

# DISCOVERY S460S EXPLORER S460M



## SATELLITE TV ANTENNAS FOR MOBILE VEHICLES

USER AND INSTALLATION MANUAL

**GLOMEX**<sup>®</sup>  
*Emotion In Motion 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 vehicle.

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 and on the packaging.

### 1.3 WARRANTY

GLOMEX guarantees the Discovery S460S and Explorer S460M satellite antenna series against conformity defects for a period of 24 (twenty-four) months from the date of shipment.

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, written on the instruction manual and on the box containing the antenna, 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 warranty does not include: periodical checks, software updates, product settings, maintenance.

After the expiration of the warranty period, the technical assistance 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 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 INSTRUCTIONS

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 words **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.

## 2. PRODUCT DESCRIPTION

### 2.1 DISCOVERY S460S

Discovery S460S is a satellite TV antenna for mobile vehicles, totally compatible with DVB (Digital Video Broadcasting) satellite services.

It has a small size: a diameter of only 50 cm and a height of 30 cm, with a weight of only 6 kg. It operates with parked vehicle and with a very low current consumption (0.6 A/h with 12 V).

It can be updated by SD card, to be inserted into the relevant slot on the control unit side, in order to have a constantly updated SAT TV antenna over time.

The antenna covers the whole of Europe and the available pre-loaded satellite are Astra1, Astra2, Hotbird.

### 2.2 EXPLORER S460M

Explorer S460M is a parabolic satellite TV antenna for mobile vehicles with totally automatic pointing, totally compatible with DVB (Digital Video Broadcasting) satellite services. It has a small size: a diameter of only 50 cm and a height of 30 cm, with a weight of only 6 kg. It has a maximum consumption (with moving vehicle) of approx. 1 A/h with 12 V.

It operates both with parked and with moving vehicle.

Provided with new-generation electronic gyroscopes, it can compensate any kind of vehicle movement during travel, thus allowing you to watch your favourite TV programme during transfers, and to use it when parked.

It can be updated by SD card, to be inserted into the relevant slot on the control unit side, in order to have a constantly updated SAT TV antenna over time.

The antenna covers the whole of Europe and the available pre-loaded satellite are Astra1, Astra2, Hotbird.

### 3. CONTENTS

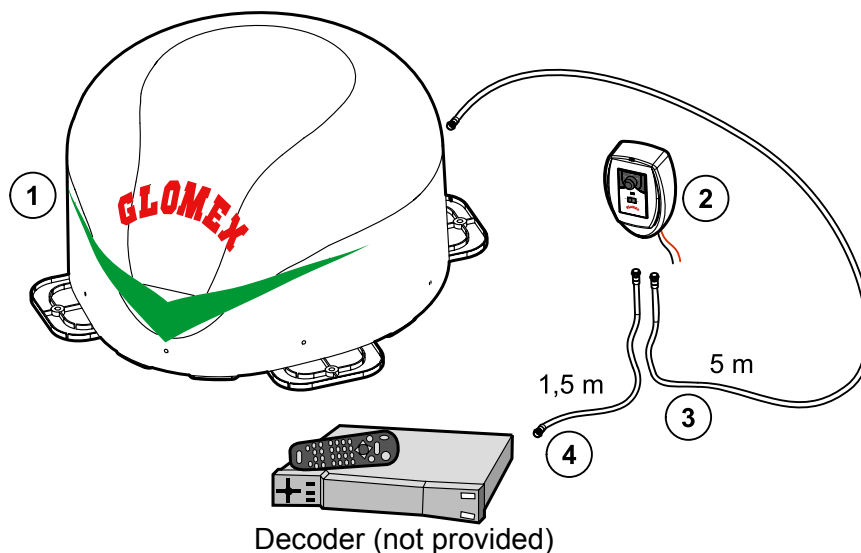
The satellite antenna is sent packed in a cardboard box and sealed with the GLOMEX "SAFETY SEAL" hoop, which has the function of CONTENT WARRANTY seal.

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).



GL00003

Fig. 1

Decoder (not provided)

DISCOVERY S460S		EXPLORER S460M	
Component	GLOMEX code	Component	GLOMEX code
Antenna unit (1)	3.010.0010	Antenna unit (1)	3.010.0011
Control unit with wall-mounting bracket (2)	4.120.0066	Control unit with wall-mounting bracket (2)	4.120.0066
Coaxial cable, 5 m long, for antenna - control unit connection, with integrated protection (antenna side) (3)	4.070.0097	Coaxial cable, 5 m long, for antenna - control unit connection, with integrated protection (antenna side) (3)	4.070.0097
Coaxial cable, 1.5 m long, for control unit - sat decoder (4) connection	4.070.0015	Coaxial cable, 1.5 m long, for control unit - sat decoder (4) connection	4.070.0015
Installation and user manual	4.150.0043	Installation and user manual	4.150.0043
Warranty certificate	4.150.0044	Warranty certificate	4.150.0044



### 3.1 OPTIONAL ACCESSORIES (NOT INCLUDED) TO USE GLOMEX ANTENNAS

To be able to use your new GLOMEX satellite antenna for mobile vehicles, you will have to procure or buy also:

- a TV set;
- a satellite receiver for channel selection.

The table below lists all the GLOMEX optional components, with relevant code.

