

# "NEO" TV SATELLITE ANTENNAS



"NEO" PANDORA -  
39cm dish



RHEA / SATURN - 47cm dish

Bluetooth



dCSS



MARS / RHINE - 60cm dish

MARINE 4K FULL HD DVB-S2 AND  
dCSS/SCR TV SATELLITE ANTENNAS  
WITH **WIRELESS CONTROL VIA APP**

**GLOMEX**  
*The best in marine antennas*®



GL00002

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## 1. FOREWORD

### 1.1 DELIVERY LETTER

Welcome: with the installation of this antenna, the world of satellite television comes on board your boat.

This manual has been drafted in order to help you with the correct installation and operation of the antenna.

### 1.2 ANTENNA IDENTIFICATION

When calling GLOMEX or an authorized Service Centre, always provide the **serial number** and the **model** of the antenna, shown on the second page of the manual, on the packaging, on the backside of the dish, next to the control unit.

### 1.3 WARRANTY

GLOMEX guarantees the "NEO" satellite antennas against conformity defects for a period of 24 (twenty-four) months from the date of sales.

Warranty is intended as the repair or replacement of the equipment showing conformity defects when entering the sales contract, with no charge for the materials.

In case of conformity defects, the customer is entitled to the replacement of the goods with no charge.

The warranty is only valid if the product **comes with a valid proof of purchase** (receipt or invoice).

The non-conforming product must be sent back to a Service Centre or authorized retailer, who will forward it to:

**GLOMEX S.r.l.**  
**Via Faentina 165/G**  
**48124, Ravenna (Italy)**

along with all the accessories supplied at purchase.

The warranty is provided by:

**GLOMEX S.r.l.**  
**Via Faentina 165/G**  
**48124 Ravenna (Italy)**

The serial number must neither be erased nor made illegible, otherwise the warranty will be voided.



### WARNING

Conserve the installation and user manual with care! Losing the serial number makes the warranty null and void!

The warranty does not apply in case of damage due to carelessness, use or installation not compliant with the instructions given, tampering, product or serial number modification, damage due to accidental causes or to the buyer's negligence.

Moreover, warranty does not apply in case of damage consequent to connections of the equipment to different voltages than those indicated or to sudden voltage variations of the network the equipment is connected to, as well as in case of damage caused by leakage, fire, inductive/electrostatic discharges or discharges due to lightning, use of cables different to those provided, overvoltages or other phenomena not related to the equipment.

The parts subject to wear consequent to use such as connection cables, driving belts, connectors, external parts and plastic supports are covered by a one-year period warranty.

The following are not covered by warranty: periodic monitoring, software updates, settings of the product, maintenance.

After the expiration of the warranty period, the technical support activities will be carried out charging the customer for the replaced parts, the labour costs and freight charges, according to current rates.

**The equipment will be replaced or repaired under warranty only and exclusively on Glomex quality department's approval.**

Should any dispute rise, the place of jurisdiction will exclusively be Ravenna (Italy).

### 1.4 GENERAL SAFETY RULES

Carefully read the instructions given and follow the precautions indicated to prevent potential hazards and to safeguard your health and safety, before carrying out any installation and maintenance operation.

This manual contains the following indications:

---

 **WARNING**

This symbol warns against potential damage to the equipment which could involve the operator's safety.

---

---

 **DANGER**

With specific warnings against potential dangers for the safety of the operator or other directly involved persons.

---

Failure to comply with the instructions preceded by the above-mentioned keywords (**WARNING** and **DANGER**) can cause serious accidents or even the death of the persons involved.

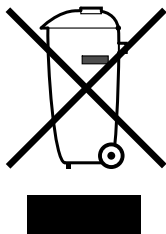
Moreover, in this Manual, some instructions are given with text in italics, preceded by the word **NOTE**.

The information and specifications given in this manual are based upon the information available at the moment it is written.

In case of doubts, do not hesitate to contact GLOMEX S.r.l.

### 1.5 ENVIRONMENT

Do not throw the appliance away with the normal household waste at the end of its life, but hand it in at an official point for recycling. By doing this, you will help preserve the environment.



**Fig. 1**

GL00024

## 2. PRODUCT DESCRIPTION

"NEO" satellite TV antennas manufactured by Glomex are fitted with a super fast satellite locking on system even under extreme rough sea conditions thanks to totally renewed electronic and mechanical characteristics: more powerful processor, faster driver and more sturdy structure. Also, the new electronics have been designed in order to make "NEO" antennas extra quiet, both in the satellite searching and tracking phases.

Thanks to the very new GPS system, Glomex "NEO" antennas save the navigation positions previously travelled and ensure increased signal reception performance even at the far ends of the signal coverage area.

Also, Glomex "NEO" satellite TV antennas are managed via the Glomex SAT App available for iOS and Android devices free of charge. Downloading the App you can connect to the satellite TV antenna via Bluetooth® and with just one click:

- update the antenna
- Update the list of the antenna satellites
- select and change the satellites
- Send the setting parameters of the antenna to the technical assistance in case of need.

The wide range of "NEO" satellite TV antennas covers all the LNB models (universal, multi-band, dCSS/SCR) to meet all yachtsmen's installation needs. The antenna models with the new dCSS/SCR technology have been specifically designed to be used with new dCSS decoders, such as Sky Q decoders, and take advantage of all their functions (such as recording a programme while watching another channel). The dCSS technology also ensures extremely simple and fast installation thanks to one single cable that goes down from the antenna even for multi-output installations.

The models available are:

"NEO" Pandora, code V8001N, TV satellite antenna, with 39cm parabolic dish and universal one-output LNB

"NEO" Rhea, code V8100N, TV satellite antenna, with 47cm parabolic dish and universal one-output LNB

"NEO" Saturn 4, code V9104N, TV satellite antenna, with 47cm parabolic dish and universal four-output LNB

"NEO" dCSS Saturn 4, code V9104N/DCSS, TV satellite antenna, with 47cm parabolic dish and LNB for dCSS decoder

"NEO" Mars, code V9801N, TV satellite antenna, with 60cm parabolic dish and universal one-output LNB

"NEO" Mars 4, code V9804N, TV satellite antenna, with 60cm parabolic dish and universal four-output LNB

"NEO" SKEW Mars 4, code V9804NSKEW, TV satellite antenna, with 60cm parabolic dish, universal four-output LNB and automatic Skew adjustment

"NEO" dCSS Mars 4, code V9104N/DCSS, TV satellite antenna, with 60cm parabolic dish and LNB for dCSS decoder

"NEO" dCSS SKEW Mars 4, code V9804NSKEW/DCSS, TV satellite antenna, with 60cm parabolic dish, LNB for dCSS decoder and automatic Skew adjustment

Glomex has also developed satellite TV antennas with 60cm parabolic dish specifically designed for river boats. The models are:

R9801N: TV satellite antenna with universal one-output LNB

R9804N: TV satellite antenna with universal four-output LNB

R9804N/DCSS: TV satellite antenna with LNB for dCSS decoder



### 3. CONTENTS AND CONNECTIONS

The satellite antenna is sent packed in a cardboard box and sealed with the GLOMEX "SAFETY SEAL" hoop, which has the function of CONTENT WARRANTY seal.

Upon receipt, check that:

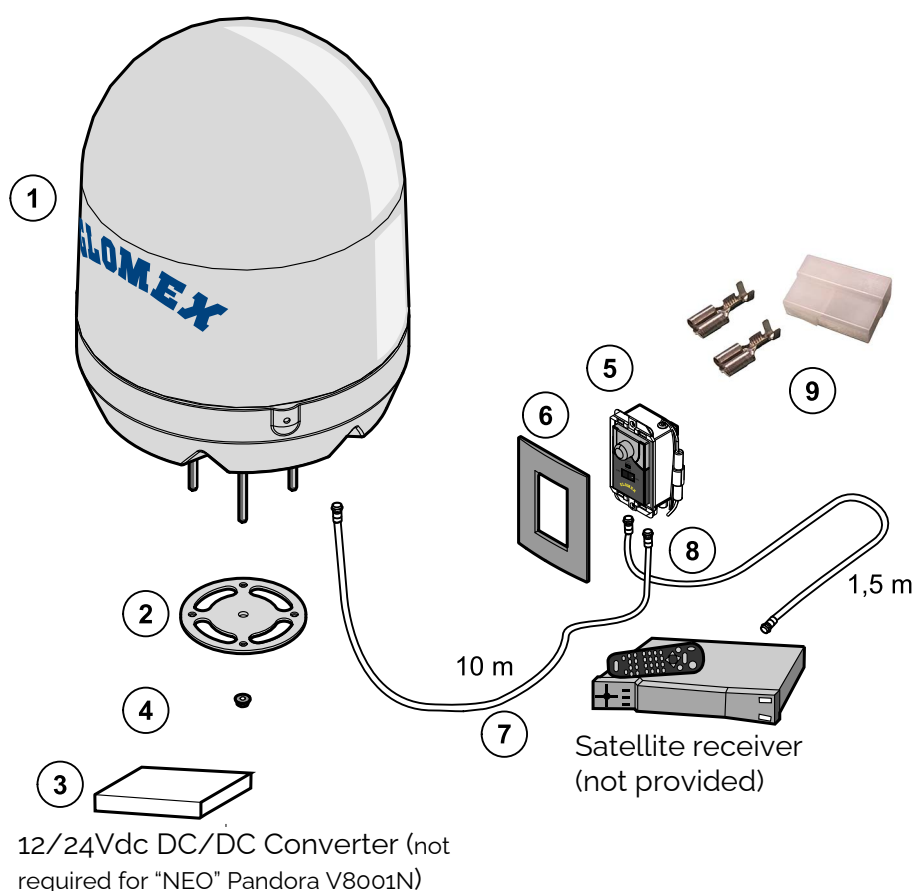
- the packaging is whole and the warranty hoop is present;
- the supply matches the order specifications;

- the antenna and its accessories are not damaged.

In case of damage or missing parts, immediately inform the Retailer, if possible with appropriate photos.

The table below lists the components contained in the package, indicating the quantities and the GLOMEX code (if provided).

#### "NEO" TV SATELLITE ANTENNAS WITH UNIVERSAL ONE-OUTPUT LNB



GL00279

Fig. 1

| "NEO" TV SATELLITE ANTENNAS WITH ONE OUTPUT           |             |
|-------------------------------------------------------|-------------|
| Component                                             | GLOMEX code |
| (1) Antenna unit                                      | -           |
| (2) Base seal                                         | 4.010.0415A |
| (4) M8 self-locking nuts (4 pcs)                      | 4.100.0019  |
| (3) 12/24 VDC DC/DC Converter                         | 4.120.0373  |
| Control unit (5)                                      | 4.120.0321  |
| (6) Frame for built-in installation                   | 4.010.0008  |
| (7) 10 m cable for antenna - control unit connection  | V9140/10    |
| (8) 1.5 m cable for control unit - satellite receiver | V9143       |
| (9) Female Faston for power supply (2 pcs)            | -           |

"NEO" TV SATELLITE ANTENNAS WITH UNIVERSAL FOUR-OUTPUT LNB

ENGLISH

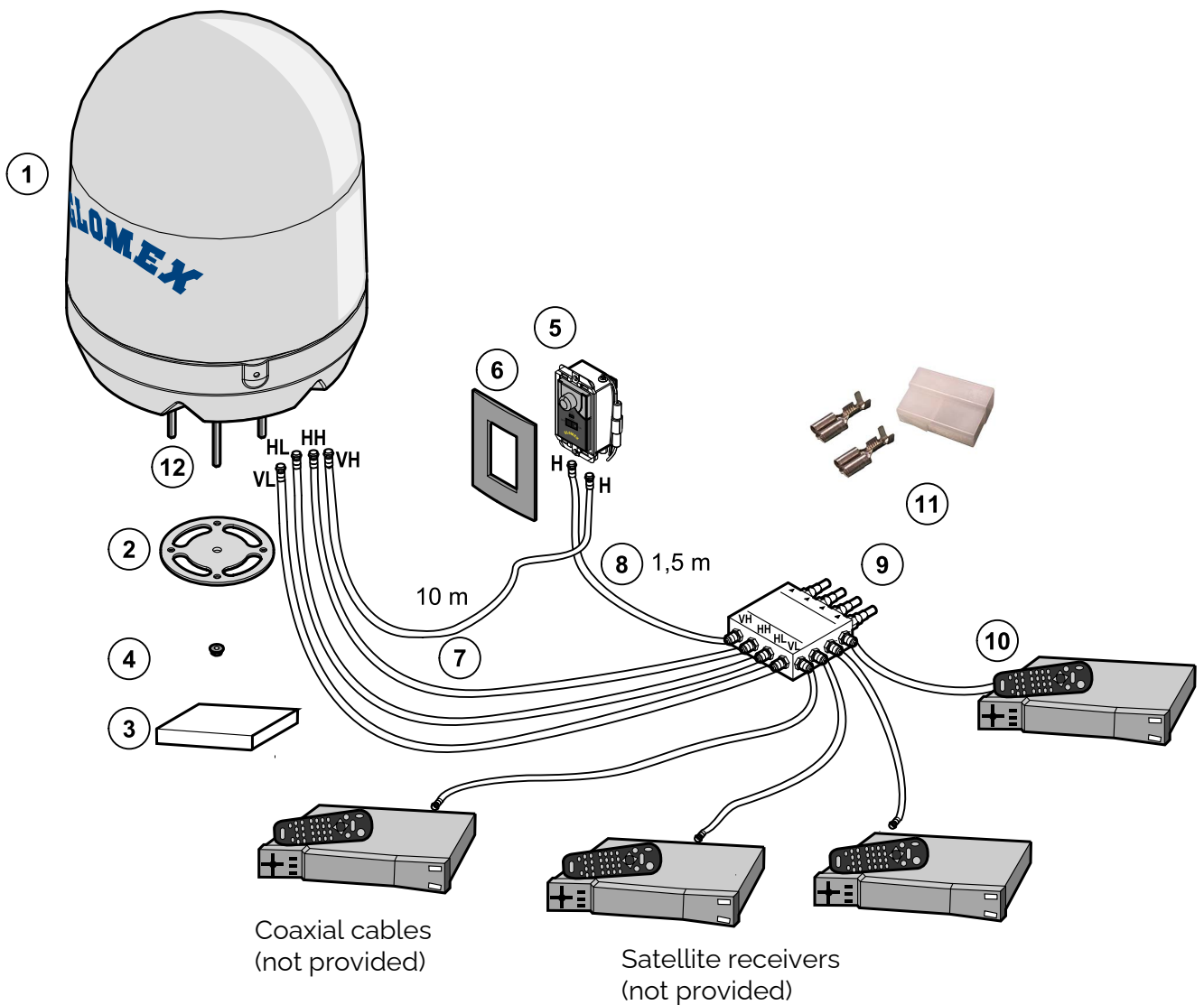


Fig. 2

GL00280

| "NEO" TV SATELLITE ANTENNAS WITH FOUR OUTPUT                                  |             |
|-------------------------------------------------------------------------------|-------------|
| Component                                                                     | GLOMEX code |
| (1) Antenna unit                                                              | -           |
| (2) Base seal                                                                 | 4.010.0415A |
| (3) 12/24Vdc DC/DC Converter                                                  | 4.120.0373  |
| (4) M8 self-locking nuts (4 pcs)                                              | 4.100.0019  |
| Control unit (5)                                                              | 4.120.321   |
| (6) Frame for built-in installation                                           | 4.010.0008  |
| (7) 10 m cable for antenna/ control unit and antenna / multiswitch connection | Vg140/10    |
| (8) 1.5 m cable for control unit / multiswitch connection                     | Vg143       |
| (9) Multiswitch                                                               | Vg191       |
| (10) 1.5m cable for multiswitch/ decoder connection (one cable provided)      | Vg143       |
| (11) Female Faston for power supply (2 pcs)                                   | -           |
| (12) Threaded bars (4 pcs)                                                    | 4.100.0118  |

"NEO" TV SATELLITE ANTENNAS WITH dCSS LNB

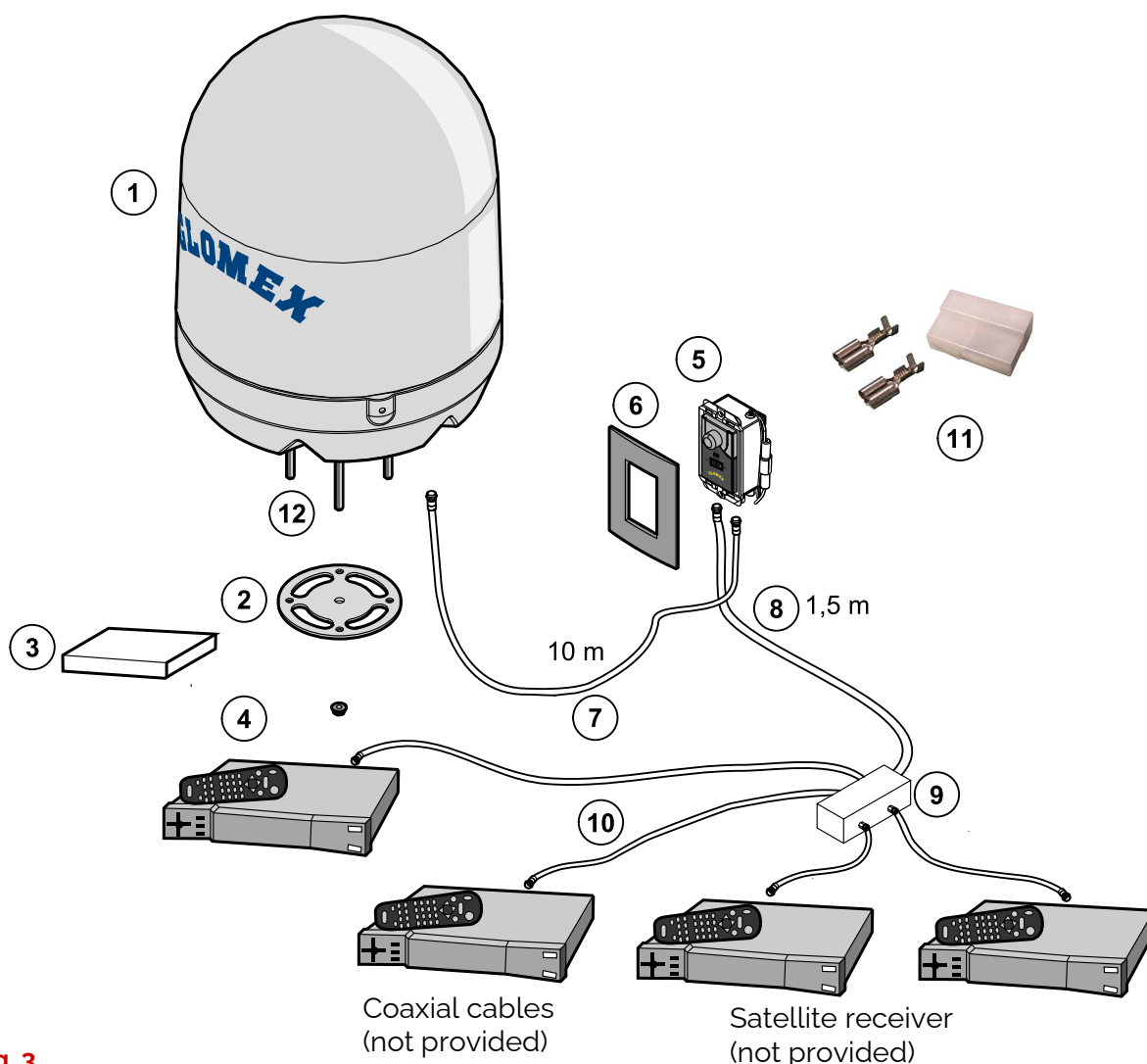


Fig. 3

GL00281

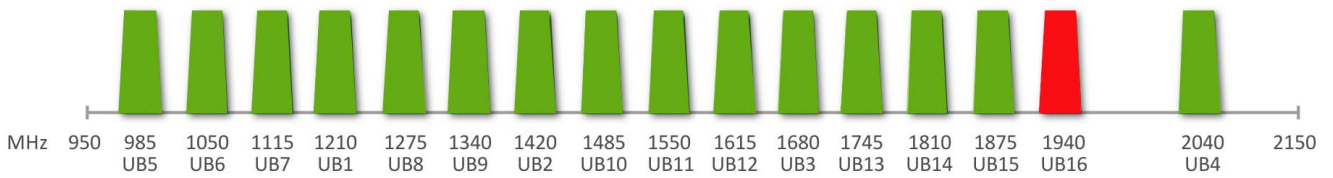
| "NEO" DCSS TV SATELLITE ANTENNAS                                                                |             |
|-------------------------------------------------------------------------------------------------|-------------|
| Component                                                                                       | GLOMEX code |
| (1) Antenna unit                                                                                | -           |
| (2) Base seal                                                                                   | 4.010.0415A |
| (3) 12/24Vdc DC/DC Converter                                                                    | 4.120.0373  |
| (4) M8 self-locking nuts (4 pcs)                                                                | 4.100.0019  |
| Control unit (5)                                                                                | 4.120.321   |
| (6) Frame for built-in installation                                                             | 4.010.0008  |
| (7) 10 m cable for antenna/ control unit and antenna / dCSS splitter connection (code V9140/10) | V9140/10    |
| (8) 1.5 m cable for control unit / dCSS splitter and antenna connection (code V9143)            | V9143       |
| (9) dCSS Splitter (not provided)                                                                | -           |
| (10) dCSS splitter / decoder connection cables (not provided)                                   | -           |
| (11) Female Faston for power supply (2 pcs)                                                     | -           |
| (12) Threaded bars (4 pcs)                                                                      | 4.100.0118  |

**NOTA:** The "NEO" DCSS antennas can be used with dCSS or SCR decoders only. Using the optional Glomex splitter, to be installed after the control unit, it is possible to connect up to max 15 dCSS or SCR decoders to the Glomex TV satellite antenna.

