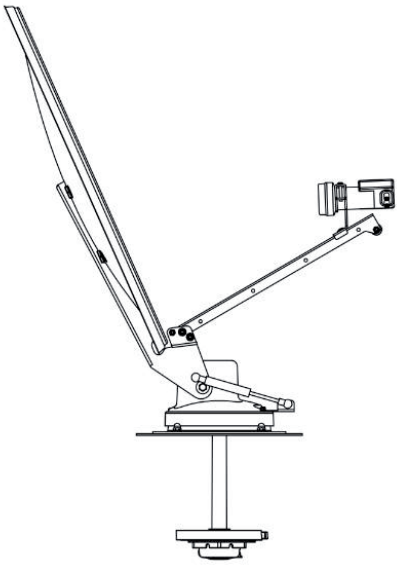
After INITIAL INSTALLATION, the antenna SHOULD ROTATE APPROXIMATELY 360° FROM PARK POSITION.

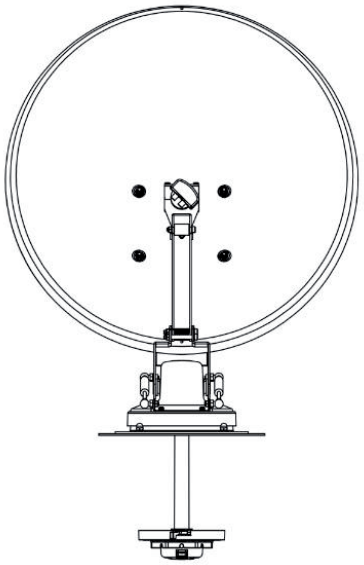
The pointer on the DIRECTIONAL HANDLE should point towards the ARROW between Lock/Unlock lever when its parked.

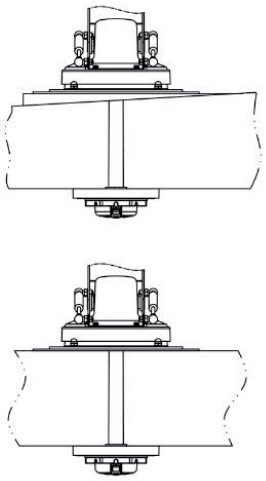
ROOF THICKNESS CHART

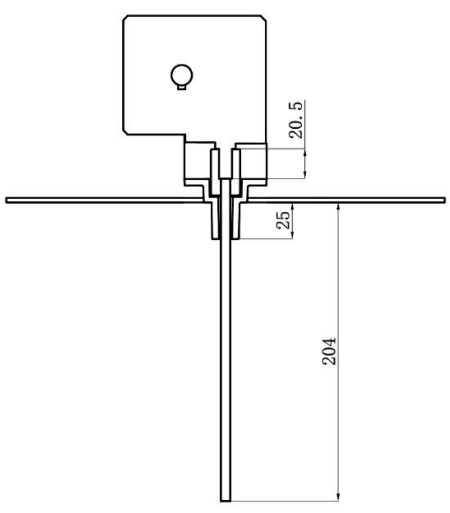
Roof thickness	Azimuth handle length
38	40
44	46
50	52
56	58
62	64
68	70
74	76
80	82
86	88
92	94
98	100
104	106
110	112
116	118
122	124
128	130
134	136
140	142
146	148
152	154
158	160
164	166
170	172