Optional accessory	GLOMEX code
Terrestrial digital - satellite (DVBT + DVB) combi decoder	V9190
SD card with new satellite	4.120.0077
SD card with software update	4.120.0078
Frame for built-in installation	4.010.0008
Coaxial cable, 10 m long, for antenna - control unit connection, with integrated protection	4.070.0096
Roof fairlead (enables cable and connector passage)	RA140

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

- Electric drill.
- Drill tips: 3.5 mm (for fastening the control unit to a non-wooden wall), 6 mm (for fastening the control unit to wooden walls, by using an expansion plug), 8 mm (for fastening the radome), 12 mm (for the passage hole of the coaxial cable).
- Phillips screwdriver (with adequate dimensions for control unit opening).
- 11 mm wrench (for the installation of the coaxial cable connectors).
- Reciprocating saw (to drill a hole in case of wall built-in installation of the control unit; use the template provided on page 15).
- Sealant type SIKAFLEX®212-FC or similar.



#### 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.

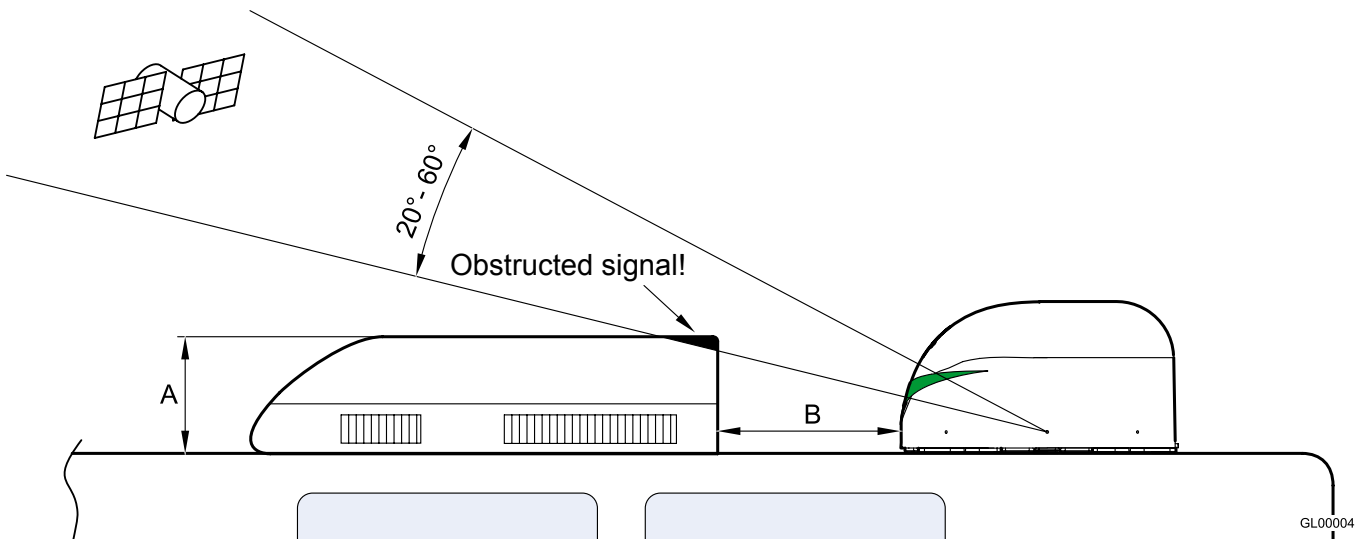
## 5. INSTALLATION

Since the GLOMEX satellite TV antenna requires a clear view of the southern sky to receive satellite signals, the ideal antenna site has an unobstructed view of the satellite/horizon all around.

Keep the antenna clear of any obstructions installed on the roof of the mobile vehicle (e.g., air conditioners).

Use the table below as a reference and install the antenna at a correct distance from the obstructions installed on the roof.

Obstacle height (A)	Minimum distance from the antenna (B)
20 cm	40 cm
25 cm	50 cm
30 cm	60 cm
35 cm	70 cm
40 cm	80 cm



**Fig. 2**

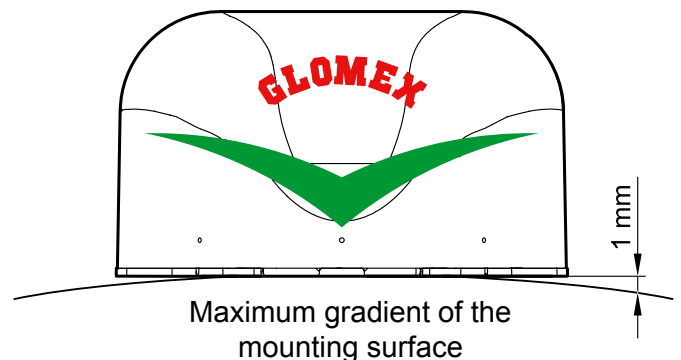
The antenna requires an angle between 20° and 60° to receive satellite signals.

Please also consider the position of the antenna with respect to the position of all various attachments or wiring harnesses necessary inside the vehicle.

Make sure the antenna is installed on a flat surface. When correctly installed on a flat surface, the mounting plates should be positioned less than 1 mm from the surface.

**WARNING**

A higher distance from the one indicated will bend the mounting plates and will seriously damage the antenna!