 **WARNING**

Follow the instructions given in the decoder's installation manual to configure your dCSS decoder. It is important to leave the 1940MHz (UB16) free when selecting the frequencies on your decoder. In fact, this frequency is used by the Antenna's Board.  
GLOMEX satellite TV Each decoder connected to the Glomex TV satellite antenna must use a different frequency.

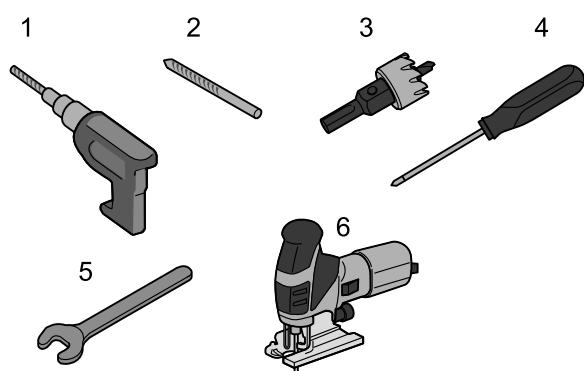
**SCR + dCSS Frequencies**



#### 4. NECESSARY TOOLS FOR ASSEMBLY (NOT PROVIDED)

Procure all tools and materials listed below. They will be necessary to complete installation.

- Electric drill (1).
- 8.5 mm drill tip for radome assembly (2).
- 28 mm hollow mill for drilling the passage hole for the antenna connector cable (3).
- Phillips screwdriver (with adequate dimensions for control unit installation) (4).
- 11 mm wrench (for the installation of the coaxial cable connectors) (5).
- Reciprocating saw (to create the compartment in case of wall built-in installation of the control unit; use the template provided on page 86) (6).



GL00102

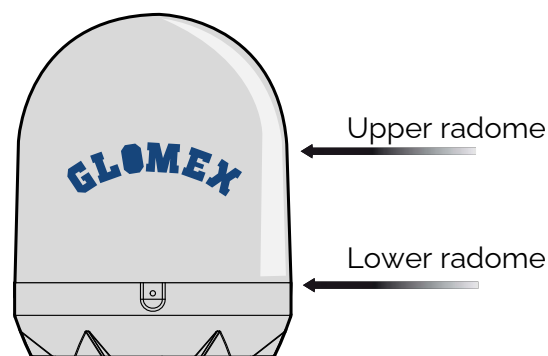


Fig. 4

GL00054

ENGLISH

#### WARNING

Plan the whole installation before proceeding! Please consider the lay-out of the various components, the distance between them, the length of the various cables and the accessibility to the equipment once it is installed.

#### WARNING

Always lift the antenna from the lower radome and never from the upper radome or any part inside it.

## 5. INSTALLATION

Before proceeding with the installation, please respect the following guidelines:

- please remember that the best position for the satellite TV antenna is in the middle of the boat, in the lowest possible position.
  - minimize obstruction. The antenna requires a clear view of the sky in order to receive satellite TV signals. The fewer the obstacles, the better the system operation. Any foreign body (flags, antennas, radar antennas, sailboat masts, cranes, bridges, etc.) between the antenna and the satellite obstructs the signal and prevents correct receipt.
  - make sure that the mounting surface is wide enough for the antenna base to be installed.
- Mount the antenna in a perfect horizontal position. If the surface on which the antenna is installed is not flat, use the optional stainless steel support for inclination adjustment (code V9500).
  - make sure that the mounting surface is resistant and rigid enough to support the weight of the antenna and the vibrations which could occur.
  - do not install the antenna near speakers or magnetic sources. In case it is not possible, it is necessary to compensate the magnetic source, paying attention not to interfere with the on-board compass.
  - Fix the antenna firmly to the surface.

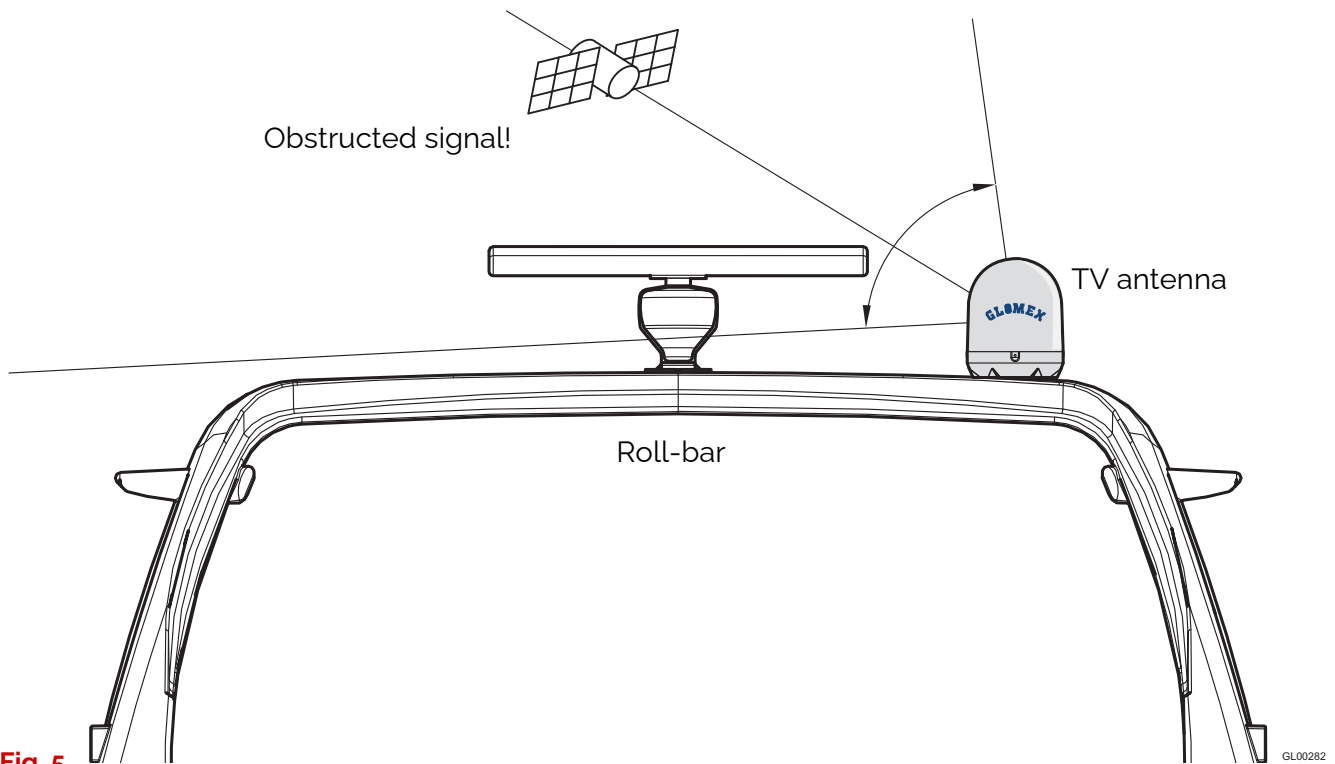


Fig. 5

### Typical antenna lifting

NORTHERN EUROPE (≈ 15°)

CENTRAL EUROPE (≈ 35°)

SOUTHERN EUROPE (≈ 50°)

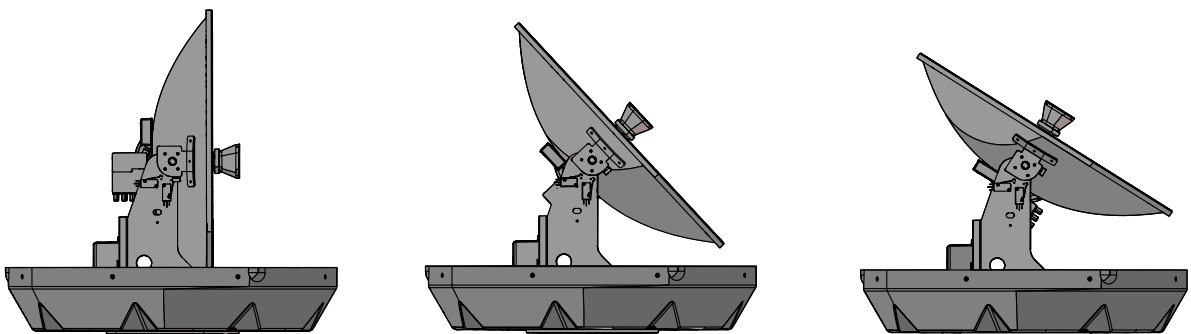


Fig. 6

- please also consider the position of the antenna with respect to the position of all various attachments or wiring harnesses inside the boat.
- the control unit should be mounted in a convenient position for the adjusting operations. It should be near the receiver/TV-set unit, so that the TV screen may be watched while carrying out the operations on the control unit.

We recommend not to install the antenna at the same level of the radar, as the radar's energy could damage the antenna. The antenna should be positioned at a distance of at least 1.5 m from the other transmitting antennas (VHF, radar) (Fig. 7).

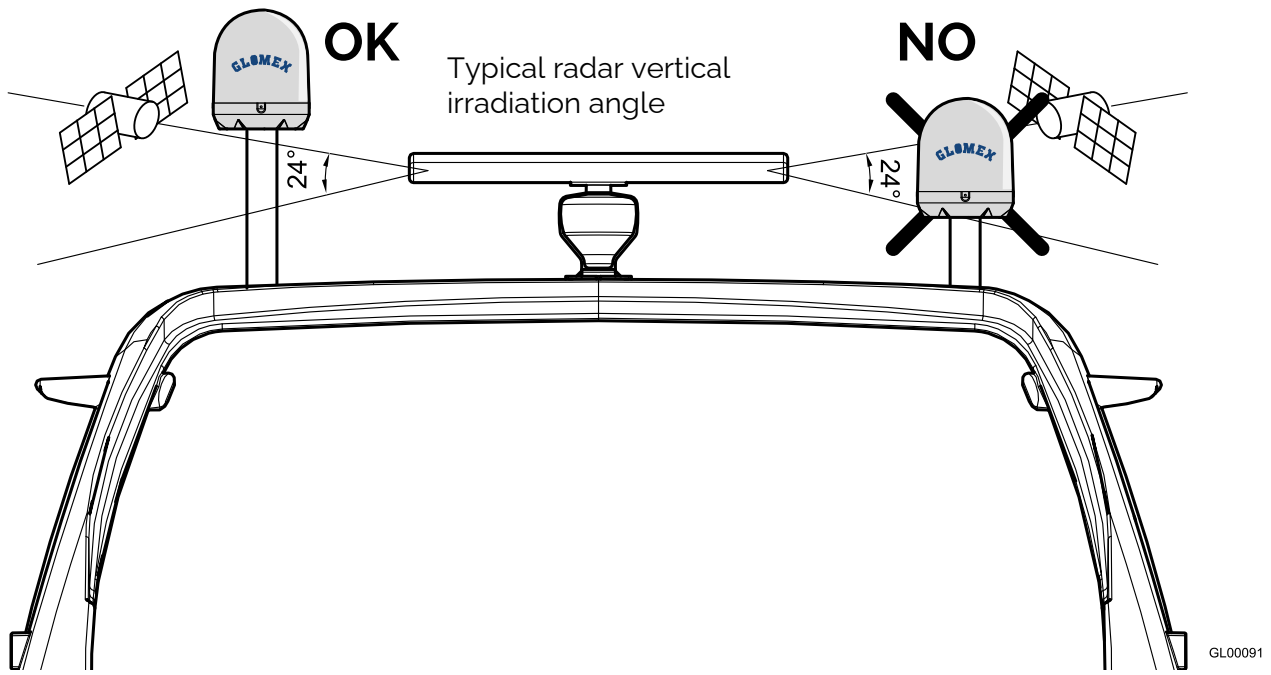


Fig. 7

**! WARNING**

The radio frequency beam transmitted by the radar may damage the inner electronics of the antenna, especially the LNB.

## 6. ASSEMBLY

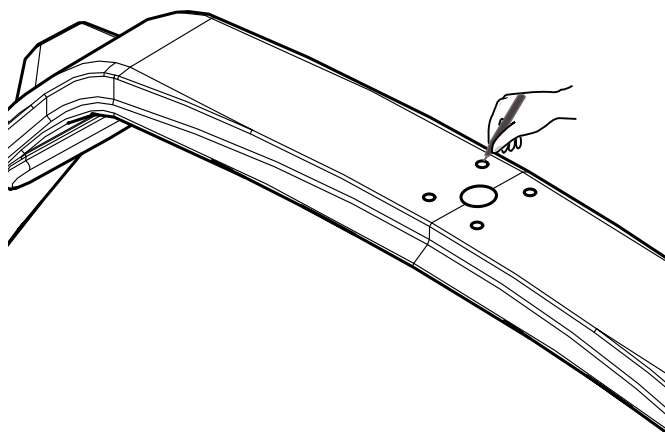
### 6.1 "NEO" PANDORA, "NEO" RHEA AND "NEO" DCSS SATURN 4

ENGLISH

#### DANGER

While installing the antenna, wear the appropriate safety equipment for the job to be carried out.

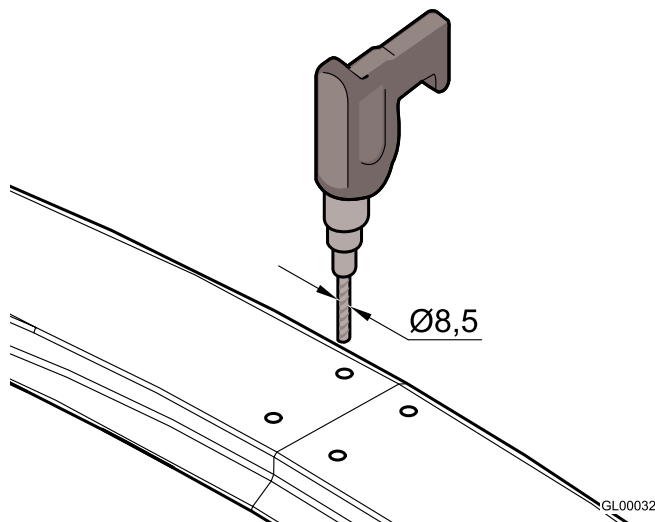
1. First of all, make sure you have chosen a correct position to install the antenna (see section 5: "Installation").
2. Remove the antenna from the packaging box.
3. Use cutting template 6.1 on page 85 and use a felt-tip pen to mark the holes for the screws coming out of the antenna and for cable passage.



GL00031

Fig. 8

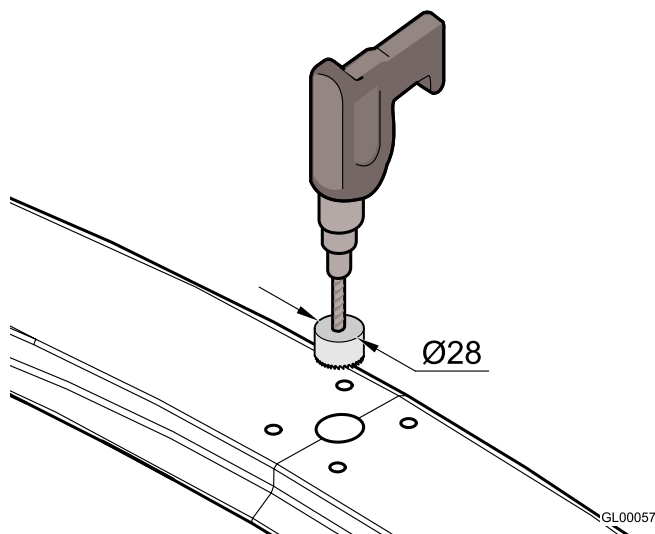
4. Drill the 4 holes for the passage of the 4 screws coming out of the antenna using an electric drill and a 8.5 mm drill tip on the supporting surface.



GL00032

Fig. 9

5. Drill the hole for cable passage by means of an electric drill and a 28 mm hollow mill.



GL00057

Fig. 10

6. Position the rubber seal so that the holes match.



7. **NEO PANDORA V8001N, NEO RHEA V8100N – NEO SATURN dCSS V9104NDCSS:** Position the antenna onto the seal, and firstly insert the cable through the relevant hole, then the 4 screws, and pay attention to direct the orientation symbol of the antenna towards the bow.
- NEO SATURN V9104N:** Have the four 10 m cables pass through the previously drilled hole and insert them inside the antenna through the hole in the antenna's lower radome

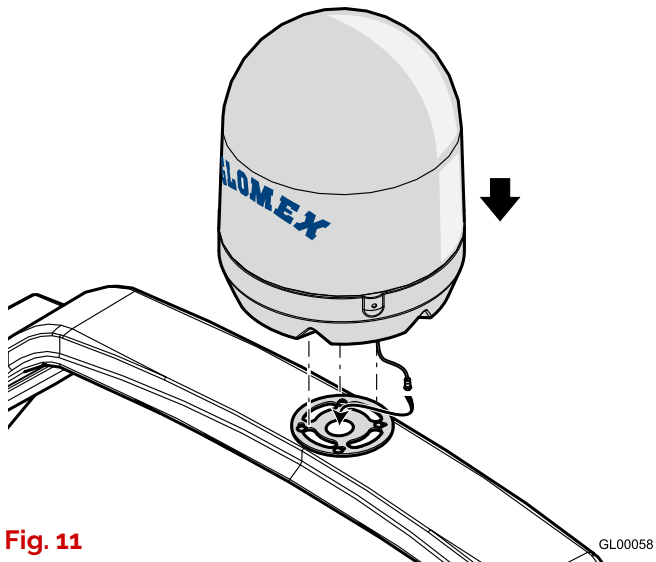


Fig. 11

8. Install the fastening reinforcements onto the threaded bars and screw in the M8 self-locking nuts.

**NOTA:** For "NEO" SATURN 4 antennas: Underneath the base of the antenna, insert the 4 M8 threaded bars and use a liquid thread locking product (Loctite®638). See Fig. 19.

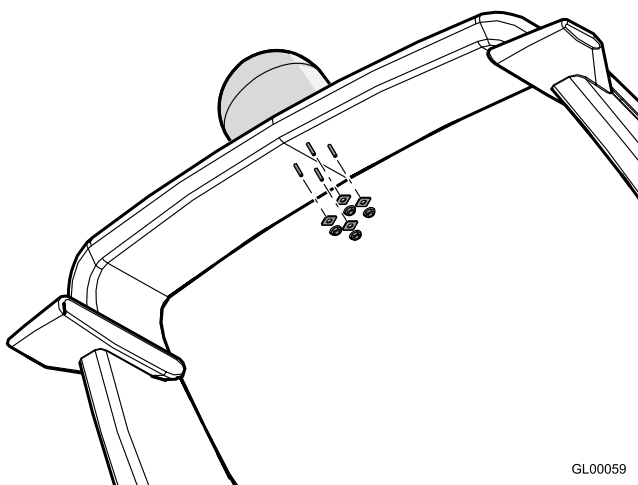


Fig. 12

9. Completely tighten.

**! WARNING**

GLOMEX declines any liability for an incorrect mounting of the radome on the boat.

10. **NEO PANDORA V8001N, NEO RHEA V8100N, NEO SATURN dCSS V9104NDCSS:** Connect the 10 m coaxial cable to the cable coming out of the antenna.
11. If the cable(s) need to be made shorter, please refer to the instructions given in Fig. 13.