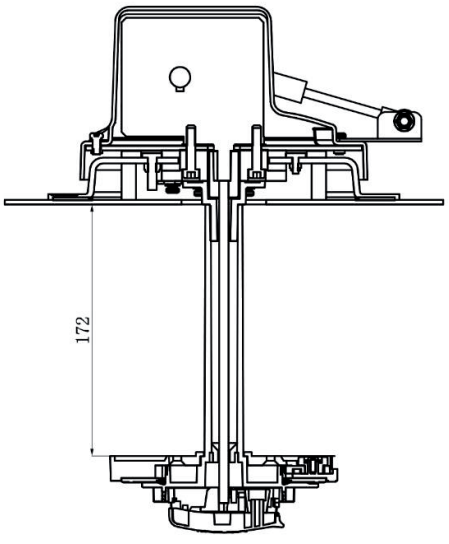






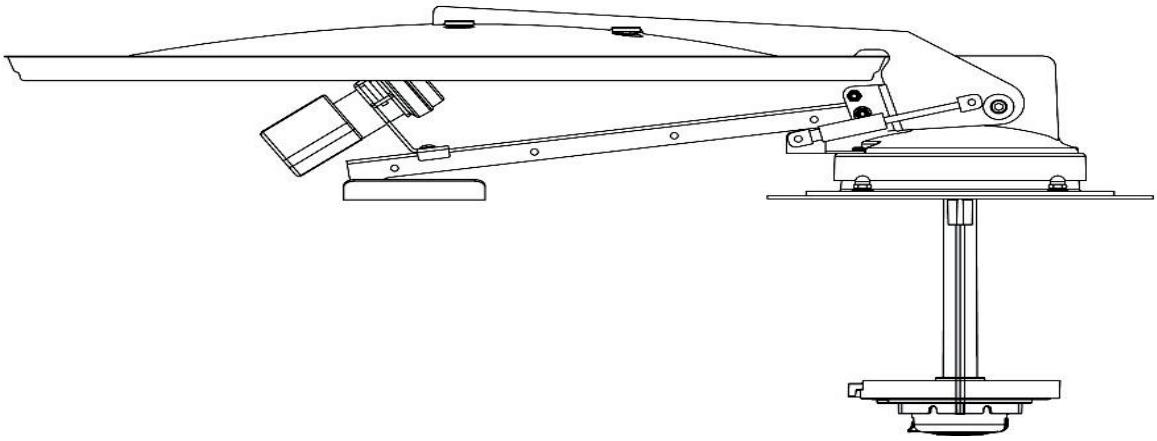


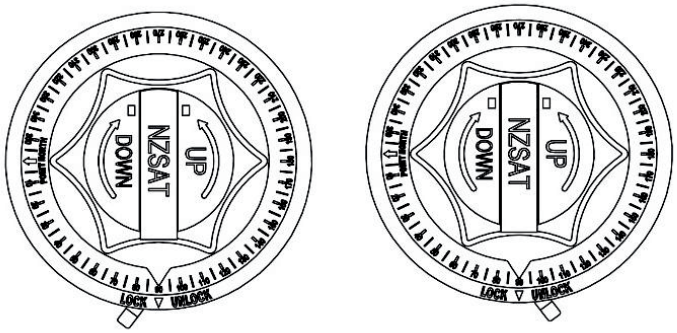


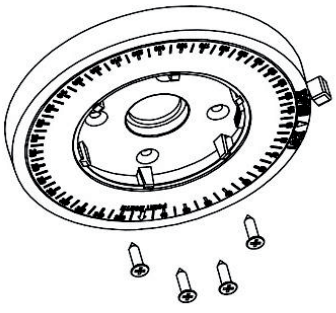


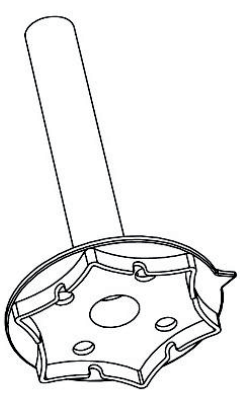
Specification & Dimensions

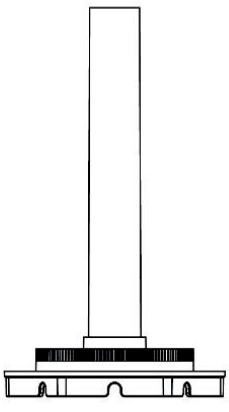
Operation voltage:	9 - 24vdc	Height when raised:	870mm
LNB:	10.75 Ghz	Height when Parked:	180mm
Gain:	60db	Reflector height:	690mm
Frequency range:	11.7 - 12.75 Ghz	Reflector width:	635mm
Colour:	Grey	Operating Radius:	450mm
Weight:	7kg	Operating Diameter:	900mm
Shipping weight:	12kg	Centre of turret to top of dish when parked:	750mm
		Length of cable Coax&elev meter:	8mtrs