**Fig. 3**

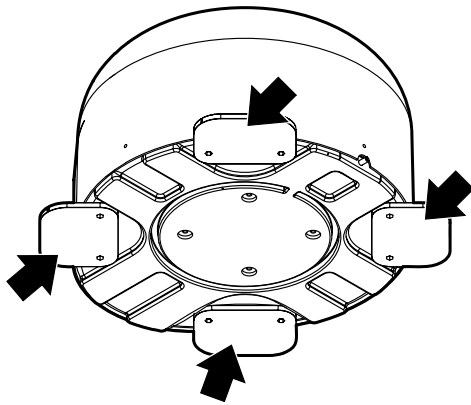
## 6. ASSEMBLY

### DANGER

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

Operations to be carried out **outside** the vehicle.

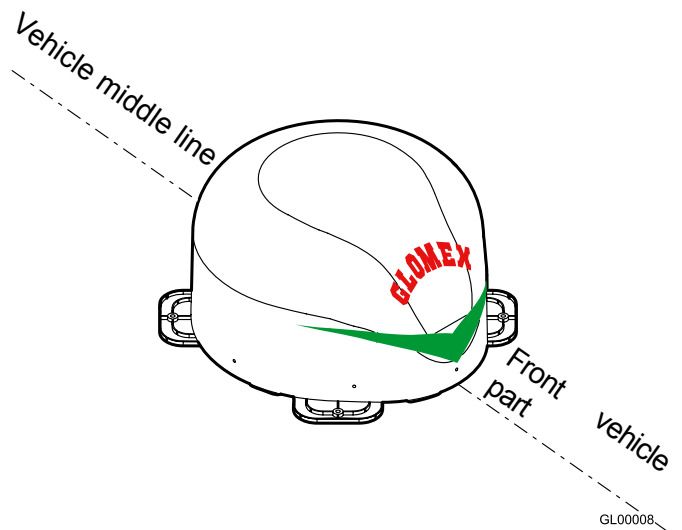
1. First of all, make sure you have chosen a correct position to install the antenna (see section 5: "Installation").
2. Remove the antenna from the packaging box.
3. Carefully clean the 4 mounting plates on the antenna and the vehicle roof with alcohol and let evaporate before applying the sealant.



GL00007

**Fig. 4**

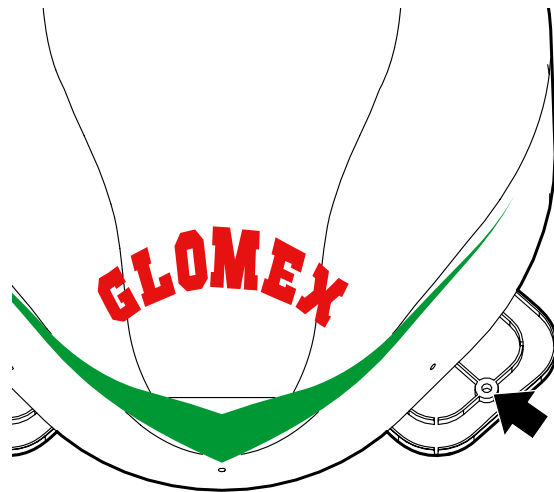
4. Drill a hole by means of an electric drill and a 12 mm drill tip on the vehicle roof for the passage of the 5 m coaxial cable; if necessary, use a fairlead code RA140 (not supplied).
5. Apply sealant type SIKAFLEX®212-FC or similar onto the plates.
6. Place the antenna in the appropriate position on the vehicle middle line, respecting the installation direction indicated in **Fig. 5** and apply a good pressure on the radome sides to make the plates correctly adhere to the mounting surface.



GL00008

**Fig. 5**

7. OPTIONAL OPERATION: drill the plates with an 8 mm drill tip and fasten the antenna to the roof with the appropriate screws.



GL00009

**Fig. 6**

### WARNING

Fastening with sealant is necessary and sufficient for the correct use of the equipment. Fastening with the screws (not included) of the radome on the roof is optional. Fastening with screws only does not guarantee a perfect coupling of the radome to the roof. GLOMEX declines any liability for an incorrect coupling of the radome to the vehicle roof.

8. Mount the coaxial cable onto the antenna:
- make sure that the cable core is correctly inserted in the central hole of the female connector on the antenna (otherwise, there would be a short circuit and the fuse installed on the power supply line inside the control unit 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;
  - insert the protection;
  - make the coaxial cable pass through the previously bored 12 mm hole on the vehicle roof.