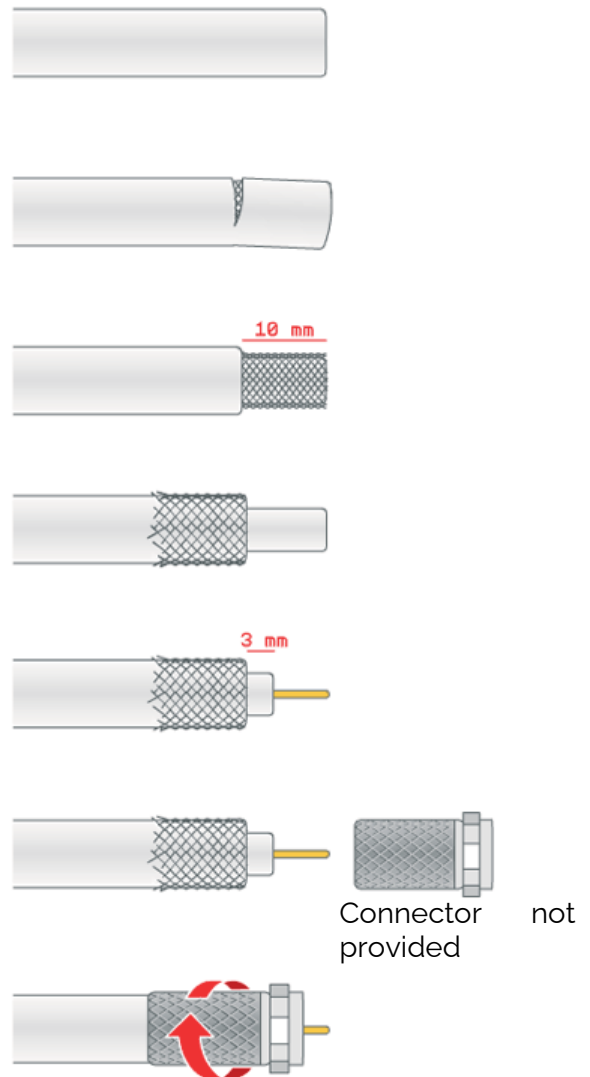


Fig. 13

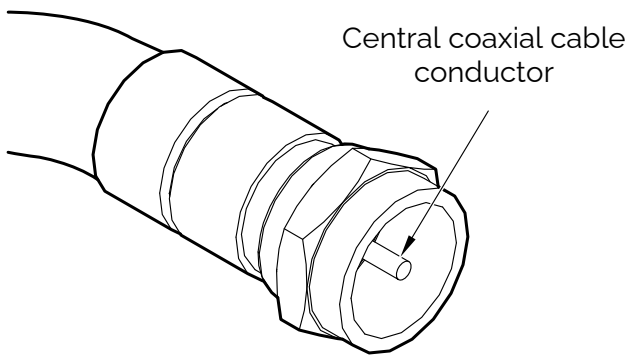
GL00095

**! WARNING**

**NEO PANDORA, RHEA V8100S3 – SATURN dCSS V9104DCSS:** Do not pull nor damage the cable coming out of the antenna! It is not provided with an outer sheath as the 10 m coaxial cable!

- Make sure that the cable core is correctly inserted in the central hole of the female connector on the antenna (otherwise, there could be a short circuit and the fuse installed on the cable would trip).  
Manually screw in the ring nut of connector F. Once the ring nut has been manually screwed in, tighten by ¼ turn by means of a 11 mm wrench.

**NOTA: NEO PANDORA V8001N, NEO RHEA V8100N, NEO SATURN dCSS V9104DCSS:** For the connection of the antenna coaxial cable, it is not necessary to remove the upper radome!



GL00011

Fig. 14

**WARNING**

For a correct assembly, respect the installation direction indicated in Fig. 11. A different installation from the recommended one could cause an incorrect operation of the antenna due to the risk of water penetration into the radome.

Operations to be carried out **inside** the boat.

- Determine the correct position for the control unit:
  - it must be positioned near the satellite receiver, as the provided coaxial cable is 1.5 m long;
  - it must be reached by the power supply cables coming from the control panel;
  - it must be reached by the coaxial cable coming from the antenna (10 m long);
  - it must be positioned in a dry and ventilated area.

- Connect the coaxial cable of the antenna (previously installed) to the ANTENNA IN input on the control unit and the 1.5 m coaxial cable to the RECEIVER OUT output on the control unit.  
Make sure that the cable cores are correctly inserted in the central holes of the relevant female connectors on the control unit (otherwise, there would be a short circuit and the fuse installed on the cable would trip).  
Manually screw in the ring nuts of connectors F.  
Once the ring nuts have been manually screwed in, tighten by ¼ turn by means of a 11 mm wrench.

**WARNING**

The inversion of the two cables jeopardizes the operation of the equipment. Make sure you have correctly installed the coaxial cables. In case of damage, GLOMEX will not be directly liable for the damage suffered by the receiver.

**ANTENNA WITH UNIVERSAL ONE-OUTPUT LNB**

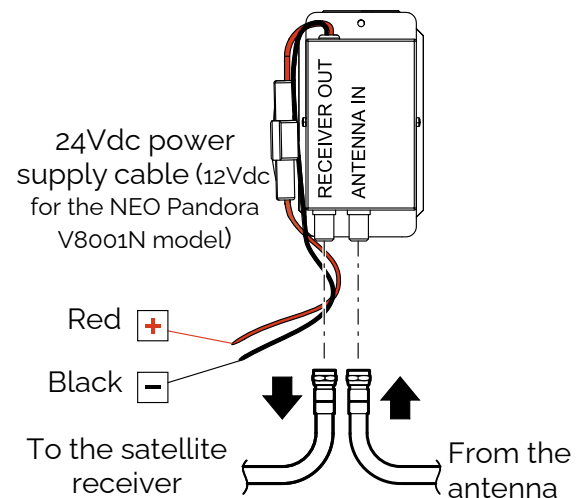


Fig. 15

GL00060

### ANTENNA WITH UNIVERSAL FOUR-OUTPUT LNB

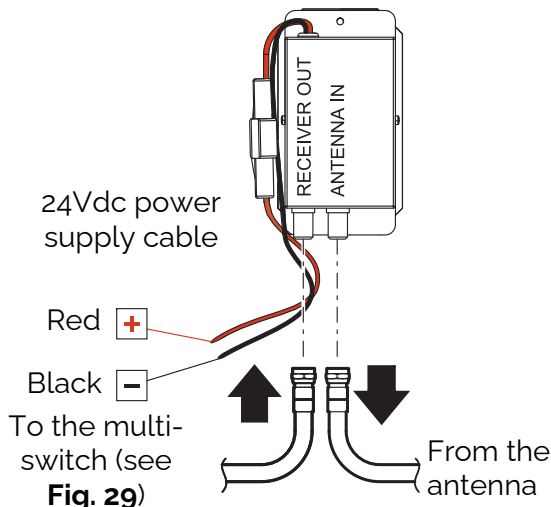


Fig. 16

GL00283

### NEO DCSS ANTENNA

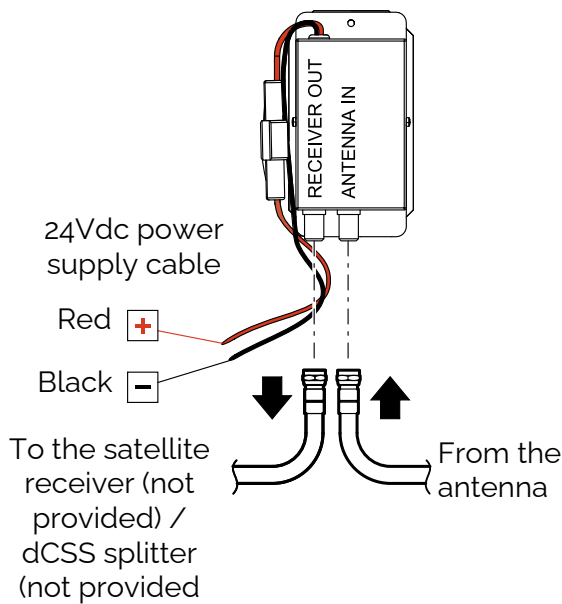


Fig. 17

GL00060

- The power supply line must be min 24V 5A (12V Pandora model only); the positive pole must be connected to the red cable while the negative one to the black cable. The power supply line must have cables with a minimum cross section of 2.5 mm<sup>2</sup> with a length up to 4 m, of 4 mm<sup>2</sup> for longer cables. If the power supply line is 12V, use the 12DC to 24DC converter provided.

### ! WARNING

Do not use power supply from secondary circuits. This could jeopardize the operation of the equipment.

**NOTA:** The polarity inversion on the power supply blows the fuse to prevent any damage to the antenna.

### ! WARNING

Pay attention not to bend the coaxial cables at a right angle; the bending angle must always be higher than 120°.

### ! WARNING

The "NEO" one-output satellite antenna is designed to operate with a single decoder; therefore, do not install signal splitters upstream or downstream the control unit.

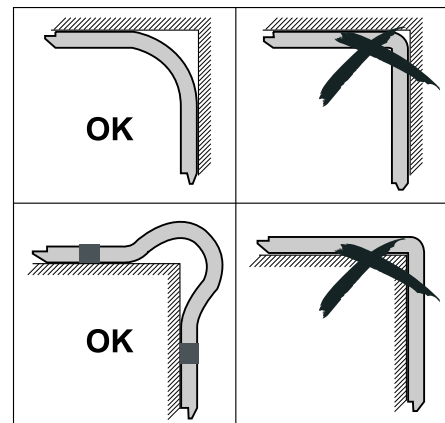


Fig. 18

GL00006

ENGLISH

**NOTA:** Do not cut the connectors of the coaxial cables (the operation would not be guaranteed any more) and always use the original GLOMEX cables supplied, even with inappropriate dimensions (too long). **Do not use different cables, as it would jeopardize the operation of the equipment.**

4. Build in the control unit by using the GLOMEX accessory (code 4.010.0008) by boring a hole with a reciprocating saw and using the drill with 2.5 mm tip (use the cutting template in **Fig. 33** for correct dimensions).
5. Connect the 1.5 m coaxial cable to the satellite receiver.

**NOTA:** Maximum wall thickness for mounting the control unit: 20 mm.

**! WARNING**

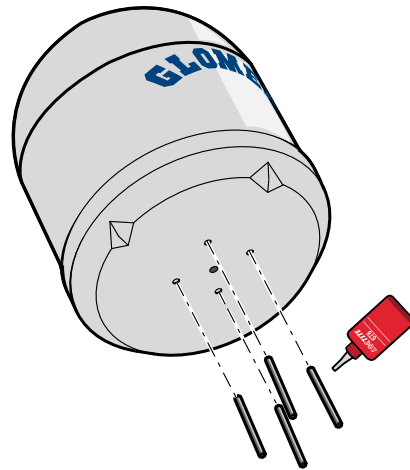
If the control unit led flashes alternately red and green, there is no communication between the antenna and the control unit. It is therefore necessary to check that the connection cable between antenna and control unit is correctly fastened and is not interrupted or short-circuited.

**6.2 "NEO" SATURN 4 , "NEO" MARS AND "NEO" RHINE ANTENNAS**

**! DANGER**

While installing the antenna, wear the appropriate safety equipment for the job to be carried out.

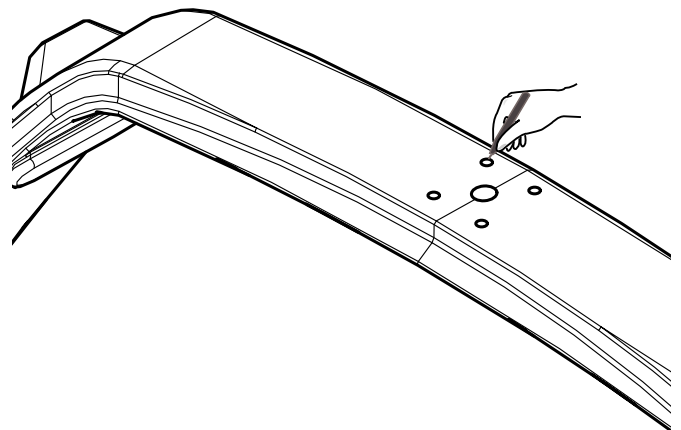
1. First of all, make sure you have chosen a correct position to install the antenna (see section 5: "Installation").
2. Remove the antenna from the packaging box. Remove the screws from the lower radome.
3. Underneath the base of the antenna, insert the 4 M8 threaded bars and use a liquid thread locking product (Loctite®638).



GL00056

**Fig. 19**

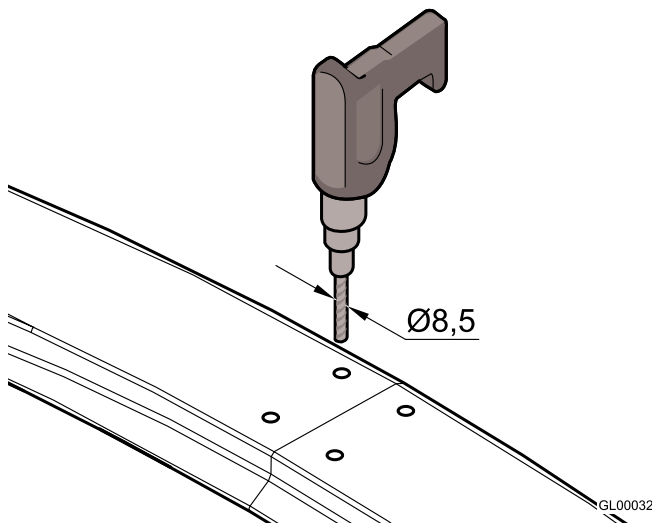
4. Use cutting template 6.1 on page **85** and use a felt-tip pen to mark the holes for the threaded bars and cable passage.



GL00075

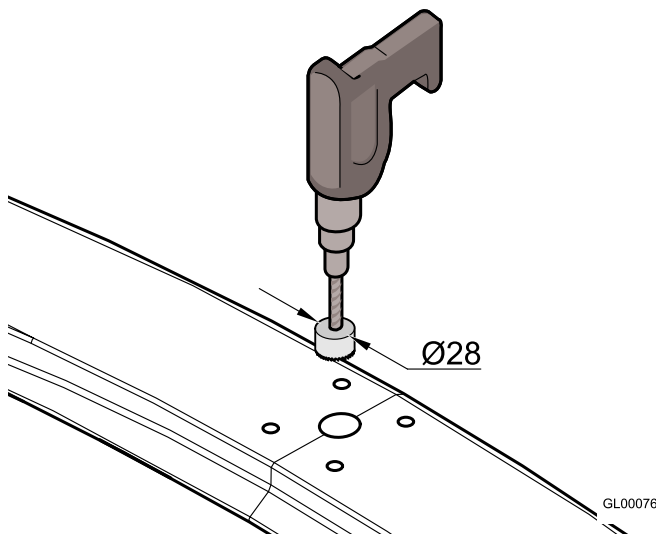
**Fig. 20**

5. Drill the 4 holes for the passage of the threaded bars by means of an electric drill and a 8.5 mm drill tip on the supporting surface.



**Fig. 21**

6. Drill the hole for cable passage by means of an electric drill and a 28 mm hollow mill.

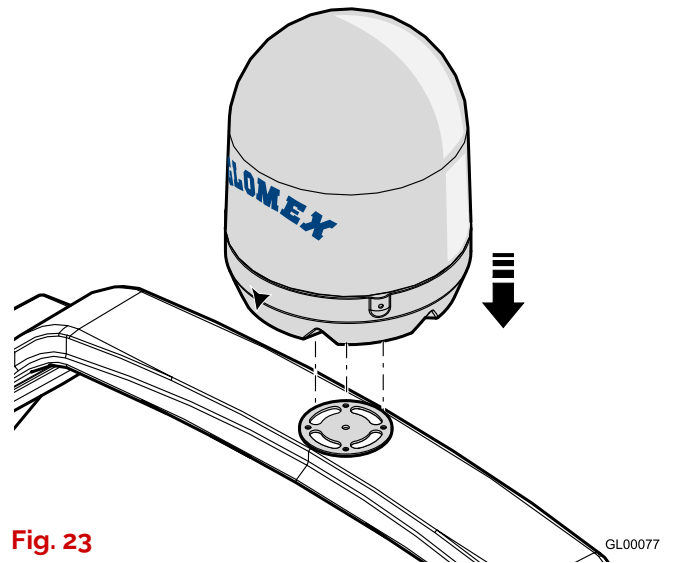


**Fig. 22**

7. Position the rubber seal so that the holes match.

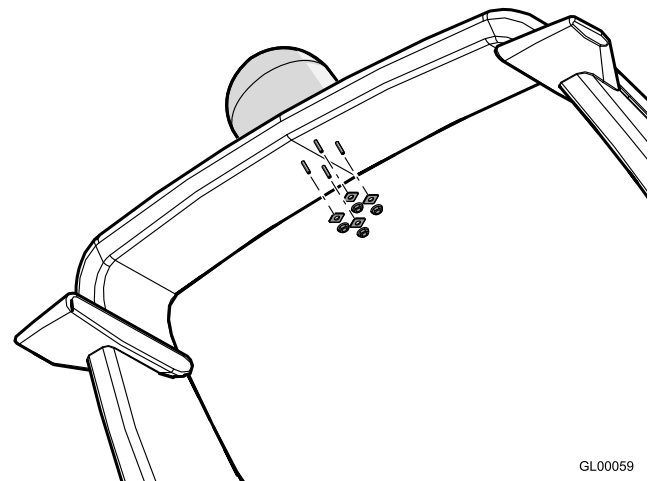
8. **SATURN 4dCSS (V9104NDCSS) and MARS dCSS (V9804NDCSS and V9804NSKEW/DCSS):** Position the antenna onto the seal, and firstly insert the cable through the relevant hole, then the 4 screws, and pay attention to direct the orientation symbol of the antenna towards the bow.

**SATURN 4 (V9104N) and MARS (V9804N and V9804NSKEW):** Have the four 10 m cables pass through the previously drilled hole and insert them inside the antenna through the hole in the antenna's lower radome



**Fig. 23**

9. Install the fastening reinforcements onto the threaded bars and screw in the M8 self-locking nuts.



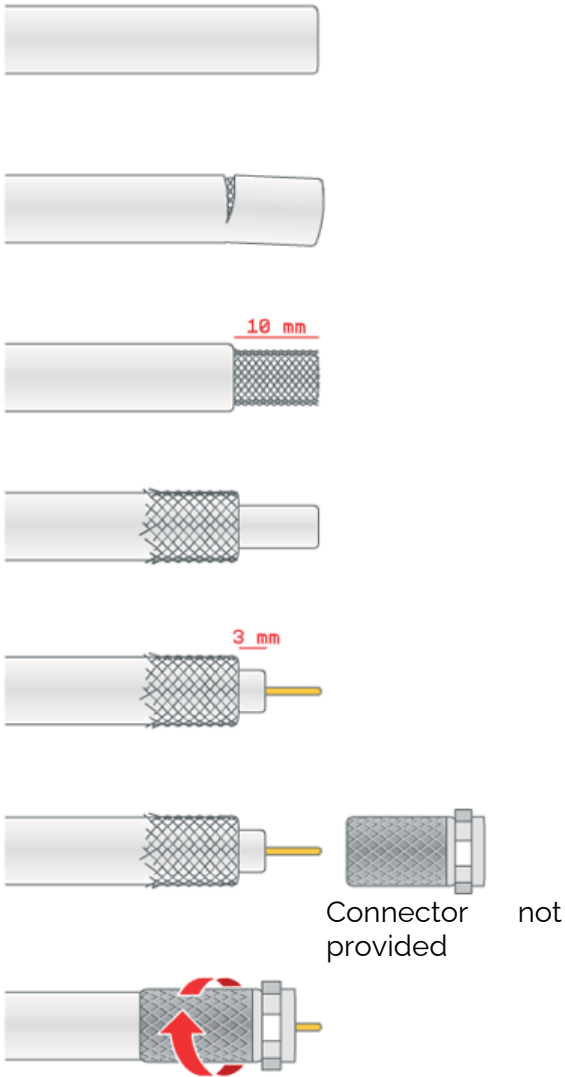
**Fig. 24**

10. Completely tighten.

**! WARNING**

GLOMEX declines any liability for an incorrect mounting of the radome on the boat.