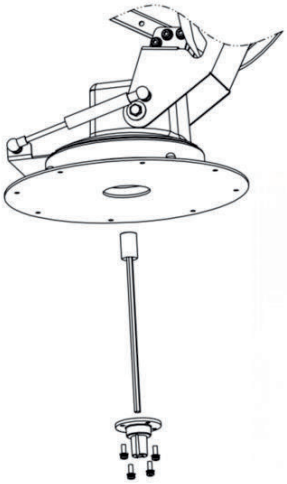


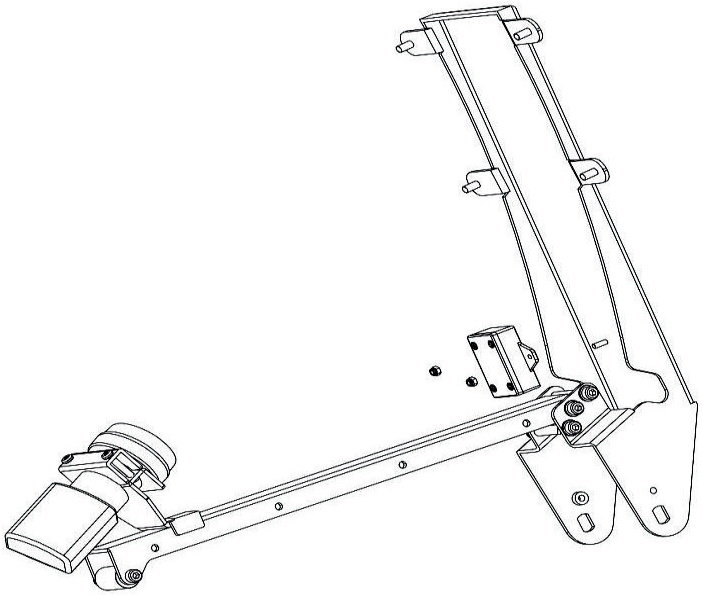


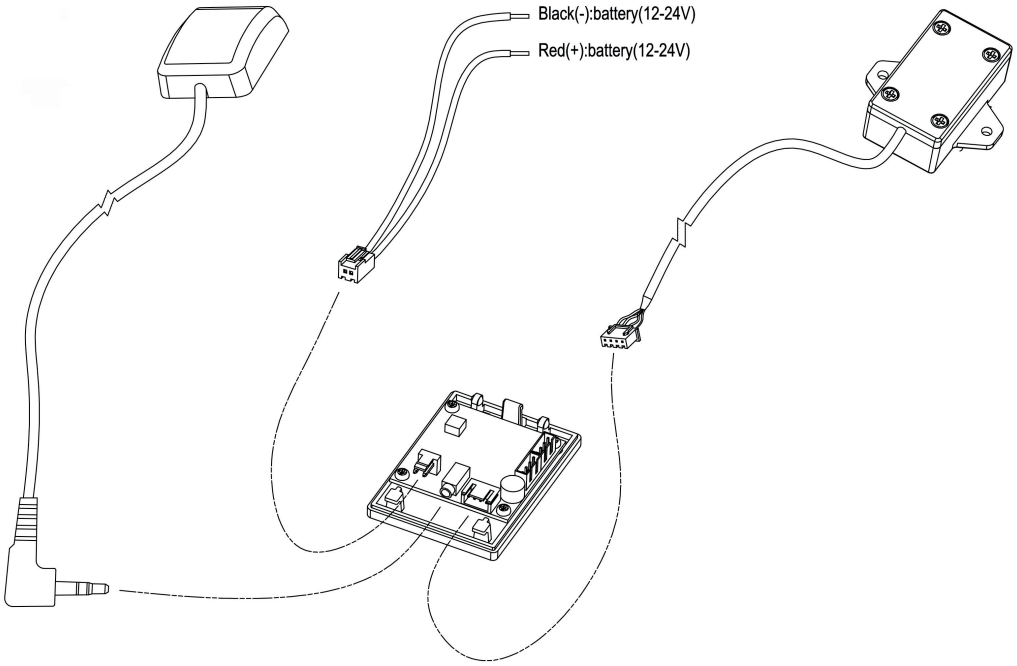











Black(-):battery(12-24V)
Red(+):battery(12-24V)