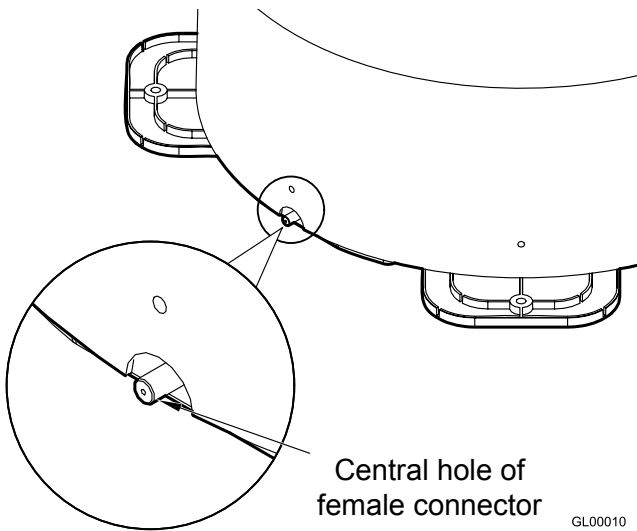


Fig. 7

GL00010

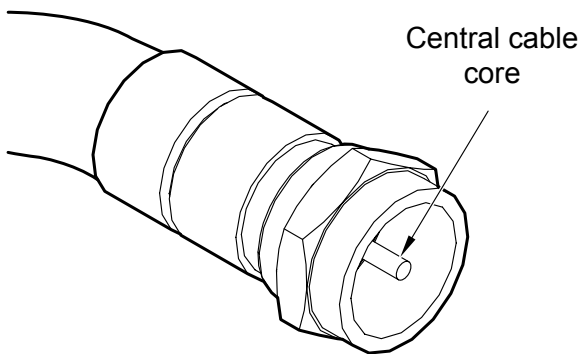


Fig. 8

GL00011

**NOTE:** For the connection of the antenna coaxial cable, it is not necessary to remove the dome!

9. Insulate with appropriate sealants the holes drilled in order to prevent the passage of water.

**WARNING**

For a correct assembly, respect the installation direction indicated in Fig. 5.

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 vehicle.

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 cables coming directly from the battery;
  - it must be reached by the coaxial cable coming from the antenna (5 m long);
2. Open the control unit by loosening the screws with an appropriate screwdriver.

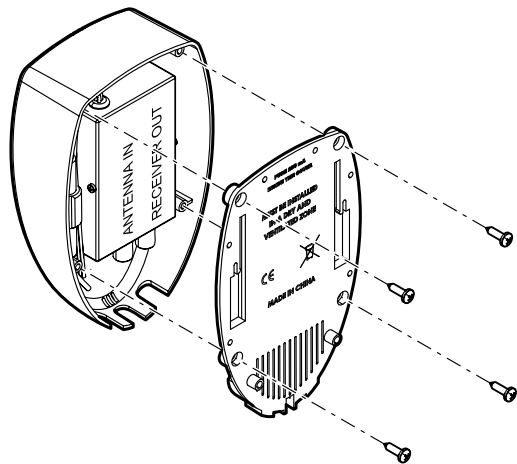


Fig. 9

GL00012

- 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 power supply line inside the control unit would trip). Manually screw in the ring nuts of connectors F. Once the ring nuts have been manually screwed in, tighten by  $\frac{1}{4}$  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.

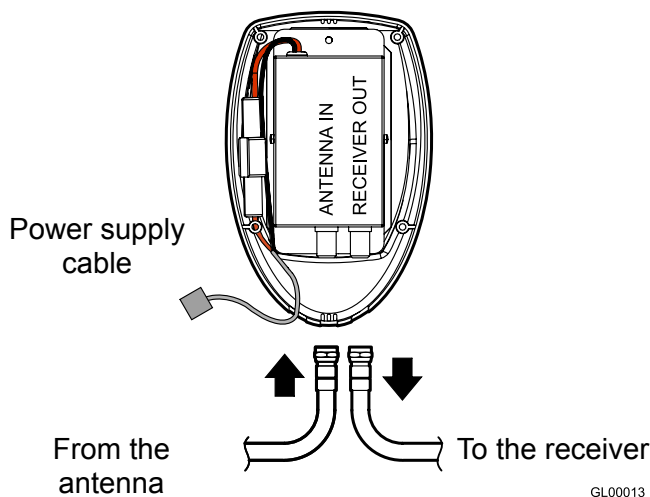


Fig. 10

- Connect the power supply cable to the battery: connect the positive terminal of the vehicle battery to the red cable and the negative terminal to the black cable. The power supply line coming from the battery must have cables with a minimum cross section of  $2.5 \text{ mm}^2$  with a length up to 4 m, of  $4 \text{ mm}^2$  for longer cables.

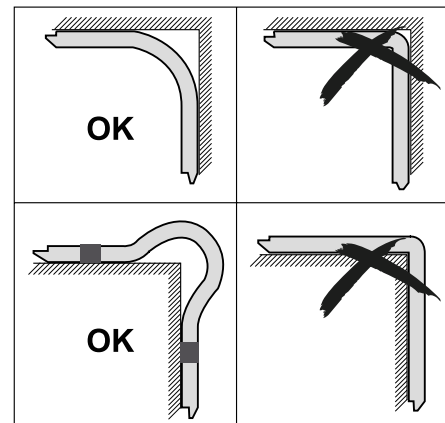
**WARNING**

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

**NOTE:** 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  $120^\circ$ .



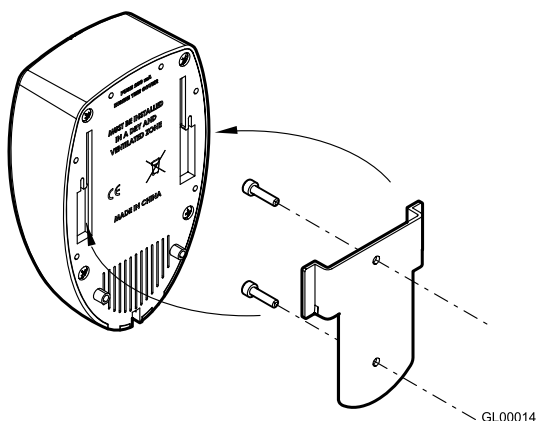
GL00006

Fig. 11

**NOTE:** Do not cut the connectors of the coaxial cables (the operation would not be guaranteed any more) and always use the supplied cables, even with inappropriate dimensions (too long). In case a longer cable is needed, ask the authorized retailer for a 10 m coaxial cable, provided on demand. Do not use different cables, as it would jeopardize the operation of the equipment.