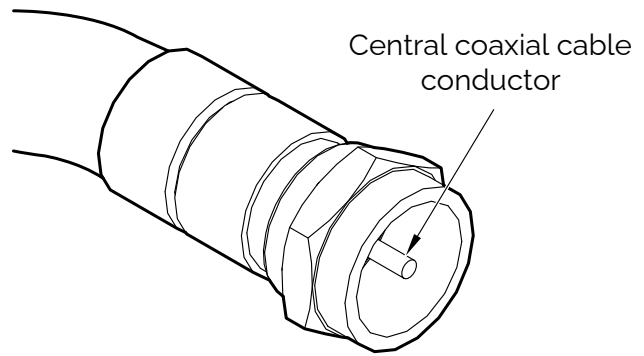
11. If the cable(s) need to be made shorter, please refer to the instructions given in Fig. 25.



GL00095

**Fig. 25**

12. Make sure that the cable core is correctly inserted in the central hole of the female connector on the antenna.  
Manually screw in the ring nut of connector F. Once the ring nut has been manually screwed in, tighten by ¼ turn by means of a 11 mm wrench.
13. Remove the two safety straps found on the azimuth and lifting gears.



GL00011

**Fig. 26**

**! WARNING**

For a correct assembly, respect the installation direction indicated in Fig. 11.

A different installation from the recommended one could cause an incorrect operation of the antenna due to the risk of water penetration into the radome.

Operations to be carried out **inside** the boat.

1. Determine the correct position for the control unit:
  - it must be positioned near the satellite receiver, as the provided coaxial cable is 1.5 m long;
  - it must be reached by the power supply cable coming from the power supply;
  - it must be reached by the coaxial cable coming from the antenna (10 m long);
  - it must be positioned in a dry and ventilated area (maximum operating temperature 45° C).

2. Determine the correct position for the power supply;
  - it must be close to the control unit;
  - it must be reached by the (red - black) cable coming from the batteries or from the on-board panel;
  - it must be positioned in a dry and ventilated area (maximum operating temperature 45° C).
3. Connect the coaxial cable of the antenna (previously installed) to the ANTENNA IN input on the control unit and a coaxial cable between the RECEIVER OUT output on the control unit and the decoder.
 

Make sure that the cable cores are correctly inserted in the central holes of the relevant female connectors on the control unit. Manually screw in the ring nuts of connectors F.

Once the ring nuts have been manually screwed in, tighten by ¼ turn by means of a 11 mm wrench.

4. Connect the power supply cable (24Vdc) to a free switch for the on-board electronic devices (min. 5A): connect the positive terminal to the red cable and the negative terminal to the black cable. The power supply line must have cables with a minimum cross section of 2.5 mm<sup>2</sup> with a length up to 4 m, of 4 mm<sup>2</sup> for longer cables.

**⚠ WARNING**

Do not use power supply from secondary circuits. This could jeopardize the operation of the equipment.

**⚠ WARNING**

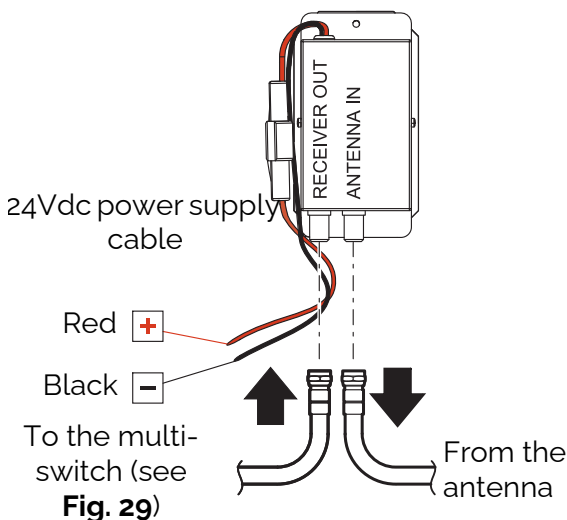
In order to prevent that current leakage or charge build-up may damage the electronic components of the antenna, make sure there is an efficient grounding system.

**⚠ WARNING**

Pay attention not to bend the coaxial cables at a right angle; the bending angle must always be higher than 120°.

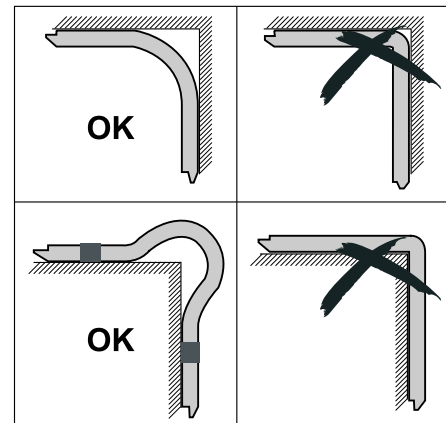
**⚠ WARNING**

The inversion of the two cables jeopardizes the operation of the equipment. Make sure you have correctly installed the coaxial cables. In case of damage, GLOMEX will not be directly liable for the damage suffered by the receiver.



**Fig. 27**

GL00283



**Fig. 28**

GL00006

**NOTA:** Do not cut the connectors of the coaxial cables (the operation would not be guaranteed any more) and always use the original GLOMEX cables supplied, even with inappropriate dimensions (too long). **Do not use different cables, as it would jeopardize the operation of the equipment.**



**WARNING**

If the control unit led flashes alternately red and green, there is no communication between the antenna and the control unit. It is therefore necessary to check that the connection cable between antenna and control unit is correctly fastened and is not interrupted or short-circuited.

- For models V9104N, V9804N and V9804NSKEW which provide for the presence of the multiswitch, connect the cables by following the indications given in **Fig. 29**.

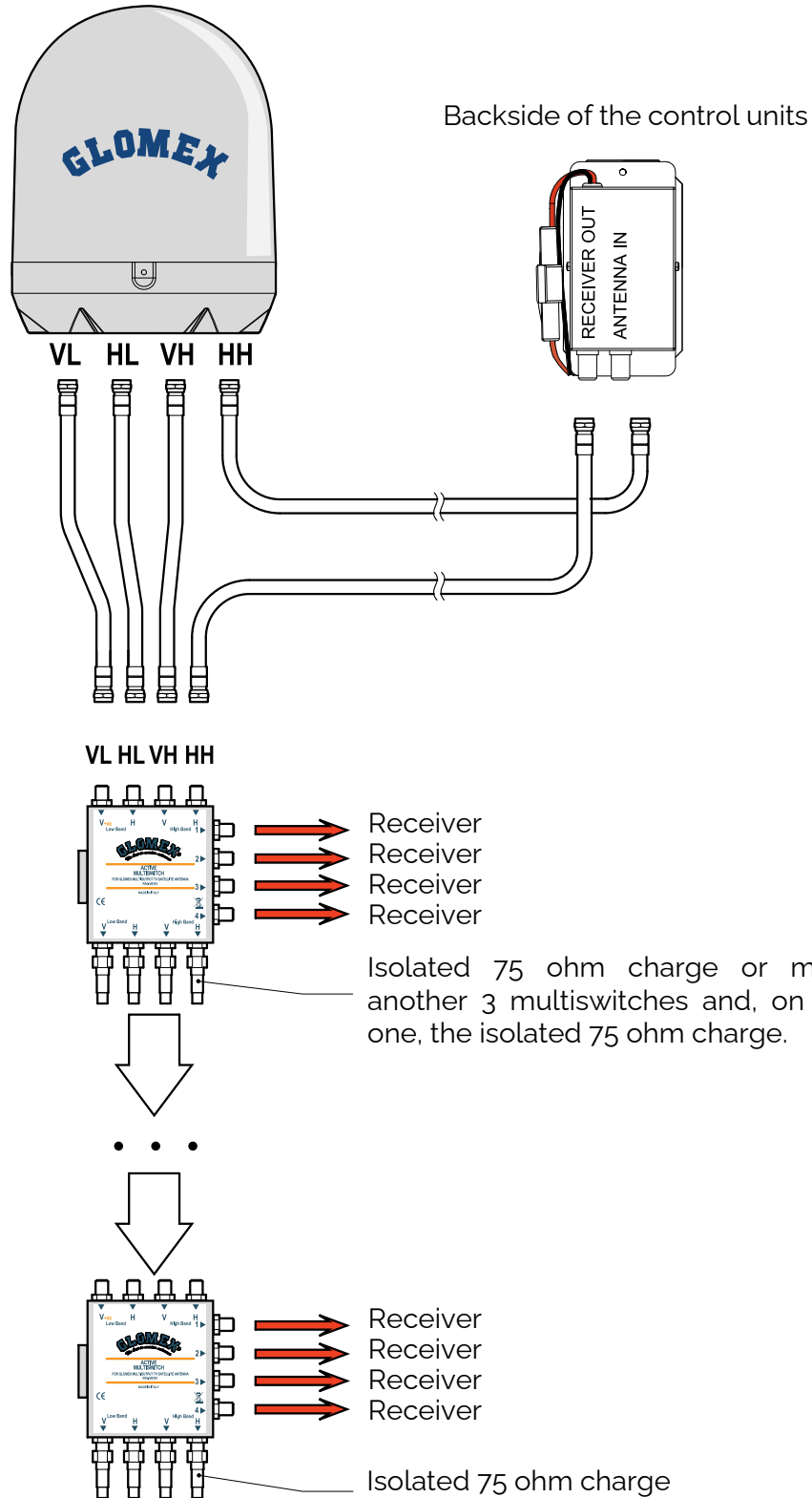


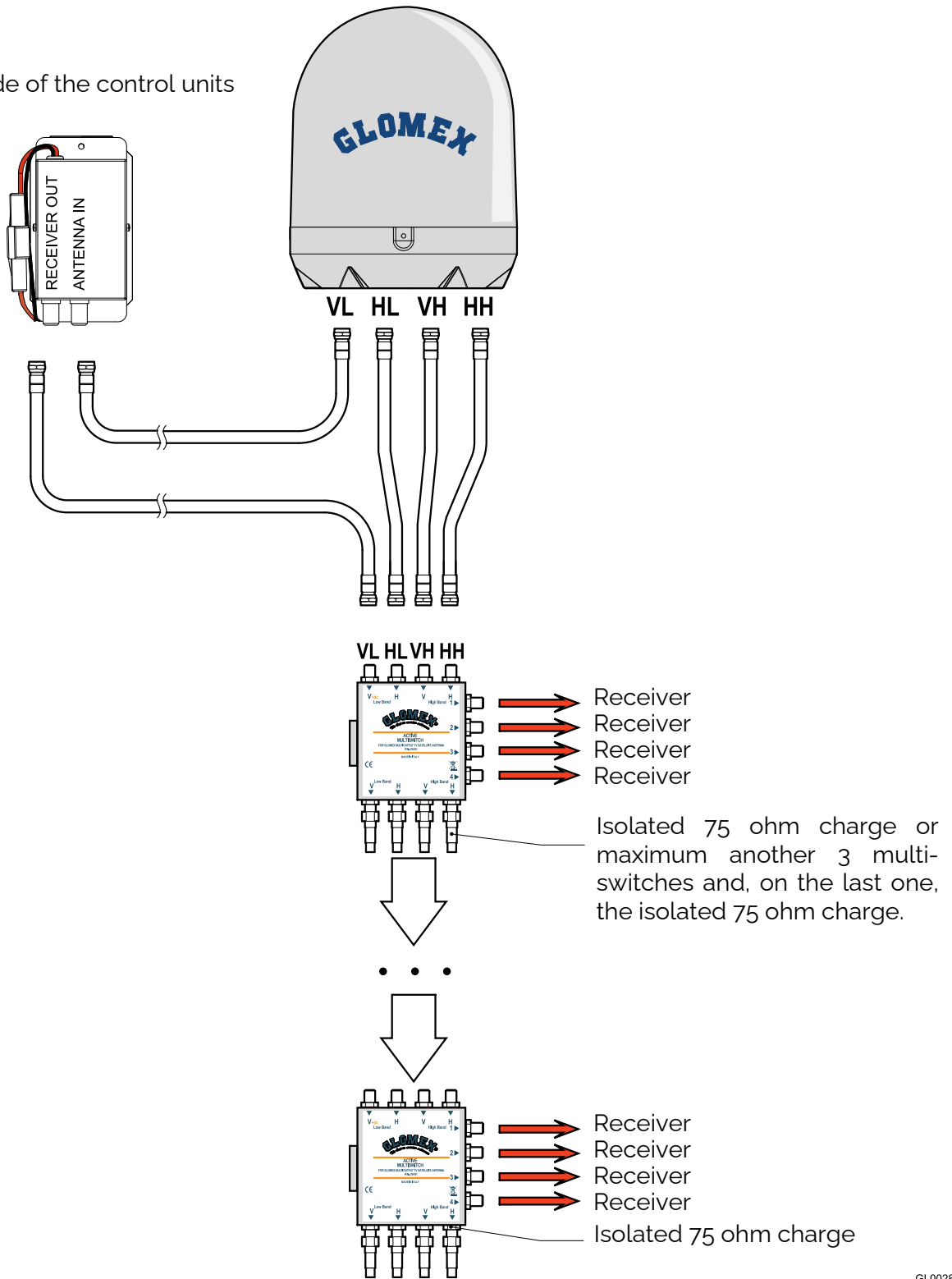
Fig. 29

GL00288



- For models R9804N which provide for the presence of the multiswitch, connect the cables by following the indications given in **Fig. 30**.

Backside of the control units



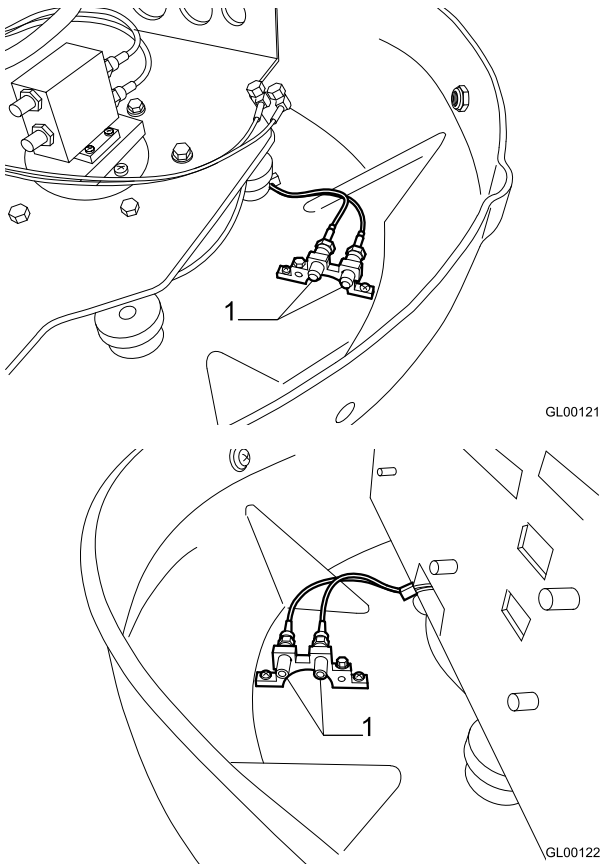
**Fig. 30**

GL00289

To connect the coaxial cables to VL, HL, VH and HH sockets of the coaxial rotating joint it is necessary to remove the upper radome and to connect the various cables to the connectors (1) available inside the lower radome, trying to give the cables a path that follows the curvature of the radome.

**NOTA:** for some models, there is a single bracket with 4 connections instead of 2 brackets with 2 connections each.

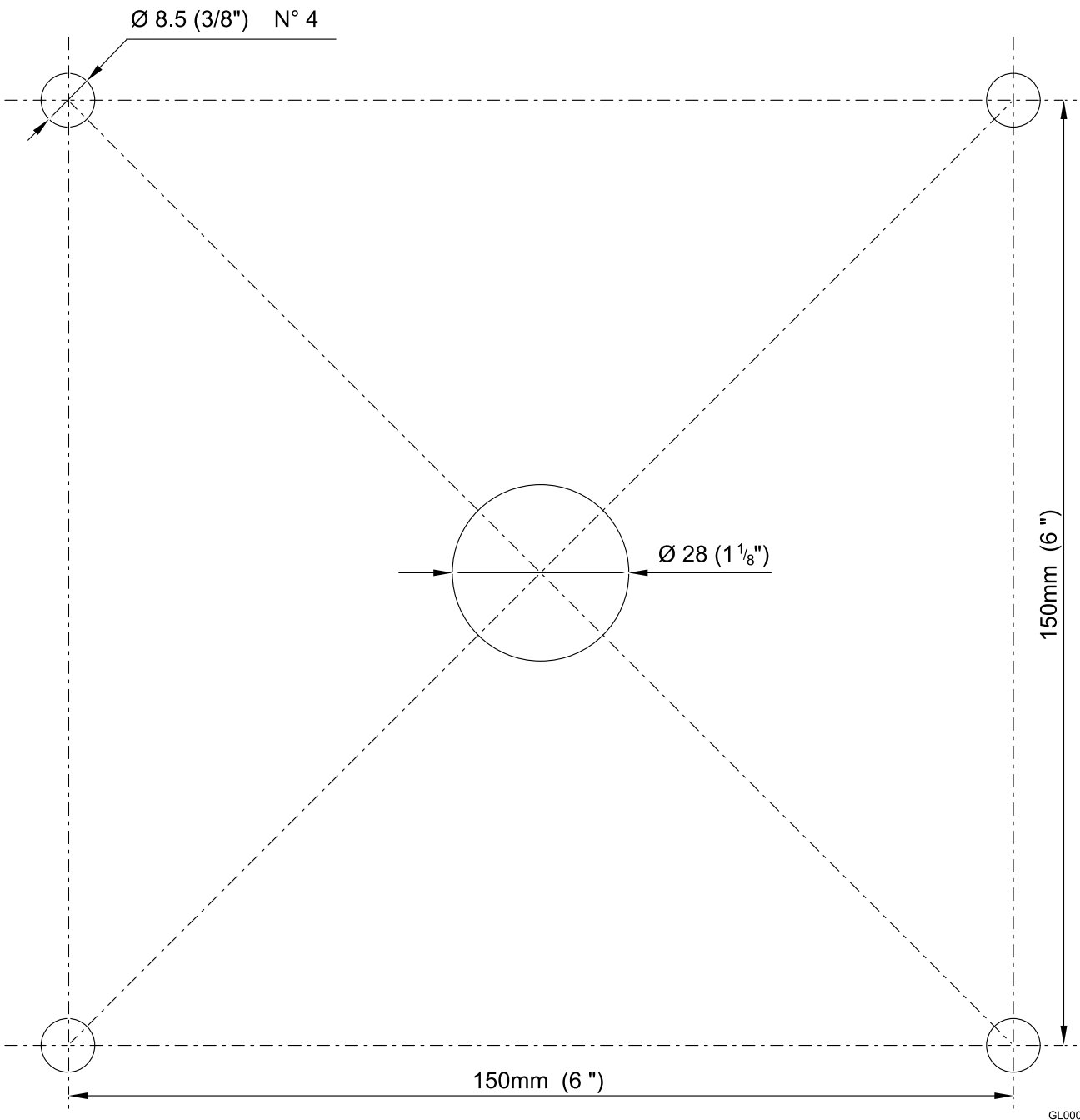
8. Connect the cables to the line amplifier (is available), to the multiswitch (if available), to the receiver(s) (not included), as indicated in Fig. 30.



**Fig. 31**

7. Build in the control unit by using the GLOMEX accessory (code 4.010.0008) by boring a hole with a reciprocating saw and using the drill with 2.5 mm tip (use the cutting template in Fig. 32 for correct dimensions). Connect the 1.5 m coaxial cable to the satellite receiver.