SATELLITE ELEVATION
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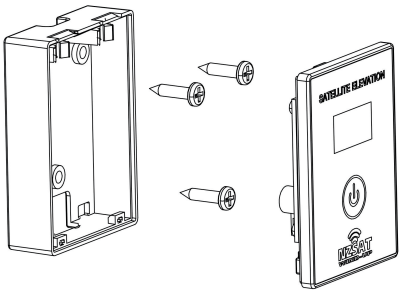
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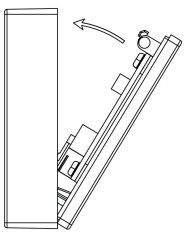

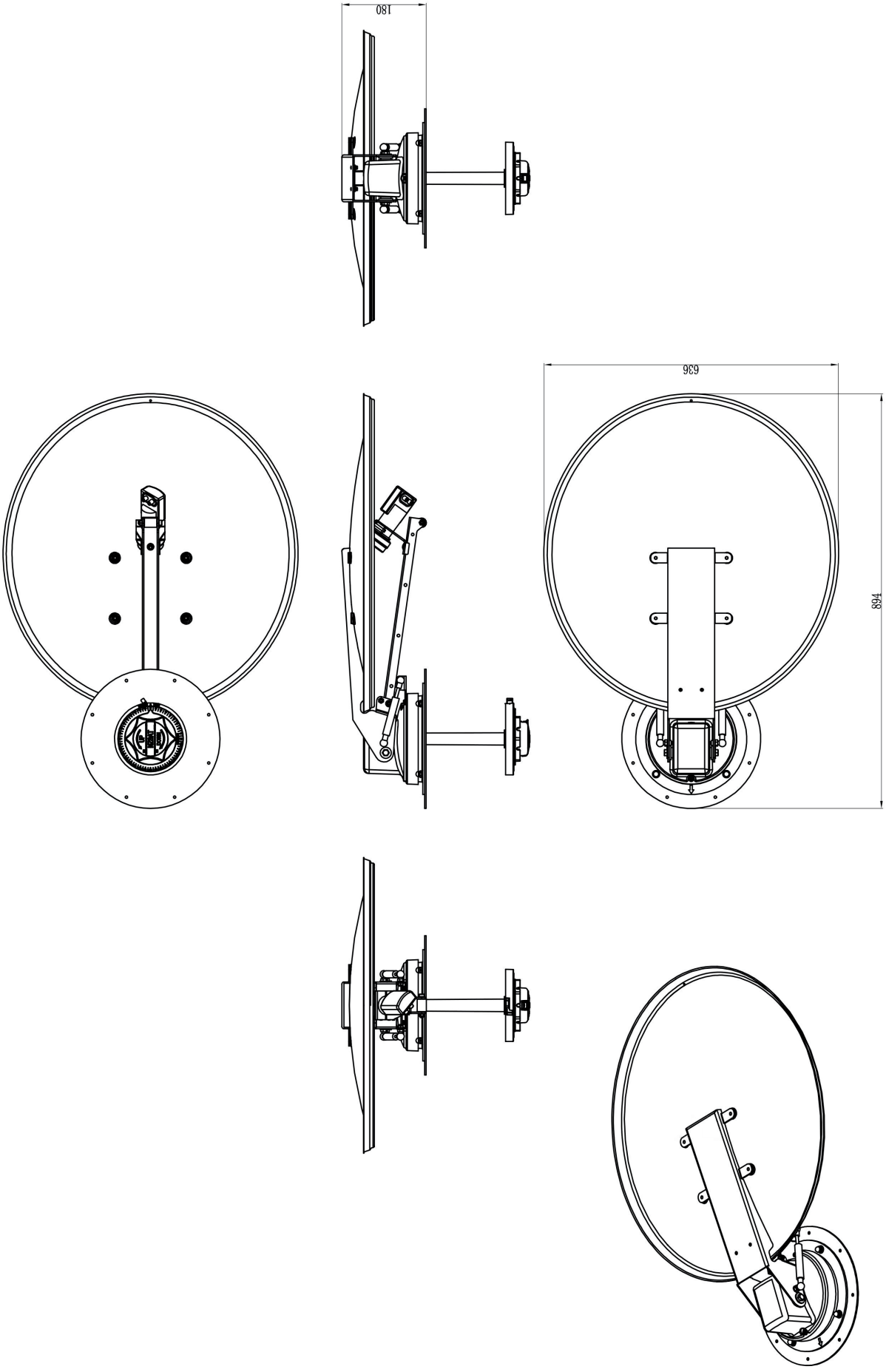
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