- Close the control unit by tightening the screws in the rear cover.

6. Fasten the control unit to the wall by using the provided accessory (bracket) and screws.



**Fig. 12**

7. As an alternative, it is possible to build in the control unit by using commercial plates (3-module plates) or the GLOMEX accessory (not included: code 4.010.0008, see **Fig. 13**) by boring a hole with a reciprocating saw and using the drill with 2.5 mm tip (use the template on the following page for correct dimensions).
8. Connect the 1.5 m coaxial cable to the LNB IN socket of the satellite receiver (not supplied).

### 6.1 CUTTING TEMPLATE FOR BUILT-IN INSTALLATION WITH GLOMEX ACCESSORY

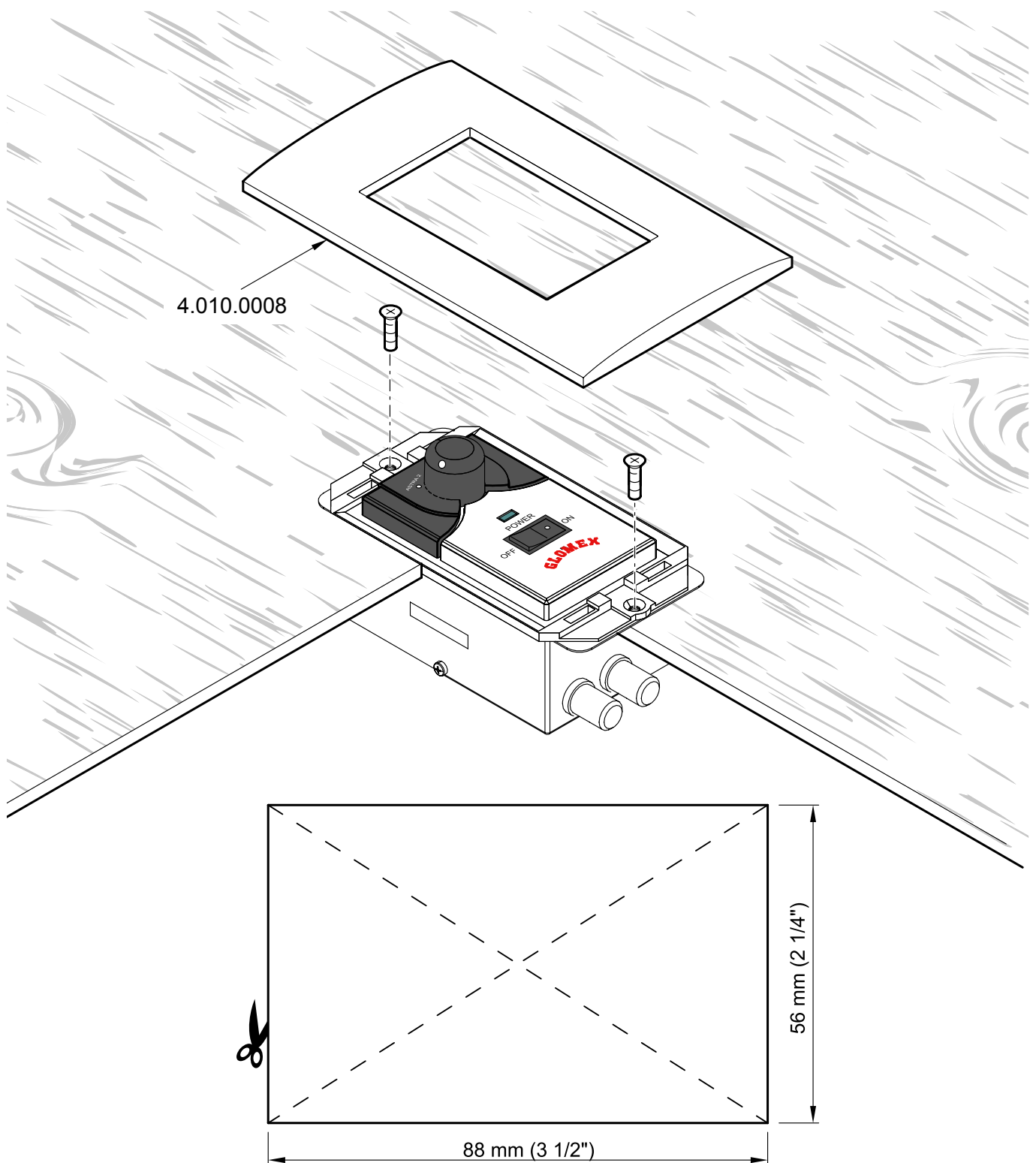


Fig. 13

GL00015

## 7. USE

### Flow chart

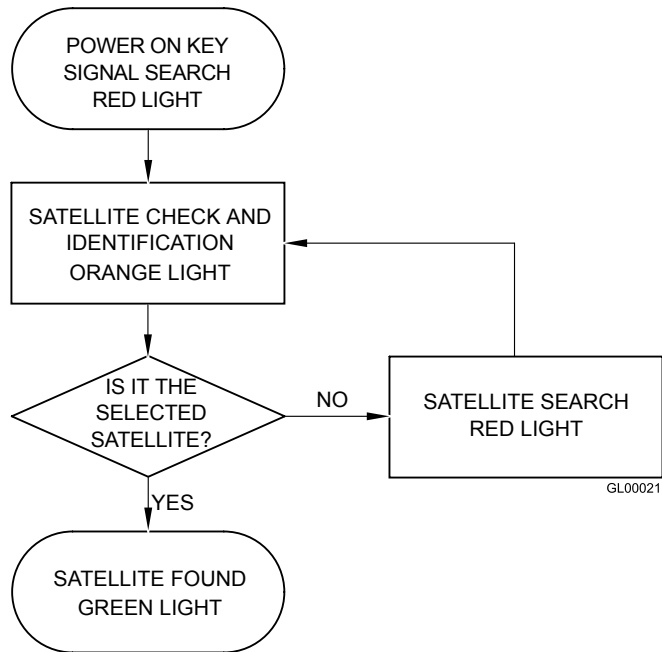


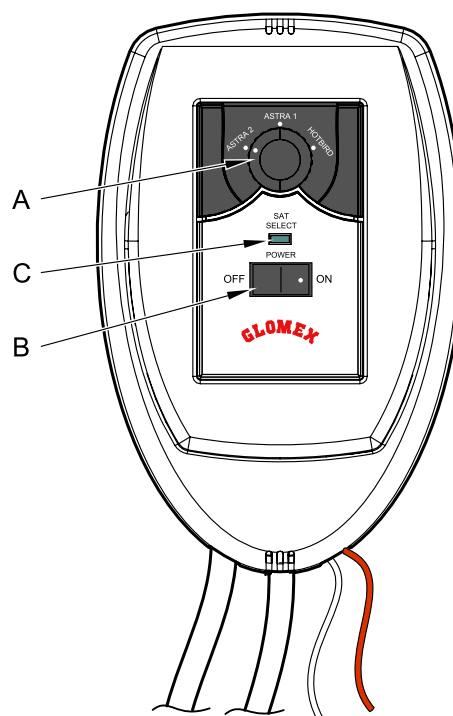
Fig. 14



1. In case of use with still vehicle, park the vehicle in an obstacle-free area.
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. On the control unit, by means of the relevant selector (A), select the desired satellite (ASTRA 1, ASTRA 2, 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 signal, the led turns orange: it checks that the found satellite is the selected one.
7. If the led, after a few seconds, turns green, this means that the satellite found was the correct one. Otherwise, the led turns red again, and the procedure is restarted.
8. With green led, after a few moments, 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.

 **WARNING**

If the led flashes alternately red and green, this means that the antenna is not connected or that a failure has occurred. See section "Troubleshooting" or contact the Service Centre.



**Fig. 15**

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

GL00016

## 8. 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 antenna 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 trees, buildings, overpasses, mountains, bridges and galleries. GLOMEX antennas also do not operate inside garages.



**Fig. 16**

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

- 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.