### 6.3 LOWER RADOME CUTTING TEMPLATE



ENGLISH

Fig. 32

GL00061

### 6.4 CUTTING TEMPLATE FOR BUILT-IN INSTALLATION OF THE CONTROL UNIT

ENGLISH

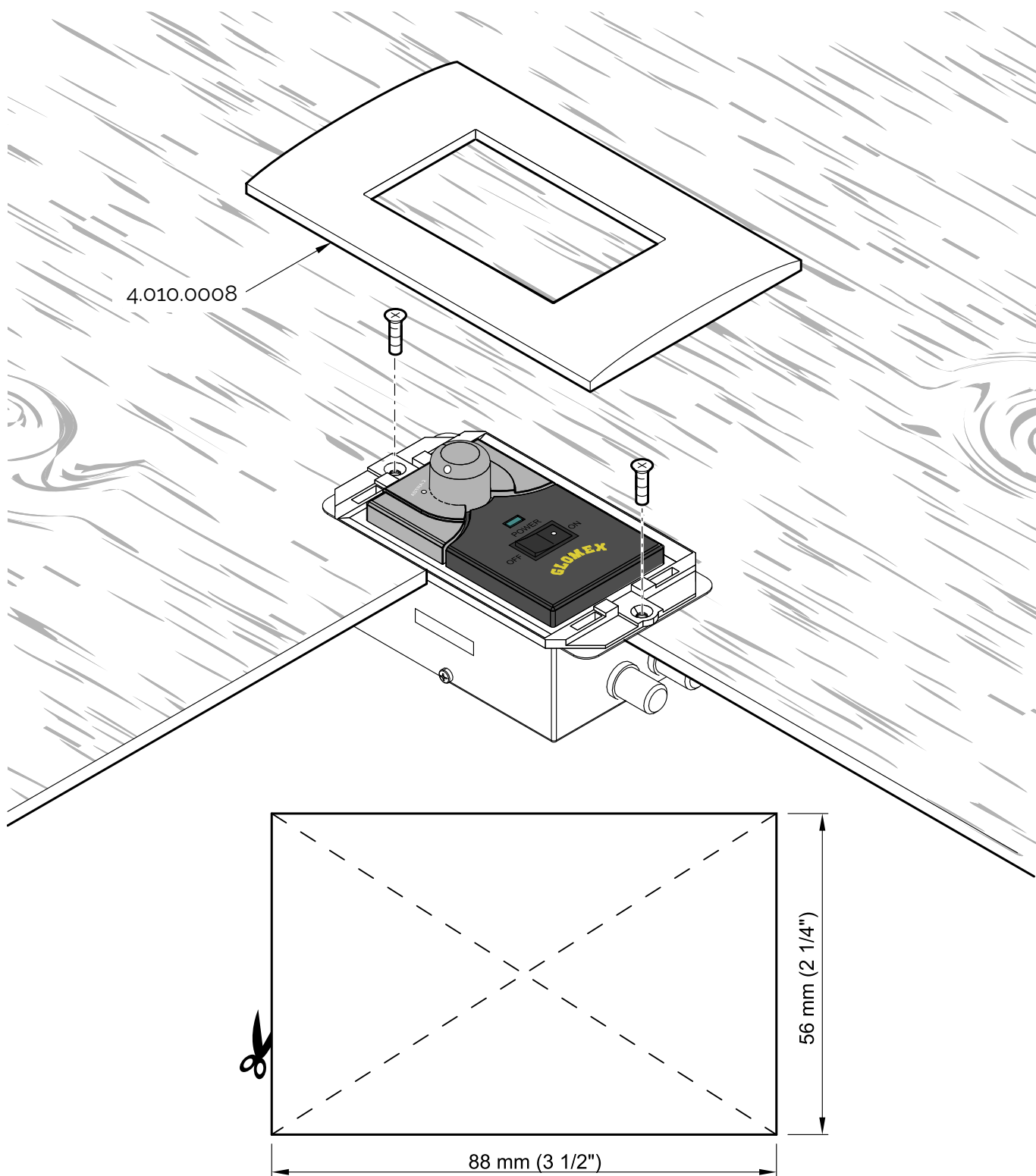


Fig. 33

GL00062

## 6.5 SKEW CALIBRATION (MANUAL)

Such a paragraph concern the GLOMEX models with code TV8001N, V8100N, V9104N, V9104N/DCSS, V9801N, R9804N and R9804N/DCSS.

The LNBs installed in GLOMEX TV satellite antennas are developed to receive the satellites that transmit in linear polarization (Europe) and not require any calibration during

Installation to optimize the alignment of the LNB with the satellite you want to receive.

When you are at the same longitude of the satellite, its horizontal and vertical signals are aligned with the horizon. When the satellite is east or west of your position, the signal of the satellite will appear as clockwise or counterclockwise shifted. Both the horizontal and the vertical signal will be shifted by the same angle, and therefore they will always be perpendicular to each other.

The degree of rotation will depend on the distance to the east or to the west between the position of the antenna and the position of the satellite, and on your distance from the equator.

Once you move to an area with a longitude more than +/- 10° from the previous position, the LNB must be manually adjusted in order to obtain the best possible signal.

Antennas are delivered with the LNB optimized for an area with longitude 12° East while receiving satellite 13° East.

For the adjustment of the LNB, proceed as follows:

- loosen the screws on the radome and remove it from the base;
- loosen the 2 screws fastening the LNB to the dish (see **Fig. 35**) and manually move the dish, using the parameter of signal quality of the digital receiver in use as a reference for correct calibration (please refer to the receiver's manual). Calibration does not need to be changed if the boat remains in the same area and receives transmission from the same satellite.

### WARNING

While adjusting the SKEW, please make sure not to disconnect the two sensor cables fastened to the LNB.

Once the desired adjustment has been carried out, tighten the screws, position the radome onto its base again and tighten the fastening screws again.

**NOTA:** Incorrect adjustment of the screw may cause a number of problems: from no reception of some channels up to impossibility to find the selected satellite.

## 6.6 AUTOMATIC SKEW CALIBRATION

Models V9804NSKEW/ and V9804NSKEW/DCSS are fitted with automatic SKEW calibration. The Glomex innovative compensation system which, according to the geographic position, directly operates on the LNB, automatically changing its inclination and optimizing polarization to obtain the best possible signal quality.

**NOTA:** Automatic SKEW/ calibration is based upon the GPS inside the antenna. When turned on for the first time, the antenna might take up to 5 minutes to complete calibration.

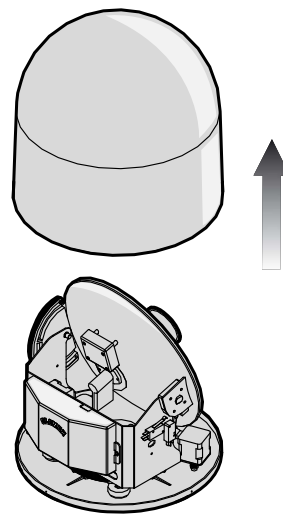


Fig. 34

GL00063

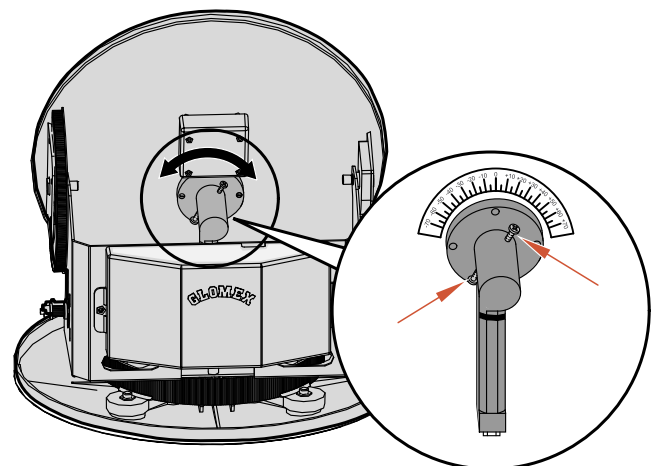


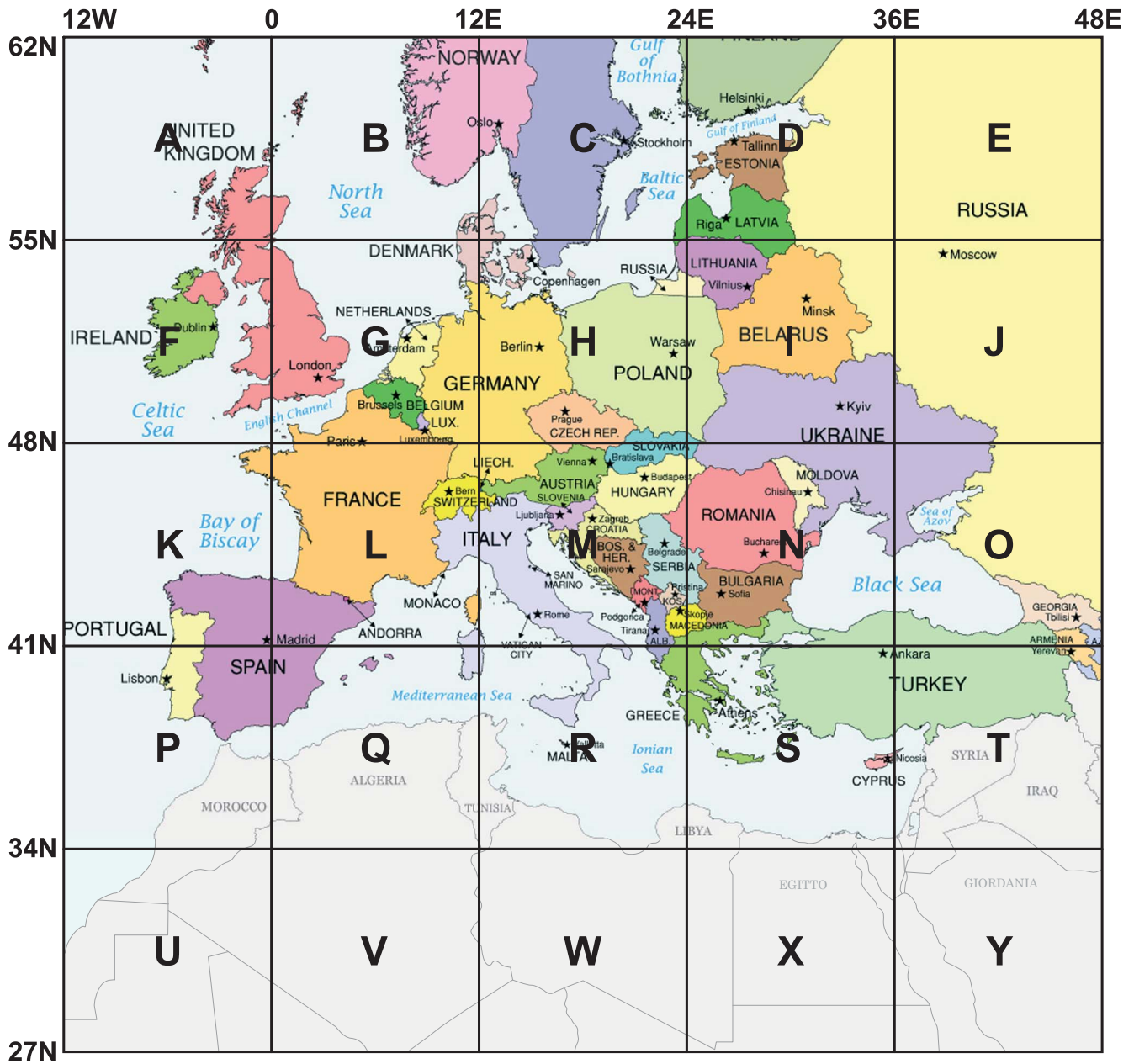
Fig. 35

GL00124

### 6.7 SKEW ADJUSTMENT GRID FOR EUROPE

To determine the values for adjusting the LNB, it is possible to use the grid below and the relevant table.

ENGLISH



GL00096

Fig. 36

We recommend obtaining the exact values for the adjustment of the skew by using the (free licence) app SMW Link (distributed by SWEDISH MICROWAVE AB) available for both iOS on the App Store and for Android on Play Store. Select the menu item "Antenna Alignment".

| Grid position | TURKSAT<br>42°E | ASTRA<br>2<br>28.2°E | ASTRA<br>3<br>23.5°E | ASTRA<br>1<br>19.2°E | HOTBIRD<br>13.0°E | SIRIUS<br>4.8°E | THOR<br>1°W | HISPASAT<br>30°W | ATLANTIC<br>BIRD 3<br>5°W |
|---------------|-----------------|----------------------|----------------------|----------------------|-------------------|-----------------|-------------|------------------|---------------------------|
| A (6°W 58°N)  | -25°            | -19°                 | -18°                 | -14°                 | -11°              | -6°             | -3°         | 14°              | -3                        |
| B (6°E 58°N)  | -20°            | -13°                 | -12°                 | -8°                  | -4°               | 0°              | 4°          | 20°              | 4                         |
| C (18°E 58°N) | -14°            | -6°                  | -4°                  | 0°                   | 3°                | 8°              | 11°         | 24°              | 11                        |
| D (30°E 58°N) | -7°             | 1°                   | 3°                   | 6°                   | 10°               | 14°             | 17°         | 28°              | 16                        |
| E (42°E 58°N) | 0°              | 7°                   | 10°                  | 13°                  | 16°               | 20°             | 23°         | 30°              | 21                        |
| F (6°W 52°N)  | -30°            | -24°                 | -21°                 | -18°                 | -14°              | -8°             | -3°         | 17°              | -2                        |
| G (6°E 52°N)  | -24°            | -16°                 | -13°                 | -10°                 | -5°               | 0°              | 5°          | 24°              | 6                         |
| H (18°E 52°N) | -17°            | -8°                  | -5°                  | 0°                   | 3°                | 9°              | 14°         | 34°              | 15                        |
| I (30°E 52°N) | -9°             | 1°                   | 4°                   | 8°                   | 12°               | 18°             | 21°         | 36°              | 22                        |
| J (42°E 52°N) | 0°              | 11°                  | 12°                  | 17°                  | 20°               | 25°             | 28°         | 22°              | 26                        |
| K (6°W 45°N)  | -36°            | -29°                 | -27°                 | -23°                 | -18°              | -10°            | -5°         | 30°              | -4                        |
| L (6°E 45°N)  | -30°            | -20°                 | -20°                 | -12°                 | -7°               | 0°              | 6°          | 31°              | 7                         |
| M (18°E 45°N) | -22°            | -9°                  | -8°                  | -1°                  | 4°                | 12°             | 18°         | 36°              | 18                        |
| N (30°E 45°N) | -11°            | 2°                   | 5°                   | 10°                  | 16°               | 22°             | 27°         | 40°              | 26                        |
| O (42°E 45°N) | 0°              | 13°                  | 17°                  | 21°                  | 25°               | 31°             | 34°         | 43°              | 34                        |
| P (6°W 38°N)  | -43°            | -35°                 | -36°                 | -28°                 | -22°              | -13°            | -6°         | 27°              | -5                        |
| Q (6°E 38°N)  | -37°            | -25°                 | -23°                 | -16°                 | -8°               | 1°              | 8°          | 36°              | 12                        |
| R (18°E 38°N) | -27°            | -12°                 | -10°                 | -1°                  | 6°                | 16°             | 22°         | 43°              | 23                        |
| S (30°E 38°N) | -15°            | 2°                   | 8°                   | 13°                  | 20°               | 28°             | 33°         | 47°              | 35                        |
| T (42°E 38°N) | 0°              | 17°                  | 23°                  | 26°                  | 31°               | 37°             | 41°         | 50°              | 44                        |
| U (6°W 30°N)  | -               | -44°                 | -43°                 | -36°                 | -28°              | -18°            | -8°         | 35°              | -7                        |
| V (6°E 30°N)  | -               | -33°                 | -34°                 | -21°                 | -11°              | 1°              | 11°         | 45°              | 17                        |
| W (18°E 30°N) | -               | -16°                 | -11°                 | -1°                  | 8°                | 21°             | 29°         | 52°              | 36                        |
| X (30°E 30°N) | -               | 3°                   | 10°                  | 18°                  | 25°               | 36°             | 41°         | 56°              | 50                        |
| Y (42°E 30°N) | -               | 22°                  | 28°                  | 34°                  | 38°               | 46°             | 49°         | 58°              | 54                        |

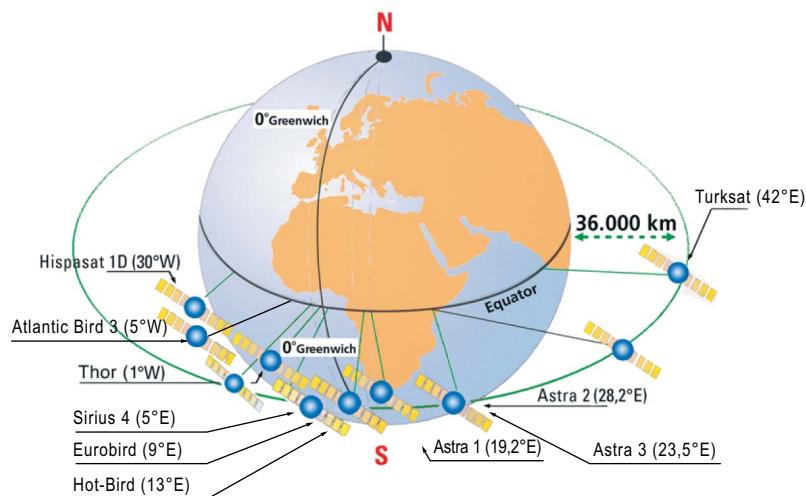


Fig. 37

GL00249

## 7. TURNING ON AND SELECTING THE SATELLITE - MANUAL PROCEDURE

Flow chart

ENGLISH

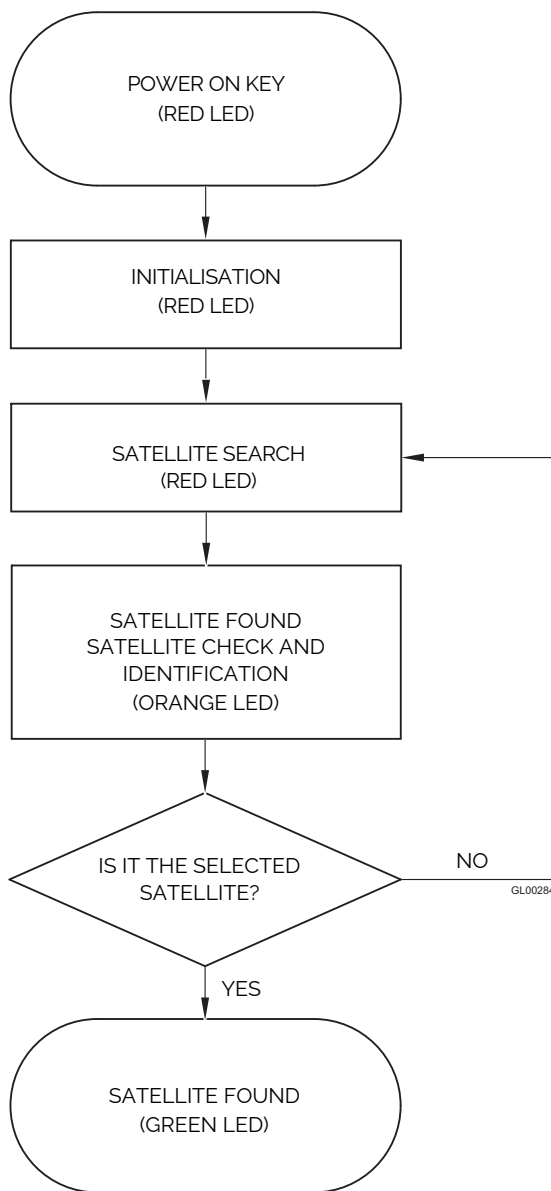
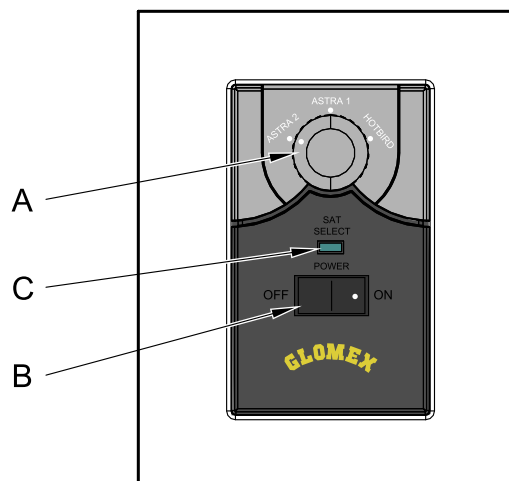


Fig. 38



1. Make sure that the antenna has a clear view of the sky in order to receive satellite signals.
2. Turn on the receiver and the TV set. For details about the use of the receiver and the TV set, please refer to the relevant user manuals provided by the manufacturers.
3. Standard configuration: On the control unit, by means of the relevant selector (A), select the desired satellite.
  - SAT1 ASTRA2,
  - SAT2 ASTRA1,
  - SAT3 HOTBIRD.
4. Turn on the control unit (set (B) key to ON).
5. After a few seconds, the led (C) turns red, and this means that the antenna is searching for the signal.
6. If the antenna has found a satellite signal, the led turns orange and starts checking that the found satellite is the selected one. Verification can take up to 30 seconds.
7. If, after a few seconds, the led turns green, it means that the found satellite was the correct one. Otherwise, the led turns red again, and the procedure is restarted.
8. With green led, after a few seconds, the image will appear on the TV set. Follow the instructions appearing on the screen to set the parameters for a correct operation of the receiver.
9. **Automatic stand-by function:**  
 once the satellite has been verified (green led on the control unit), after about 2 minutes that the boat did not move, the antenna stops in the position where signal reception from the satellite is maximum.  
 A level decrease of the received signal or a total shift of the boat of 6° in two minutes "wake the antenna up" in order that it recovers the maximum receivable signal level.