 **WARNING**

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

## 8.1 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 trees, cranes, buildings, overpasses, bridges, galleries, 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 by using Discovery and Explorer satellite antennas.

### 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.



Fig. 17

GL0001E

## 9. MAINTENANCE

### 9.1 PREVENTIVE MAINTENANCE

GLOMEX DISCOVERY S460S and EXPLORER S460M antennas require minimum preventive maintenance.

Observing the following instructions is sufficient to maintain a high equipment performance.

#### Monthly checks

- Wash the radome surface with a cloth damped with fresh water; do not direct pressurized water jets onto the radome.

#### WARNING

Do not use brushes, abrasive products, detergents or alcohol-based liquids.

#### Yearly checks

- Check the outer conditions of the radome. Clean from dust and dirt if necessary.

#### Checks before any long travel

- Check that the mounting plates of the radome are correctly glued
- Check for the correct installation of the 5 m coaxial cable protection on the antenna.

#### DANGER

Before carrying out any maintenance or cleaning operation, or after each use, ALWAYS turn off the antenna by means of the switch located on the control unit.

### 9.2 SPARE PARTS

GLOMEX DISCOVERY S460S and EXPLORER S460M antennas have been designed for a long life and for minimum maintenance.

Should you have problems with the operation or in case you need technical assistance, first of all contact the authorized Retailer. Keep at hand the serial number of your antenna (on page 2 in this manual) and a list with the failure symptoms. Should no Retailer be available, contact the GLOMEX Service Centre (see section "Technical assistance").

#### WARNING

You will be asked the serial number of your antenna during any service or troubleshooting phone call. The serial number is found on page 2 of the user manual of your antenna.

#### WARNING

Conserve the installation and user manual with care, as it contains the serial number of your antenna!

The following table lists the codes of the components which can be supplied as spare parts directly by the Retailer.