GL00044

**Fig. 39**

- A. Satellite selector
- B. Power on key
- C. Led

**! WARNING**

If the led flashes alternately red and green, this means that the antenna is not connected to the control unit or that a failure has occurred. Contact the Service Centre.

## 8. USING GLOMEX SATELLITE APP

### 8.1 FIRST CONFIGURATION - STARTING UP THE CONTROL UNIT

Download the Glomex Satellite App from the Apple Store or Google Play.



With the control unit off, position the selector on SAT 1 (knob A in Fig. 39).

Turn the control unit on and switch the selector to position SAT 3 within two seconds. The green LED starts blinking. If the LED does not start blinking, repeat the procedure from the start.

**NOTA:** This operation must be repeated every time the mobile device associated with the control unit is changed.



### WARNING

The control unit can be connected to one mobile device only at a time.

### 8.2 CONNECTION BETWEEN APP AND CONTROL UNIT

Open the App. Put the smartphone/tablet as close to the control unit as possible. Connect the App to the control unit by selecting the CONNECT button at the top left (Fig. 40).



Fig. 40

A window with the list of Bluetooth® signals available is shown, together with the relevant percentage of the signal power.

The signal generated by the GLOMEX antenna is called **GLOMEX\_BT**, and it must be selected to connect to the control unit (Fig. 41).



Fig. 41

If the connection between the App and control unit is successful, the status LED on the control unit becomes red, whereas the App control panel is like shown in **Fig. 42** (the connection status will be green).

After the first connection, if the Control Unit is not reset, each time you will open the App, this will automatically try to reconnect to the Control Unit.

When the App is connected to the Control Unit "SAT 1", "SAT 2" and "SAT 3", above the selector, will be replaced by the satellite names.



Fig. 42

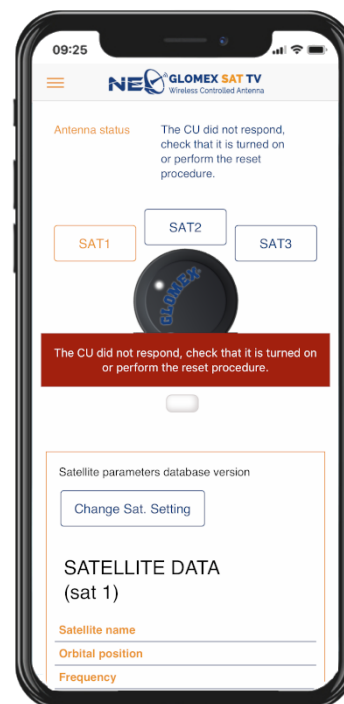


Fig. 43

If the connection between the App and control unit is not successful, the control unit status LED continues blinking with the green light, whereas the App control panel is like shown in **Fig. 43** (the connection status is red) and the message "Control unit not connected" will appear for a few seconds.

This problem may occur for two reasons:

- 1) the mobile devices is too far from the control unit. Move closer to the control unit and repeat the procedure to connect to the antenna's Bluetooth signal.
- 2) the mobile device being used for connecting is not the last one to have connected to the control unit. Repeat the coupling procedure described in paragraphs 8.1 and 8.2.

### 8.3 CONTROL PANEL

With the App and control unit connected, the App control panel shows the satellites currently set in the control unit. By clicking on the 3 satellite buttons over the knob it is possible to change the satellite selected to be used as an alternative to the physical selector on the control unit (**Fig. 42**).

After the connection, the App will recognize the position of the physical selector in the Control Unit, displaying it. Even later, if you change the satellite on the Control Unit, the App will update the display by placing the graphic selector in the same position as the physical one.

All the information on the antenna operation (voltage, GPS position, etc.), the information on the satellite currently selected are shown under the knob and a graphic that displays the signal quality level.

Switch to Advanced Mode (**App section for installers only**).

### 8.4 SATELLITE DATABASE

By clicking on the "Change Sat Setting" button or going to the Menu section you can consult the database of the satellites stored by Glomex (WITH WEB CONNECTION ONLY) and their setting parameters.

Once the satellite list stored by Glomex has been displayed, you can:

- 1) set the satellite selected in one of the three positions of the control unit (**Fig. 44**).
- 2) Test the satellite in the position selected in the control unit. The test settings are lost when the control unit is turned off.

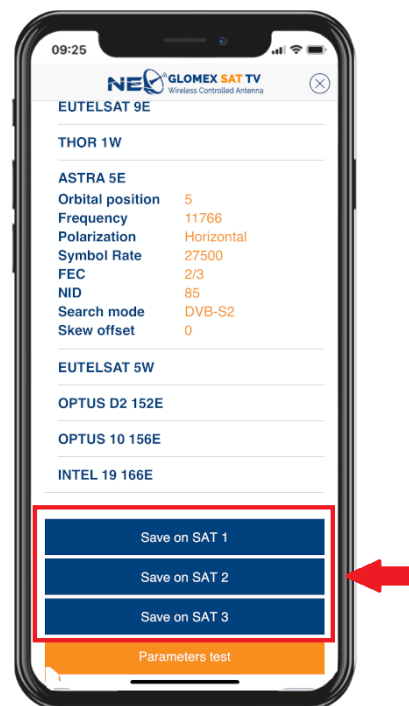


Fig. 44

## 8.5 UPDATING THE FREQUENCIES AND SATELLITE DATABASE

When Glomex releases the update of the satellite frequencies a push notification is sent.

When the App is launched, this update is highlighted by an icon on the upper bar on the top right. This icon allows you to display the contents of the update and proceed with updating if you want (**Fig. 45**).

Before updating, turn the control unit on and connect the smartphone/tablet to the control unit as indicated in paragraphs 8.1 and 8.2.

**NOTA:** The smartphone/tablet must be as close as possible to the control unit for the entire updating procedure.

If satellite frequencies cannot be updated via App, use the SD Card, please refer to paragraph 10.

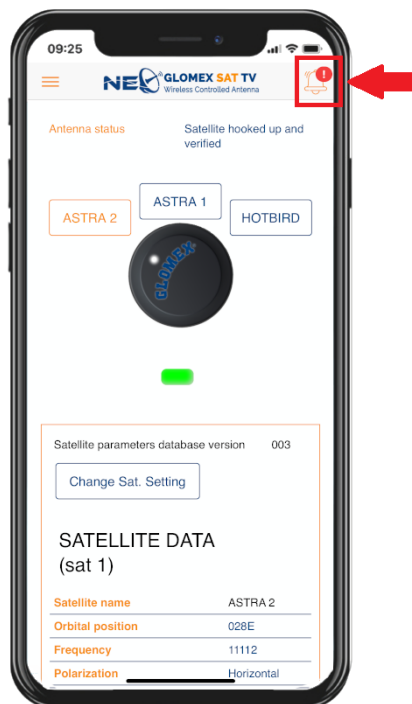


Fig. 45

## 9. APP ADVANCED MODE FOR INSTALLATION OPERATORS - ANTENNA CALIBRATION AND UPDATES

You need the identification code given to Glomex installers only in order to access the advanced mode. Go to menu, click on Basic Mode and enter the identification code (Fig. 45A and Fig. 45B).

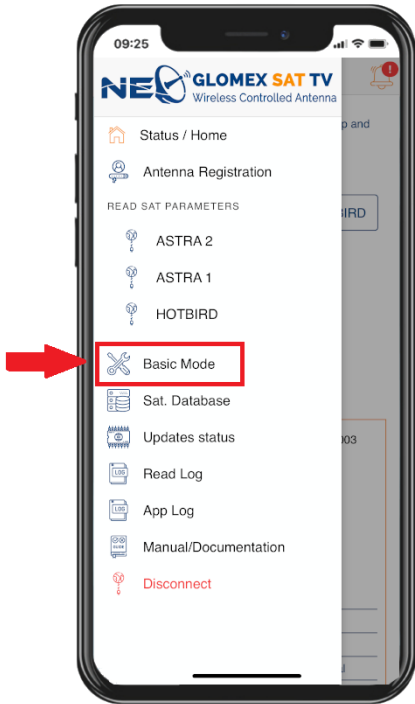


Fig. 45A

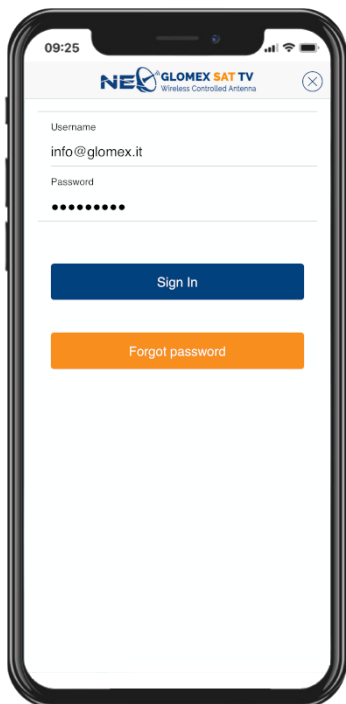


Fig. 45B

### 9.1 ANTENNA REGISTRATION

In order to use the functions envisaged in the advanced mode the antenna must be registered.

- Go to Menu.
- Click on "Antenna Registration" (Fig. 46).
- Click on the bar code button on the top right (Fig. 47), scan the bar code on page 2 of your antenna's user manual, on the package box, on the rear of the control unit and on the parabolic disc. Fill in the missing data and the installation check list to complete registration.

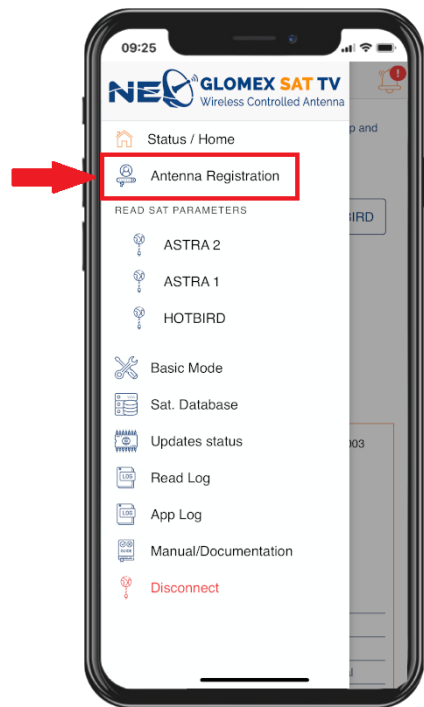


Fig. 46

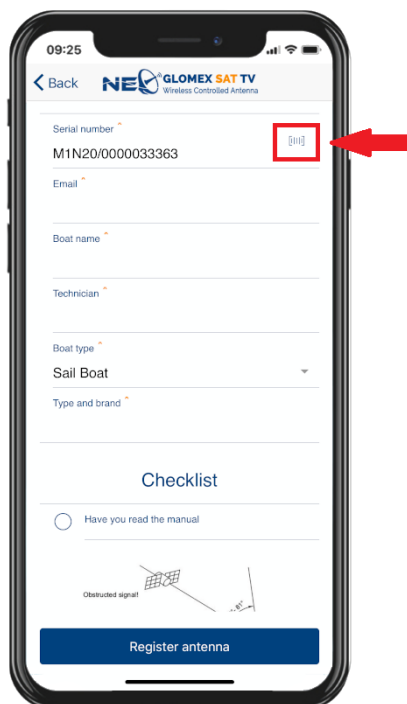


Fig. 47

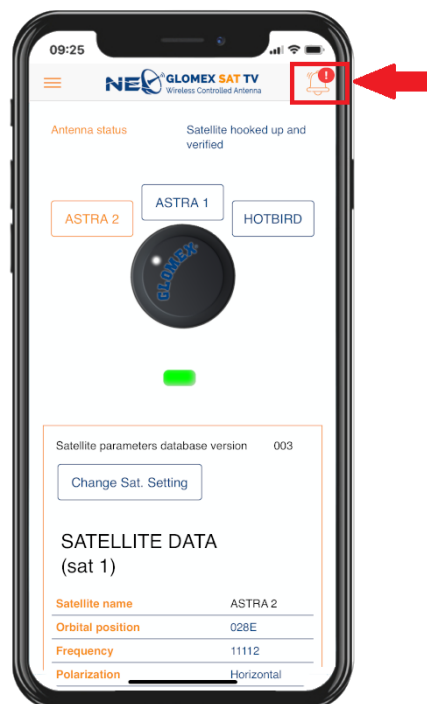


Fig. 47A

## 9.2 UPDATING THE CONTROL UNIT SOFTWARE

When Glomex releases the update of the control unit software a push notification is sent.

When the App is launched, this update is highlighted by an icon on the upper bar on the top right. This icon allows you to display the contents of the update and proceed with updating if you want (Fig. 47A e Fig. 47B).

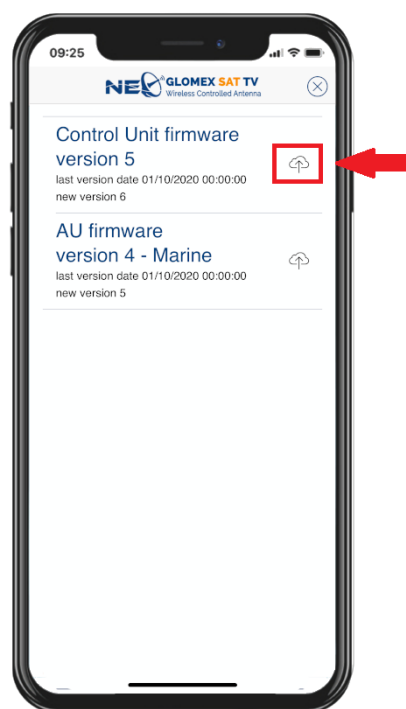
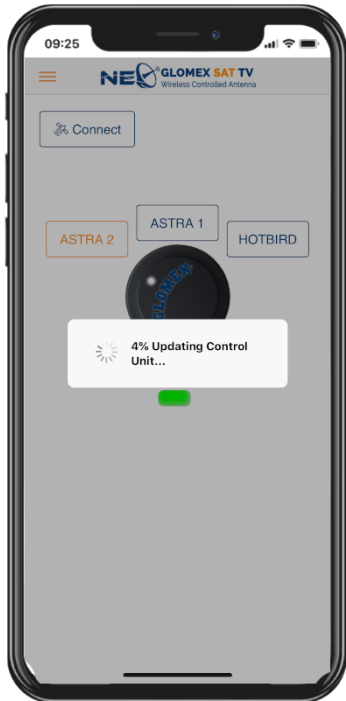


Fig. 47B

Before updating, turn the control unit on and connect the smartphone/tablet to the control unit as indicated in paragraphs 8.1 and 8.2. When updating the software, the control unit LED blinks with an orange light.

**NOTA:** The smartphone/tablet must be as close as possible to the control unit for the entire updating procedure.



**Fig. 48**

Once updated successfully, the control unit LED becomes green, then turn the control unit off and back on to finish updating (**Fig. 49A**).

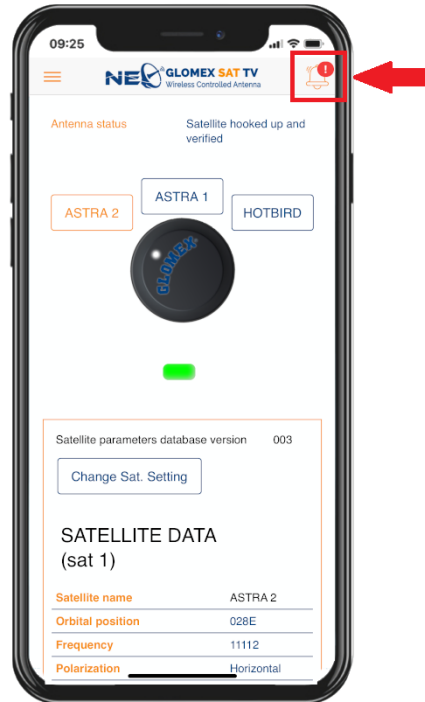
In case of problems during the update procedure, an error message appears on your smartphone/tablet and the control unit LED becomes red. In this case, the control unit must be reset as indicated in paragraph 8.1.

If the control unit software cannot be updated via App, use the SD Card, please refer to paragraph 11.

### 9.3 UPDATING THE BOARD ANTENNA SOFTWARE

When Glomex releases the update of the control unit software a push notification is sent.

When the App is launched, this update is highlighted by an icon on the upper bar on the top right (**Fig. 49**). This icon allows you to display the contents of the update and proceed with updating if you want.



**Fig. 49**

Before updating, turn the control unit on and connect the smartphone/tablet to the control unit as indicated in paragraphs 8.1 and 8.2.

When updating the software, the control unit LED blinks with an orange light.

**NOTA:** The smartphone/tablet must be as close as possible to the control unit for the entire updating procedure.

Once updated successfully, the control unit LED becomes green, then turn the control unit off and back on to finish updating (**Fig. 49A**).



**Fig. 49A**

In case of problems during the update procedure, an error message appears on your smartphone/tablet and the control unit LED becomes red. In this case, the control unit must be reset as indicated in paragraph 8.1.

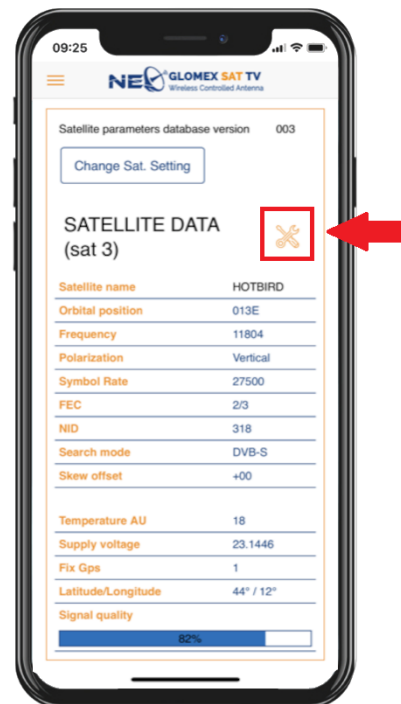
If the board antenna software cannot be updated via App, use the SD Card, please refer to paragraph 12.

## 9.4 SETTING THE PARAMETERS OF A SATELLITE MANUALLY

The parameters set for each satellite can be changed in the advanced mode:

- Orbital position
- Frequency
- Polarization
- Symbol rate
- FEC
- NID
- Mesh mode

To manually change every single parameter you must click on the highlighted button (**Fig. 50**). Then a warning disclaimer is shown (**Fig. 51**), press OK to proceed.

**Fig. 50**

Now the parameters can be changed (**Fig. 52**) and tested/saved in the three SAT positions of the control unit.

If the "Test" option is selected, the modified parameters are cancelled when the control unit is turned off.

If the "Save" option is selected, the modified parameters are saved in one of the three SAT positions as you wish.



Fig. 51

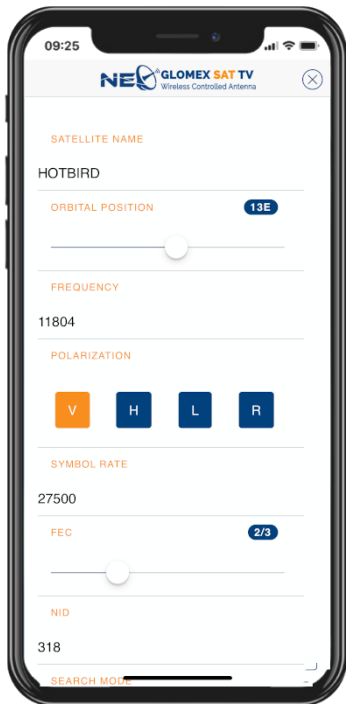


Fig. 52

### 9.5 LOG VISUALIZATION

The following values are specified in the Log:

- Log release
- Frequency being used
- Polarization being used
- FEC being used
- SymbolRate being used
- NID being used
- Modulation
- AZ turn offset
- EL turn offset
- AZ turn value
- EL turn value
- GNSS status
- Board AB temperature
- Dip switch configuration
- Antenna status
- Serial number
- Power supply voltage
- Timestamp (Date, time, minutes and seconds of data detection)
- Latitude
- Longitude

Also, some Log parameters can be registered for a few seconds and then sent to Glomex technical assistance by clicking on the "Send Log" button for trouble shooting if necessary (Fig. 53).