Component	GLOMEX code
Lower radome	4.010.0405
Higher radome	4.010.0406
Fastening support for antenna base	4.010.0250
Fuse for control unit T3A15 5x20	4.120.0076

### 9.3 SOFTWARE UPDATE BY SD CARD

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

Proceed as follows:

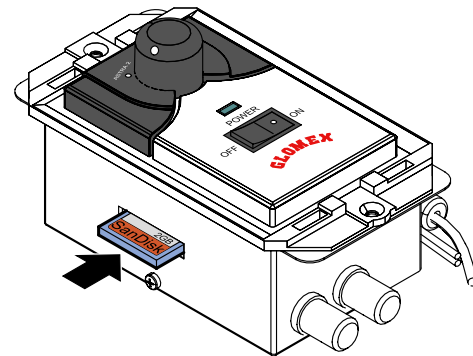
1. Turn off the decoder, the TV set and make sure that the switch on the control unit is set to OFF.
2. Remove the control unit from the wall-mounting bracket (see **Fig. 12**), open the box by loosening the screws (see **Fig. 9**).
3. OPTIONAL (in case of built-in installation): remove the wall-mounting plate (see **Fig. 13**), loosen the screws and remove the built-in control unit.
4. Insert the SD card into the relevant slot on the control unit side, as indicated in **Fig. 18**, respecting the direction (side with manufacturer label up) and making sure you have completely inserted it.
5. Turn on the control unit (set B key, **Fig. 15**, to ON). The led (C, **Fig. 15**) turns red.
6. 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.
7. 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.

**NOTE:** 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.

8. 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.
9. Remove the SD card and reinstall the rear cover onto the control unit.
10. OPTIONAL (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.



**Fig. 18**

GL00019

Flow chart

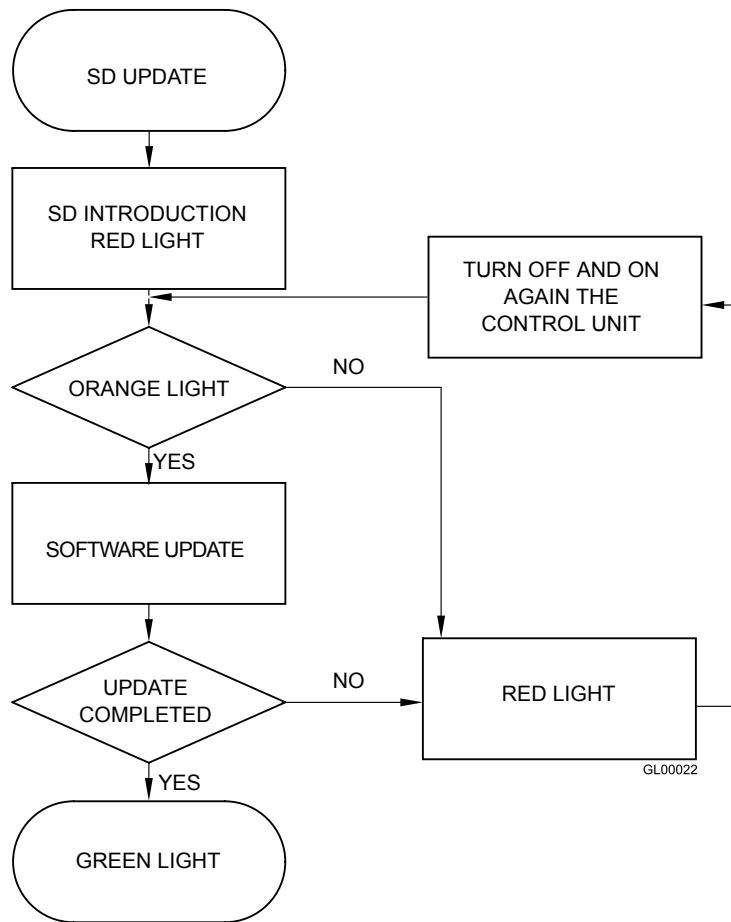
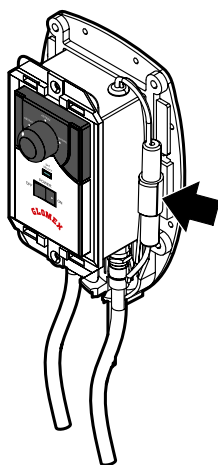


Fig. 19

## 9.4 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 control unit from the wall-mounting bracket, open the box by loosening the screws.
- OPTIONAL: (in case of built-in installation): remove the wall-mounting plate (see **Fig. 13**), loosen the screws and remove the built-in control unit.
- Disconnect the power supply cable from the battery.
- Remove the blown fuse from its seat indicated in **Fig. 20** 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 to the battery again.
- Reinstall the rear cover onto the control unit.
- OPTIONAL (in case of built-in installation): insert the control unit into the wall, reinstall the fastening screws and the installation plate.



GL00020

Fig. 20

## 10. 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 analyse 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 analyzes the most probable causes which can lead to malfunctions of your GLOMEX DISCOVERY S460S or EXPLORER S460M antenna. For any analyzed possible cause, a corrective measure is proposed, to efficiently solve, as much as possible, the trouble.