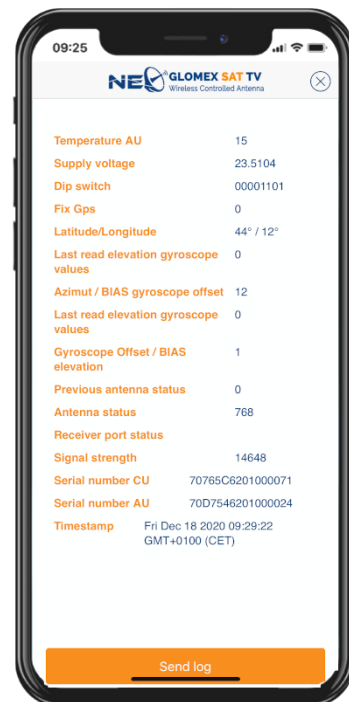


Fig. 53

## 10. UPDATING THE SATELLITE FREQUENCIES USING THE SD CARD

If satellite frequencies and database cannot be updated via App (paragraph 8.5) the SD Card must be used to do so.

The SD card must be inserted into the relevant slot on the control unit side.

The SD card used for updating must be formatted in FAT32. Then the CFG.BIN file provided must be copied on the DD card; proceed as follows:

1. Make sure that the switch on the control unit is set to OFF.
2. In case of built-in installation: remove the wall-mounting plate (see **Fig. 33**), loosen the screws and remove the built-in control unit.
3. Insert the SD card into the relevant slot on the control unit side, as indicated in (**Fig. 54**), respecting the direction (side with manufacturer label up) and making sure you have completely inserted it.
4. Turn on the control unit (set B key, **Fig. 39**, to ON).
5. If the control unit detects the presence of a SD card with original GLOMEX software, the led turns orange and automatically starts the software updating procedure.
6. If the led stays red and the antenna moves, this means that no original GLOMEX software has been detected, or that the SD card has not been inserted completely. Turn off the control unit and repeat the procedure from step 5.

**NOTA:** if the control unit is not immediately turned off, in a few seconds the led will turn orange and then green, according to the standard satellite searching procedure; turn off anyway and repeat the procedure from step 5.

7. If the update is correctly carried out, the led turns green. Otherwise, the led turns red and it is necessary to turn off the control unit and to repeat the procedure from step 5.

8. Turn off the control unit, remove the SD card and reinstall the rear cover onto the control unit.

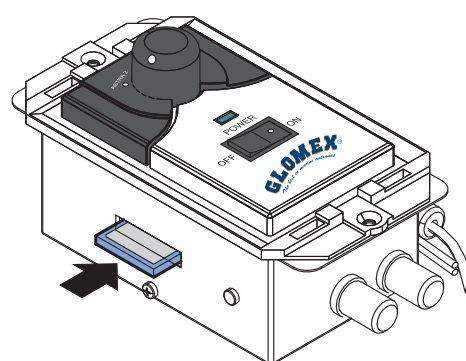
9. In case of built-in installation: insert the control unit into the wall, reinstall the fastening screws and the installation plate.



### WARNING

In case of repeated failures in the software update procedure, please contact the GLOMEX Service Centre.

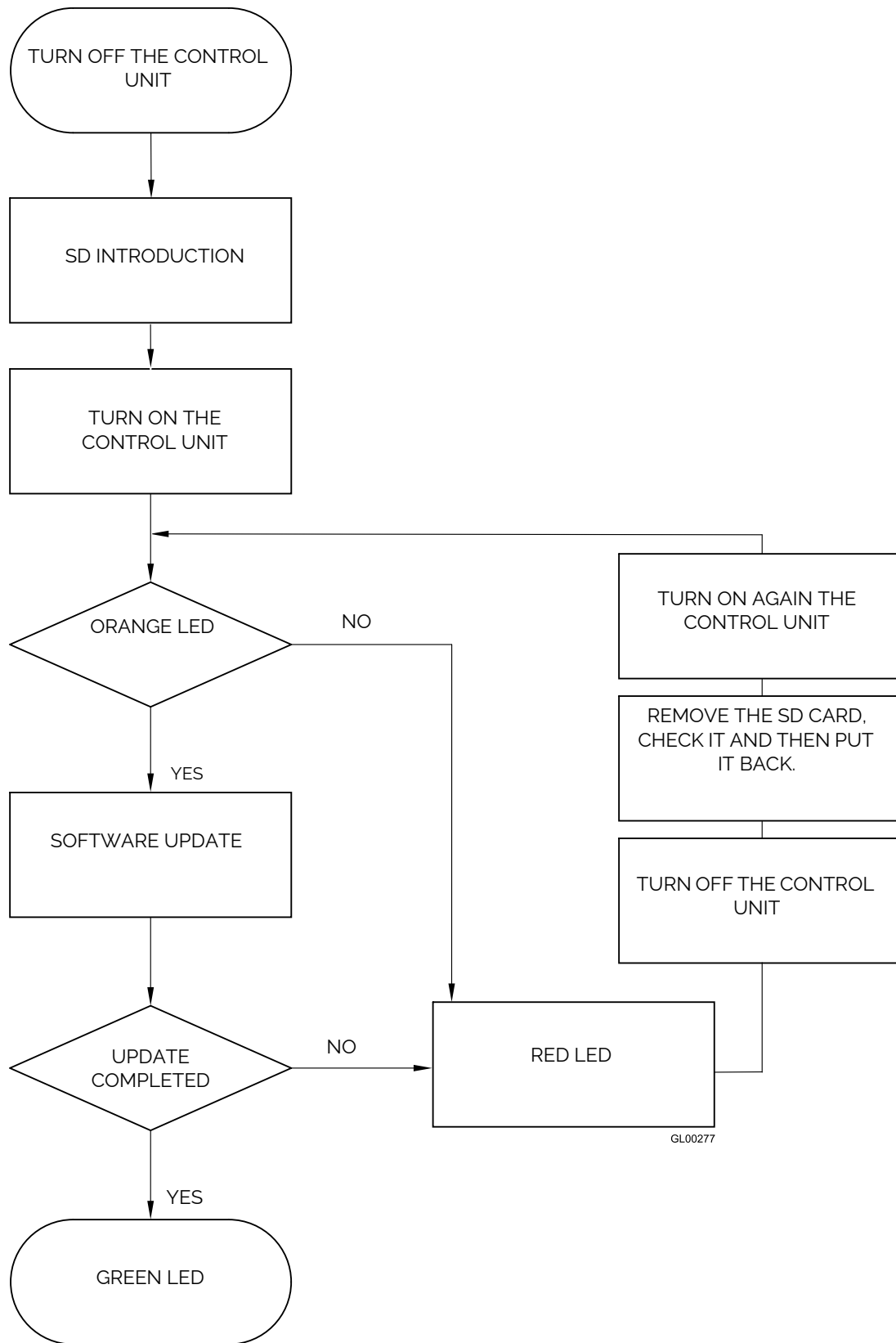
**NOTA:** it is possible to download the necessary software updating file from the Glomex website ([www.glomexmobile.com](http://www.glomexmobile.com)) in section "Technical Support - Download Area".



GL00286

**Fig. 54**

### Satellite update flowchart



GL00277

Fig. 55

## 11. UPDATING THE CONTROL UNIT SOFTWARE USING THE SD CARD

If control unit software cannot be updated via App. (paragraph 9.2) the SD Card must be used to do so.

The SD card must be inserted into the relevant slot on the control unit side.

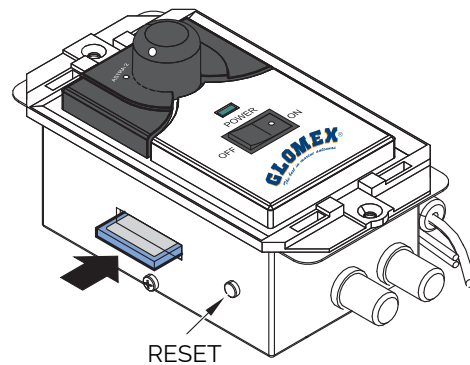
The SD card used for updating must be formatted in FAT32. The CBOX.HEX file provided must then be copied on the SD card; proceed as follows:

1. Make sure that the switch on the control unit is set to OFF.
2. In case of built-in installation: remove the wall-mounting plate (see **Fig. 33**), loosen the screws and remove the built-in control unit.
3. Insert the SD card in the slot on the side of the control unit, as shown in **Fig. 56**. Keep the RESET button (**Fig. 45**) pressed to turn on the control unit (button B, **Fig. 39**). The LED turns orange after a few seconds, then release the RESET button. The LED starts blinking for about 30 seconds, then it turns green. Update has been successfully completed. If the LED blinks red/green, the update was not successful. The updating procedure must be performed again from the beginning.
4. After completing the updating procedure, turn off the control unit, remove the SD card and reinstall the rear cover onto the control unit.
5. In case of built-in installation: insert the control unit into the wall, reinstall the fastening screws and the installation plate.

### **WARNING**

In case of repeated failures in the software update procedure, please contact the GLOMEX Service Centre.

**NOTA:** it is possible to download the necessary software updating file from the Glomex website ([www.glomexmobile.com](http://www.glomexmobile.com)) in section "Technical Support - Download Area".



**Fig. 56**

GL00287

Control unit software update flowchart

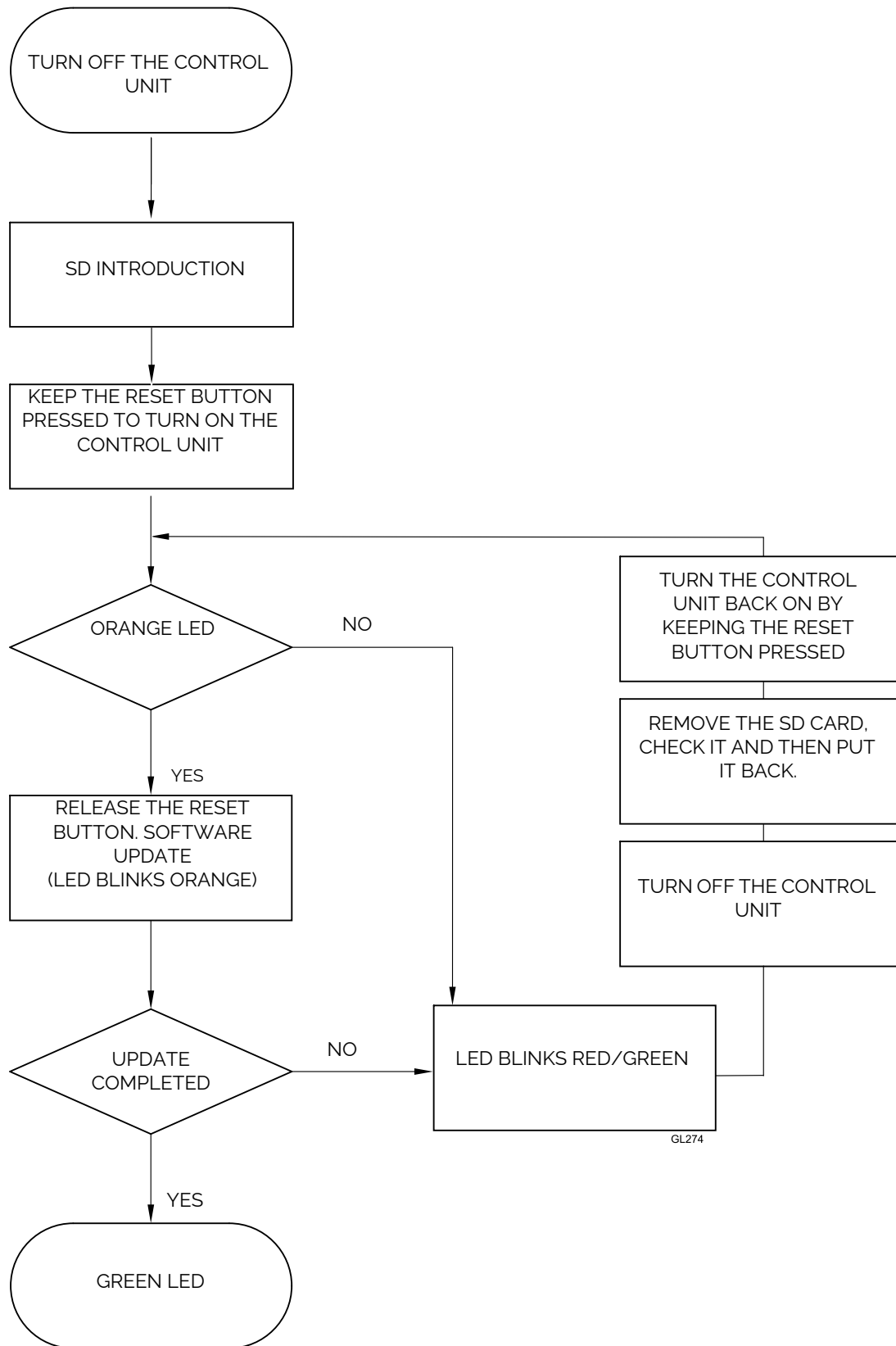


Fig. 57

## 12. UPDATING THE BOARD ANTENNA USING THE SD CARD

If board antenna software cannot be updated via App. (paragraph ) the SD Card must be used to do so.

The SD card must be inserted into the relevant slot on the control unit side.

The SD card used for updating must be formatted in FAT32. The ABOARD.HEX file provided must then be copied on the SD card; proceed as follows:

1. Turn off the decoder, the TV set and make sure that the switch on the control unit is set to OFF.
2. In case of built-in installation: remove the wall-mounting plate (see **Fig. 33**), loosen the screws and remove the built-in control unit.
3. Insert the SD card in the slot on the side of the control unit, as shown in **Fig. 54**. Turn the control unit on (button B, **Fig. 39**) until the control unit LED blinks for a few seconds and then turns orange. When the update is completed, the LED becomes green. If the LED blinks red/green, the update was not successful. The updating procedure must be performed again from the beginning.
4. After completing the updating procedure, turn off the control unit, remove the SD card and reinstall the rear cover onto the control unit.
5. In case of built-in installation: insert the control unit into the wall, reinstall the fastening screws and the installation plate.



### WARNING

In case of repeated failures in the software update procedure, please contact the GLOMEX Service Centre.

**NOTA:** it is possible to download the necessary software updating file from the Glomex website ([www.glomexmobile.com](http://www.glomexmobile.com)) in section "Technical Support - Download Area".

Board antenna software update flowchart

ENGLISH

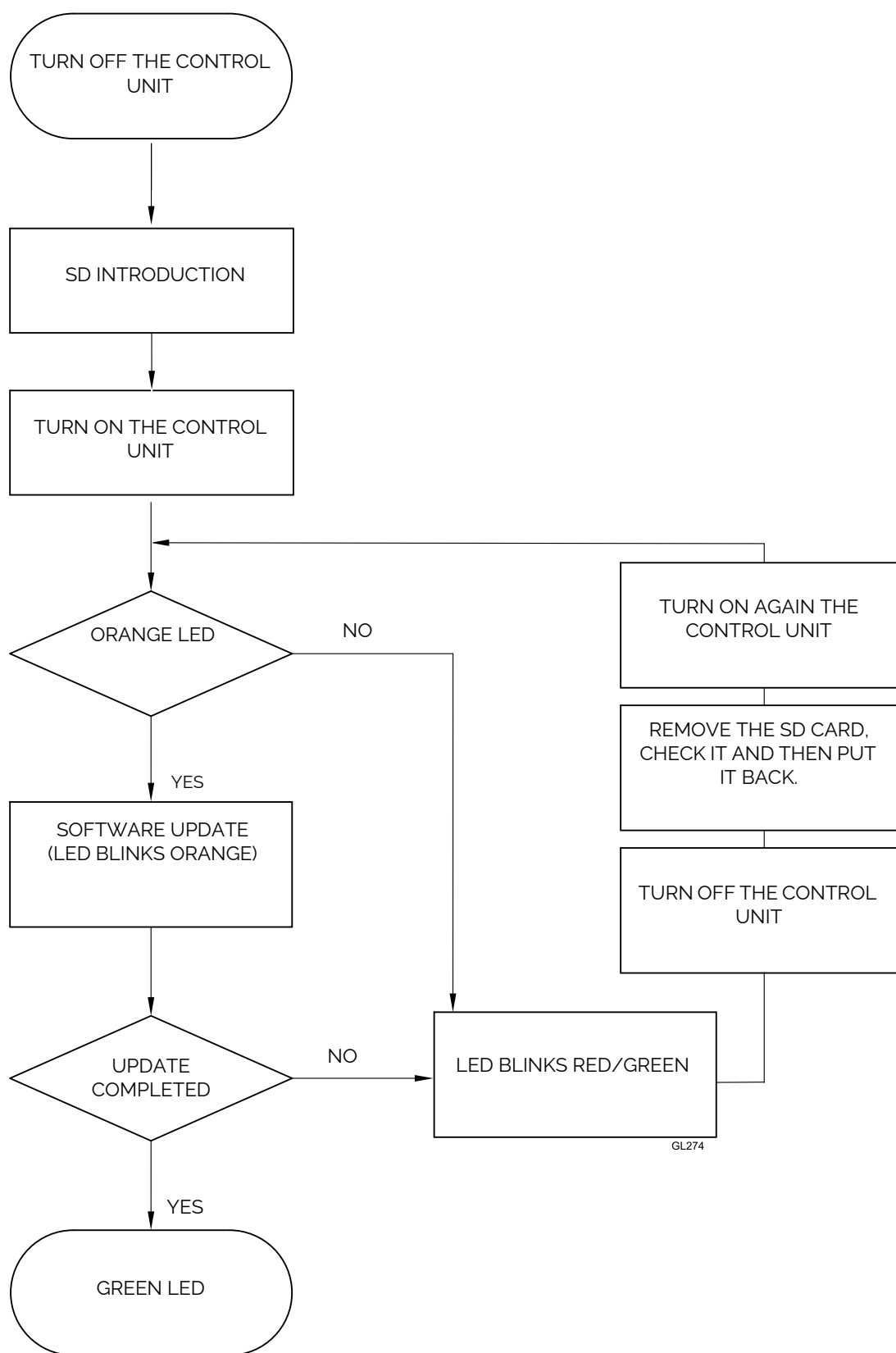


Fig. 58



### 13. TIPS FOR CORRECT USAGE

GLOMEX recommends observing the following indications for a correct use of the equipment.

- The receiver must be activated before receiving the satellite programmes.
- Keep the radome always mounted on the antenna. Its task is to protect all inner (fixed and moving) parts from wind, rain and dust.
- Do not lean against and/or sit on the antenna!
- Pay attention not to spill liquids of any kind into the antenna.
- The radome should be cleaned periodically. Dust or dirt accumulated on the radome could affect the satellite signal receipt. Clean the radome with a cloth dampened with water. **DO NOT USE BRUSHES, ABRASIVE PRODUCTS, DETERGENTS OR ALCOHOL-BASED LIQUIDS.**
- Do not paint the surface of the radome! This would negatively affect signal receipt.
- The antenna requires a clear view of the sky to receive satellite signals. Possible very common signal obstructions include masts of other boats, bridges, on-board equipment, etc. GLOMEX antennas also do not operate inside storage areas.

- The boat must be within the coverage area of the selected satellite to receive the desired signal. Please refer to the satellite coverage footprints on the following page.



#### WARNING

Bad weather conditions affect the quality of the signal and reduce image quality!

- At the end of its life, do not scatter the antenna or its components into the environment, but take advantage of specialized waste disposal agencies.

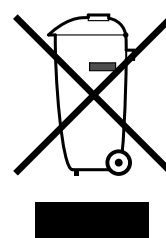
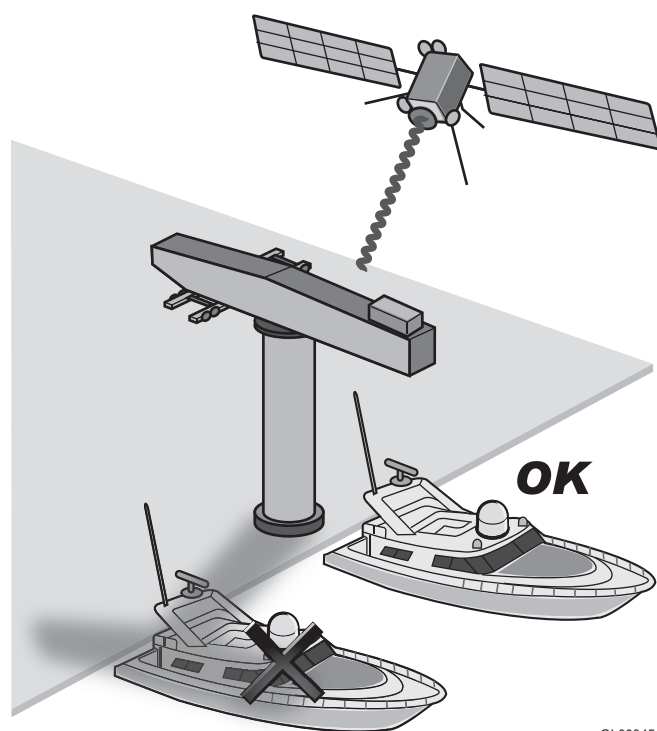


Fig. 60

GL00024



GL00045

Fig. 59

- Heavy rain or snow could temporarily interrupt signal receipt from the satellite.

### 13.1 FOOTPRINTS: SATELLITE TRANSMISSION AREAS

Satellite television is one of the few means which allow receiving information in any part of the world within the coverage area of the satellite you wish to receive.

The signal transmitted by the satellite generally has a wide coverage area, as shown in the purely indicative footprints below, and thus guarantees vision of the same TV programmes in various areas.

However, it is important to remember that ground obstacles are the main causes of satellite antenna malfunction.

Ground obstacles include all bodies which could be located between satellite and antenna, such as masts of other boats, bridges, on-board equipment, etc.

The signal transmitted by the satellite is also affected by weather conditions (storm clouds or ice clouds).

The footprints show the satellite coverage areas on the Earth.

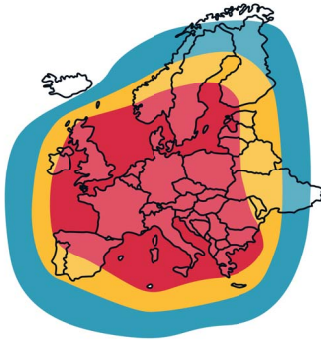
---

 **WARNING**

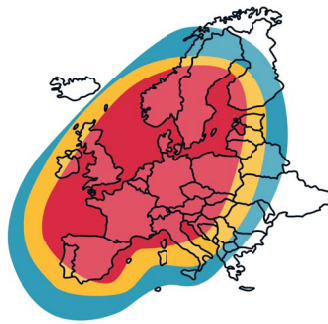
In case of bad weather, signals will be weaker; therefore, the image quality could be reduced, up to completely fading away. It is also very important to make sure, upon purchase, that the dimensions of the satellite antenna are the most appropriate ones to receive the signal in the areas where you spend your holiday. Footprints are indicative and referred to the satellite with the strongest E.I.R.P. (Equivalent Isotropic Radiated Power).

---

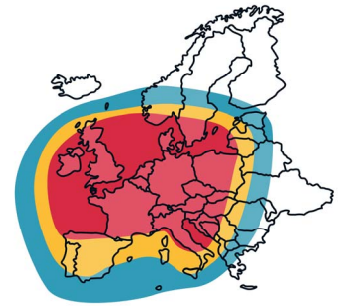
HOT BIRD (13°E)



ASTRA1 (19,2°E)



ASTRA2 SUD (28,2°E)



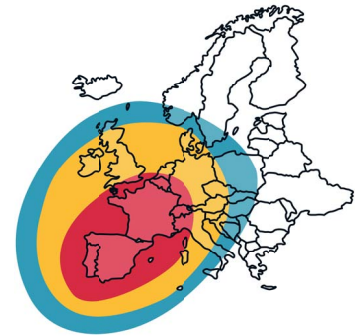
ASTRA2 UK (28,2°E)



ASTRA 3 (23.5°E)



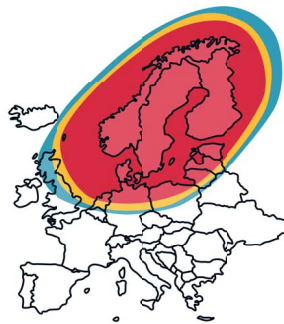
HISPASAT (30°W)



SIRIUS (4.8°E NORDIC)



THOR (1°W NORDIC)



- 39cm DISCO PANDORA
- 47cm DISCO RHEA AND SATURN
- 60cm DISCO MARS AND RHINE

GL00285

Fig. 61

## 14. REPLACING THE POWER SUPPLY PROTECTION FUSE

In case the fuse on the power supply line has blown, proceed as follows to replace it:

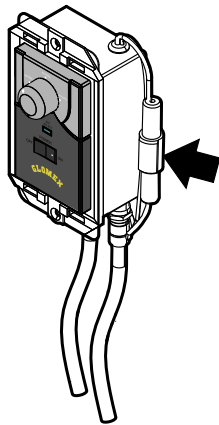
- Turn off the decoder, the TV set and make sure that the switch on the control unit is set to OFF.
- Remove the wall-mounting plate (see **Fig. 33**), loosen the screws and remove the built-in control unit.
- Disconnect the power supply cable.
- Remove the blown fuse from its seat indicated in **Fig. 62** and replace it with a new one (**type T 3A15 5x20**, i.e. delayed-action tube fuse, with 5 mm diameter and 20 mm length, 3 A rated current and 15 V rated voltage).
- Connect the power supply cable again.
- Insert the control unit into the wall, reinstall the fastening screws and the installation plate.



### DANGER

Do not supply the antenna by connecting the two wires of the positive pole without using the fuse.

This could cause a fire.



GL00068

**Fig. 62**



### WARNING

In case the fuse blows again, a short circuit on the coaxial cable or on the power supply cable could be the cause. Check that the cables are not short-circuited.

## 15. TROUBLESHOOTING

When a malfunction of your satellite system occurs, it is very important to make a rapid check to understand the nature of the malfunction and, if possible, to find a remedy.

To analyze a malfunction, it is appropriate to carry out the following verifications:

- the malfunction has been generated through human mistake;
- the malfunction is due to a weather problem;
- the malfunction is due to a failure of the equipment itself or it is caused by an anomaly of another external appliance, but in some ways connected to the equipment;
- in which phase the malfunction occurs: upon start-up, during normal operation, upon shut-down;
- the malfunction is repeated; if so, according to what criteria;
- what the malfunction determine from a functional point of view;

- whether the malfunction produces signals (light signals) and/or anomalous noise (such as hissing, buzzing, etc.) and/or anomalous odours (smell of burning) or not;
- the malfunction interferes with the operation of other appliances;
- the malfunction is an apparent failure (i.e. it disappears, for example, by turning off and then on again the equipment).

The better you are able to answer the above-mentioned questions, the deeper the malfunction analysis will be.

The following table analyses the most probable causes which can lead to malfunctions of your GLOMEX "NEO" satellite antenna. For any analyzed possible cause, a corrective measure is proposed, to efficiently solve, as much as possible, the trouble. **The updated table can be viewed and downloaded on our website <http://support.glomex.it/>.**

| Anomaly                                                                        | Cause                                                                                                               | Remedy                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. When the control unit is turned on the LED turns red and blinks fast.       | - The antenna's software is corrupted due to an incorrect software update.                                          | - Update the control unit software (file CBOX.HEX) using the App for the models that envisage so (paragraph 9.2) or via SD Card following the instructions given in paragraph 11                                                                                                                                                                                                               |
| 2. The antenna does not operate (the led on the control unit does not turn on) | - the fuse is blown<br>- wrong power supply cable connection<br>- short-circuited coaxial cable<br>- proper failure | - replace the blown fuse with a new one (see section "Maintenance")<br>- check the polarity on the power supply line<br>- check the correct mounting of the coaxial cables<br>- contact the Service Centre<br>- Update the control unit software (file CBOX.HEX) using the App for the models that envisage so (paragraph 9.2) or via SD Card following the instructions given in paragraph 11 |

|                                                                                                        |                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>3. The antenna does not operate (the led on the control unit flashes alternately red and green)</p> | <ul style="list-style-type: none"> <li>- the coaxial cable has loosened or has disconnected from the antenna</li> <li>- inner failure</li> </ul>                                                                                                                                   | <ul style="list-style-type: none"> <li>- check the connection of the coaxial cables</li> <li>- contact the Service Centre</li> </ul>                                                                                                                                                                                                                                                                              |
| <p>4. No status message on the decoder</p>                                                             | <ul style="list-style-type: none"> <li>- the satellite receiver is not installed correctly</li> <li>- alternating current fluctuations</li> </ul>                                                                                                                                  | <ul style="list-style-type: none"> <li>- check the receiver connection</li> <li>- refer to the user manual of the receiver for support</li> </ul>                                                                                                                                                                                                                                                                 |
| <p>5. Antenna pointed to the satellite (green LED) but no signal received on the TV</p>                | <ul style="list-style-type: none"> <li>- if a non-Glomex splitter is used</li> <li>- The decoders are not configured correctly.</li> </ul>                                                                                                                                         | <ul style="list-style-type: none"> <li>- Make sure that a splitter is fitted the DC Pass in all the outputs</li> <li>- Make sure that all the decoders are the dCSS type, that the dCSS mode is selected in the decoder configuration and that a frequency other than the one used by default by the antenna board (985 MHz UB5) is present on each decoder connected to the control unit.</li> </ul>             |
| <p>6. No image on the TV (the led on the control unit is green)</p>                                    | <ul style="list-style-type: none"> <li>- the receiver is off</li> <li>- the TV set is off or has not been tuned to AV</li> <li>- wrong cable connection on the receiver</li> <li>- the channel list is not up-to-date</li> </ul>                                                   | <ul style="list-style-type: none"> <li>- turn off the control unit, turn on the receiver and then turn on the control unit again</li> <li>- turn on the TV set and tune to AV channel</li> <li>- check that the SCART socket between the TV set and the receiver is installed correctly</li> <li>- carry out the automatic channel search in the receiver menu</li> <li>- check the selected satellite</li> </ul> |
| <p>7. Intermittent images for short periods</p>                                                        | <ul style="list-style-type: none"> <li>- the satellite signals are obstructed by masts of other boats, bridges, on-board equipment, etc.</li> <li>- the boat is at the boundary of the coverage area</li> <li>- bad weather conditions</li> <li>- wrong SKEW adjustment</li> </ul> | <ul style="list-style-type: none"> <li>- move the boat to allow an unobstructed view for the antenna</li> <li>- go back within the coverage area; refer to the footprints of the coverage areas on page <b>108</b> in this manual</li> <li>- adjust the SKEW by following the instructions on page <b>87</b></li> </ul>                                                                                           |

|                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>8. The equipment does not find the satellite (the led on the control unit is red)</p>                             | <ul style="list-style-type: none"> <li>- the satellite signals are obstructed by masts of other boats, bridges, on-board equipment, etc.</li> <li>- the boat is outside the signal coverage area</li> <li>- the boat is heaving within the first 60 seconds after turning on the equipment</li> <li>- bad weather conditions</li> <li>- inner failure</li> <li>- wrong SKEW adjustment</li> </ul> | <ul style="list-style-type: none"> <li>- move the boat to allow an unobstructed view for the antenna or correctly position the antenna on the boat</li> <li>- go back within the coverage area; refer to the footprints of the coverage areas on page <b>108</b> in this manual</li> <li>- turn off the equipment for 10 seconds, turn it on again and make sure that the boat is still or moves in a straight line during the first 60 seconds after being turned on</li> <li>- contact the Service Centre</li> <li>- adjust the SKEW by following the instructions on page <b>87</b></li> </ul> |
| <p>9. The equipment does not find the satellite (the led on the control unit flashes alternately red and orange)</p> | <ul style="list-style-type: none"> <li>- the satellite signals are obstructed by masts of other boats, bridges, on-board equipment, etc.</li> <li>- the equipment software is not up to date</li> <li>- wrong SKEW adjustment</li> </ul>                                                                                                                                                          | <ul style="list-style-type: none"> <li>- move the boat to allow an unobstructed view for the antenna</li> <li>- please contact the Service Centre to ask for the software update by SD card</li> <li>- adjust the SKEW by following the instructions on page <b>87</b></li> </ul>                                                                                                                                                                                                                                                                                                                 |
| <p>10. Disturbed images</p>                                                                                          | <ul style="list-style-type: none"> <li>- failure of the receiver</li> </ul>                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>- refer to the user manual of the receiver for support, spare parts and warranty conditions.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>11. Confused, incomplete and obstructed images</p>                                                                | <ul style="list-style-type: none"> <li>- condensate or rain on the radome, which can disturb the signal</li> <li>- bad weather conditions</li> <li>- wrong SKEW adjustment</li> </ul>                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>- remove the condensate deposits from the radome with a fresh water jet (not under pressure)</li> <li>- periodically apply a liquid detergent suitable for dishes (no alcohol-based detergent) to the radome surface and let dry up</li> <li>- adjust the SKEW by following the instructions on page <b>87</b></li> </ul>                                                                                                                                                                                                                                  |
| <p>12. The decoder blocks</p>                                                                                        | <ul style="list-style-type: none"> <li>- alternating current fluctuations</li> </ul>                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>- refer to the user manual of the receiver for support</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

For further information, please address to the GLOMEX Service Centre (see section "Technical Support").

## 16. RESHIPPING

Should you need to return the antenna to GLOMEX, place it in a box, possibly the original one, making sure it is well packaged and that the upper and lower side are well recognizable.

In order to prevent any damage to the antenna during transport, it is necessary to send it inside the original radome (upper and lower).

Together with the antenna, please also send the control unit, so that a verification of the whole system is possible.

---

**NOTA:** GLOMEX will not be liable for possible damage occurred during transport due to incorrect packaging.

---



### WARNING

Do not ship the antenna to GLOMEX for repairs without having received a corresponding authorization to return the material (RMA), as reported in the general warranty/support conditions.

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## 17. TECHNICAL SPECIFICATIONS

| Code                    | V8001N                   | V8100N                   | V9104N                   | V9104N/<br>DCSS      | V9801N                  | V9804N               |
|-------------------------|--------------------------|--------------------------|--------------------------|----------------------|-------------------------|----------------------|
| Dish diameter           | 390mm                    | 470mm                    | 470mm                    | 470mm                | 600mm                   | 600mm                |
| LNB                     | Universal<br>single      | Universal<br>single      | Universal<br>four        | dCSS                 | Universal<br>single     | Universal<br>four    |
| App                     | Yes                      | Yes                      | Yes                      | Yes                  | Yes                     | Yes                  |
| Installation            | 1 coaxial<br>cable       | 1 coaxial<br>cable       | 4 coaxial<br>cables      | 1 coaxial<br>cable   | 1 coaxial<br>cable      | 4 coaxial<br>cables  |
| Outputs for<br>decoders | 1                        | 1                        | 1-16                     | 1-15                 | 1                       | 1-16                 |
| Technology              | DVB-S2<br>FULL HD/<br>4K | DVB-S2<br>FULL HD/<br>4K | DVB-S2<br>FULL HD/<br>4K | DVB-S2<br>FULL HD/4K | DVB-S2<br>FULL<br>HD/4K | DVB-S2<br>FULL HD/4K |
| Autoskew                | No                       | No                       | No                       | No                   | No                      | No                   |
| Min. EIRP               | 50dBW                    | 49dBW                    | 49dBW                    | 49dBW                | 47dBW                   | 47dBW                |
| Antenna gain            | 33dB<br>(12GHz)          | 35dB<br>(12GHz)          | 35dB<br>(12GHz)          | 35dB (12GHz)         | 36,5dB<br>(12GHz)       | 36,5dB<br>(12GHz)    |
| Radome size<br>(diaxh)  | 420x450mm                | 500x560m<br>m            | 500x560m<br>m            | 500x560mm            | 660x660<br>mm           | 660x660mm            |
| Weight                  | 6kg                      | 13kg                     | 13kg                     | 12,5kg               | 15kg                    | 16kg                 |
| Tracking                | 50°/sec                  | 50°/sec                  | 50°/sec                  | 50°/sec              | 50°/sec                 | 50°/sec              |
| Elevation               | 0° / 90°                 | 0° / 90°                 | 0° / 90°                 | 0° / 90°             | 5° / 90°                | 5° / 90°             |
| Polarization            | Linear (H+V)             | Linear (H+V)             | Linear (H+V)             | Linear (H+V)         | Linear<br>(H+V)         | Linear (H+V)         |
| LNB Frequency           | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz   | 10.7 –<br>12.75GHz      | 10.7 –<br>12.75GHz   |
| Power supply            | 12Vdc                    | 12/24Vdc                 | 12/24Vdc                 | 12/24Vdc             | 12/24Vdc                | 12/24Vdc             |
| Azimuth                 | Unlimited                | Unlimited                | Unlimited                | Unlimited            | Unlimited               | Unlimited            |
| Operation temp.         | -20°/+55°C               | -20°/+55°C               | -20°/+55°C               | -20°/+55°C           | -20°/<br>+55°C          | -20°/+55°C           |
| Radome                  | UV resistant             | UV resistant             | UV resistant             | UV resistant         | UV<br>resistant         | UV resistant         |
| Future updates          | Yes                      | Yes                      | Yes                      | Yes                  | Yes                     | Yes                  |
| Satellite               | unlimited                | Unlimited                | Unlimited                | Unlimited            | Unlimited               | Unlimited            |

| Code                    | V9804N/<br>DCSS          | V9804NSKE<br>W       | V9804NSKE<br>W/DCSS      | R9801N                   | R9804N               | R9804N/<br>DCSS          |
|-------------------------|--------------------------|----------------------|--------------------------|--------------------------|----------------------|--------------------------|
| Dish diameter           | 600mm                    | 600mm                | 600mm                    | 600mm                    | 600mm                | 600mm                    |
| LNB                     | dCSS                     | Universal four       | dCSS                     | Universal<br>single      | Universal four       | dCSS                     |
| App                     | Yes                      | Yes                  | Yes                      | Yes                      | Yes                  | Yes                      |
| Installation            | 1 coaxial<br>cable       | 4 coaxial<br>cables  | 1 coaxial<br>cable       | 1 coaxial<br>cable       | 4 coaxial<br>cables  | 1 coaxial<br>cable       |
| Outputs for<br>decoders | 1-15                     | 1-16                 | 1-15                     | 1                        | 1-16                 | 1-15                     |
| Technology              | DVB-S2<br>FULL HD/<br>4K | DVB-S2 FULL<br>HD/4K | DVB-S2<br>FULL HD/<br>4K | DVB-S2<br>FULL HD/<br>4K | DVB-S2 FULL<br>HD/4K | DVB-S2<br>FULL HD/<br>4K |
| Autoskew                | No                       | Yes                  | Yes                      | No                       | No                   | No                       |
| Min. EIRP               | 47dBW                    | 47dBW                | 47dBW                    | 47dBW                    | 47dBW                | 47dBW                    |
| Antenna gain            | 36,5dB<br>(12GHz)        | 36,5dB<br>(12GHz)    | 36,5dB<br>(12GHz)        | 36,5dB<br>(12GHz)        | 36,5dB<br>(12GHz)    | 36,5dB<br>(12GHz)        |
| Radome size<br>(diaxh)  | 660x660m<br>m            | 660x660mm            | 660x660m<br>m            | 660x660m<br>m            | 660x660mm            | 660x660m<br>m            |
| Weight                  | 16kg                     | 16kg                 | 16kg                     | 16kg                     | 16kg                 | 16kg                     |
| Tracking                | 50°/sec                  | 50°/sec              | 50°/sec                  | 50°/sec                  | 50°/sec              | 50°/sec                  |
| Elevation               | 5° / 90°                 | 5° / 90°             | 5° / 90°                 | 5° / 90°                 | 5° / 90°             | 5° / 90°                 |
| Polarization            | Linear (H+V)             | Linear (H+V)         | Linear (H+V)             | Linear (H+V)             | Linear (H+V)         | Linear (H+V)             |
| LNB<br>Frequency        | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz   | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz       | 10.7 –<br>12.75GHz   | 10.7 –<br>12.75GHz       |
| Power supply            | 12/24Vdc                 | 12/24Vdc             | 12/24Vdc                 | 12/24Vdc                 | 12/24Vdc             | 12/24Vdc                 |
| Azimuth                 | Unlimited                | Unlimited            | Unlimited                | Unlimited                | Unlimited            | Unlimited                |
| Operation<br>temp.      | -20°/+55°C               | -20°/+55°C           | -20°/+55°C               | -20°/+55°C               | -20°/+55°C           | -20°/+55°C               |
| Radome                  | UV resistant             | UV resistant         | UV resistant             | UV resistant             | UV resistant         | UV<br>resistant          |
| Future<br>updates       | Yes                      | Yes                  | Yes                      | Yes                      | Yes                  | Yes                      |
| Satellite               | Unlimited                | Unlimited            | Unlimited                | Unlimited                | Unlimited            | Unlimited                |

## 18. TECHNICAL SUPPORT

In case technical support is needed, please contact the GLOMEX SERVICE CENTRE:

### Glomex Divisione Marine

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