Anomaly	Cause	Remedy
1. The antenna does not operate (the led on the control unit does not turn on)	<ul style="list-style-type: none"> <li>- the fuse is blown</li> <li>- wrong power supply cable connection</li> <li>- short-circuited coaxial cable</li> <li>- proper failure</li> </ul>	<ul style="list-style-type: none"> <li>- replace the blown fuse with a new one (see section "Maintenance")</li> <li>- check the polarity on the power supply line</li> <li>- check the correct mounting of the coaxial cables</li> <li>- contact the Service Centre</li> </ul>
2. The antenna does not operate (the led on the control unit flashes alternately red and green)	<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>
3. No status message on the decoder	<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 assistance</li> </ul>
4. No image on the TV (the led on the control unit is green)	<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> </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> </ul>



<p>5. Intermittent images for short periods</p>	<ul style="list-style-type: none"> <li>- the satellite signals are obstructed by trees, buildings, overpasses, mountains</li> <li>- the vehicle is at the boundary of the coverage area</li> <li>- bad weather conditions</li> </ul>	<ul style="list-style-type: none"> <li>- move the vehicle 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 19 in this manual</li> </ul>
<p>6. 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 trees, buildings, overpasses, mountains or attachments installed on the vehicle roof</li> <li>- the vehicle is outside the signal coverage area</li> <li>- the vehicle is moving during the first 60 seconds after starting the equipment (for S460M models)</li> <li>- bad weather conditions</li> <li>- inner failure</li> </ul>	<ul style="list-style-type: none"> <li>- move the vehicle to allow an unobstructed view for the antenna or correctly position the antenna on the vehicle roof</li> <li>- go back within the coverage area; refer to the footprints of the coverage areas on page 19 in this manual</li> <li>- turn off the equipment for 10 seconds, turn it on again and make sure that the vehicle is still or moves in a straight line during the first 60 seconds after being started</li> <li>- contact the Service Centre</li> </ul>
<p>7. 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 trees, buildings, overpasses, mountains</li> <li>- the equipment software is not up to date</li> </ul>	<ul style="list-style-type: none"> <li>- move the vehicle 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> </ul>
<p>8. The equipment does not find the satellite (the led on the control unit is orange and remains orange also when moving the vehicle)</p>	<ul style="list-style-type: none"> <li>- parameters in satellite communication have changed</li> </ul>	<ul style="list-style-type: none"> <li>- please contact the Service Centre to ask for the software update by SD card</li> </ul>
<p>9. 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 assistance, spare parts and warranty conditions.</li> </ul>
<p>10. Confused, incomplete and obstructed images</p>	<ul style="list-style-type: none"> <li>- condensate or rain on the radome, which can disturb the signal with still vehicle</li> <li>- bad weather conditions</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>-</li> </ul>
<p>11. 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 assistance</li> </ul>

12. The equipment operates with still vehicle but not with moving vehicle (S460M)	<ul style="list-style-type: none"><li>- the satellite signal is obstructed</li><li>- the antenna is only for stationary use</li><li>- failure in the gyroscope system</li></ul>	<ul style="list-style-type: none"><li>- move away from possible obstacles obstructing the satellite signal</li><li>- check the antenna model</li><li>- contact the Service Centre</li></ul>
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For further information, please address to the GLOMEX Service Centre (see section "Technical assistance").

## 11. 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.

**NOTE:** 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/assistance conditions.

## 12. TECHNICAL SPECIFICATIONS

DISCOVERY S460S		EXPLORER S460M	
Min E.I.R.P.	49 dBW	Min E.I.R.P.	49 dBW
Antenna Gain	34 db	Antenna Gain	34 db
Dish Size	46 cm x 26 cm	Dish Size	46 cm x 26 cm
Antenna type	OFFSET	Antenna type	OFFSET
Antenna Polarisation	Linear V/H	Antenna Polarisation	Linear V/H
LNB frequency range	10.7 to 12.75 GHz	LNB frequency range	10.7 to 12.75 GHz
Radome type	U.V. resistant	Radome type	U.V. resistant
Radome diameter	50 cm	Radome diameter	50 cm
Radome Height	30 cm	Radome Height	30 cm
Antenna weight (including radome)	6 kg	Antenna weight (including radome)	6 kg
Power supply	12 VDC/ 0.6 A/h	Power supply	12 VDC/ 1 A/h
Operating Temp. Range	-20°C to +55°C	Operating Temp. Range	-20°C to +55°C
Elevation range	20° to 60°	Elevation range	20° to 60°
Azimuth turn Range	Unlimited	Azimuth turn Range	Unlimited
Acquisition time	40 sec (approx.)	Acquisition time (stationary)	< 40 sec
Loaded satellites	ASTRA1 19°E ASTRA2 28°E HOT-BIRD 13°E	Acquisition time (In-motion)	< 50 sec
Working	Only when the vehicle is parked	Tracking rate	> 50° / sec
-	-	Loaded satellites	ASTRA1 19°E ASTRA2 28°E HOT-BIRD 13°E
-	-	Type of stabilization	2-axis by gyroscopes and micro-step motors + 3° axis by interpolation

## 13. TECHNICAL ASSISTANCE

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

### Glomex Divisione Mobile

Via Faentina 165/G

48124 Ravenna (Italy)

Tel. +39 0544 1936106

Fax +39 0544 1930164

Email: [service@glomexmobile.com](mailto:service@glomexmobile.com)

**NOTES:**