



User Manual PHW_00094003 + PHW_00096101

Document Revision







Revisione N°	Date	Owner	Notes
1	28/01/2014	G.Vittori	New Release 2014
2	20/05/2014	G.Vittori	Added New prog. Mode
3	26/09/2014	G.Vittori	Minor Changes
4	23/04/2015	G.Vittori	Minor Changes
5	01/03/2016	G.Vittori	Added BeepBox Ver 1
6	02/03/2016	G.Vittori	Added Dish Focus Tuning
7	05/03/2019	G.Vittori	Removed Page 17th BeepBox 1
8	05/03/2019	T.Media	Modified Template

Indice

Document Revision	2
INTRODUCTION.....	4
Symbols in this manual	4
Technical Specification.....	5
System Components.....	6
Warranty.....	8
Installation	10
Safety Instruction for Installation	10
Dish Assembly	11
Arm Focus Tuning	12
Antenna Installation	13
Passage of the cables	14
At this point the antenna installation will proceed in the vehicle. Had it not been executed yet, be sure to fully sealed waterproof box or previously mounted cable guide.	16
Installation of the pointing module	17
How To conect the Control Module (BeepBox)	19
Connection of the control cable of the external antenna	19
How to connect the Set Tob Box	20
USE of the System SAT-TV 40; 65; 80 with the Pointing module	21
Description of the system	21
Use of the system	21
Power ON	21
Switching OFF	22
Satellite selection	22
How to start the searching process	23
Change satellite after antenna locked.	23
How to update the system in case of broadcaster frequency change.....	24
Transponder Update Process.....	24
FW update of the external Antenna.....	25
Update Process	25
PROTECTION	27
Motor Protection	27

INTRODUCTION

Symbols in this manual

	Read the Manual.
	Respect indication to avoid risks for user.
	Only qualified person of TECHNO-MEDIA srl.
	Pay attention.
	Correct.
	Wrong.

Technical Specification

Dish	Offset Dish with three possible dimension: 40, 65, 80cm		
Search Mode	Automatic, Satellite is recognized through the audio signal provided by your set top box		
Power Supply	Min 12V	Typ	Max 14.5
Current Sink	Min 80mA	Typ 150mA	Max 1A
Weight	4.3 Kg		
Protection Fuse	2A self restoring		

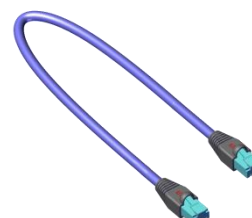
System Components

Inside the box you will find:



Automatic Antenna SAT-TV 40 or 65 or 80 based on what you purchased.

5 Meters Ethernet cable to connect the Antenna to The Pointing Module.



Coaxial cable to connect the antenna to the Pointing Module.

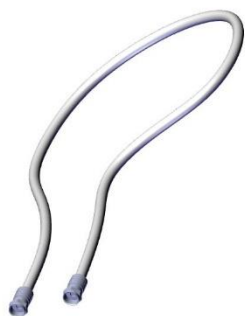
Pointing Module





Control module

Ethernet cable to connect the control module to the pointing one.



Antenna coax cable to connect the output of the pointing module to the set top box.

Warranty



Both Electronics and Mechanical parts are covered for 2 years. **

** European Warranty.

Keep copy of the purchase document (without this document we could not proceed with a warranty repair).

Cost of the parts and works are covered by the warranty.

Shipment and risk for the transportation are customer costs.

Under a valid warranty we will proceed to renew the system with the latest modification.

The replaced parts will not be returned.

The antenna warranty will be extended for an additional three (3) months and only on the same defect.

If the validity of the warranty and in need of repair, bring the antenna to one of our authorized service center. If there is no service center in your area, please send the antenna in its original packaging at TECHNO-MEDIA srl. with a detailed explanation of the defect. For added traceability, it is required to send an email to: info@techno-media.it



Exclusions and termination of the warranty

Are expressly excluded from the warranty all those faults that are attributable (at the discretion of the TECHNO-MEDIA Ltd.) to:

- Improper installation, misuse, neglect.
- Tampering or antenna opened by the user or unauthorized personnel.
- Failures that are attributable to an incorrect antenna use.
- Use of non-original parts.
- Failures caused by adverse weather conditions such as lightning, hail and strong wind.
- Failures caused by supply voltage or incorrect connections.



Installation

Safety Instruction for Installation

It is needed to pay attention to the following guidelines in order to avoid damage to the people who will operate the installation.



Since the antenna will (in most cases) mounted on the roof of the vehicle and this being an operation at risk of falling for the operator, you will need to take all preventive measures to avoid harm to people involved in the assembly. It must also check that the capacity of the vehicle roof is able to support the weight of the trader and tools needed during installation.

Be sure that:

1. Antenna and its parts are not powered during installation.
2. People involved does not suffer from Vertigo.
3. There is no risk to fall down from the roof or from the aids used to reach it.
4. Do not stand in a risky position where tools or material can fall down during the installation.

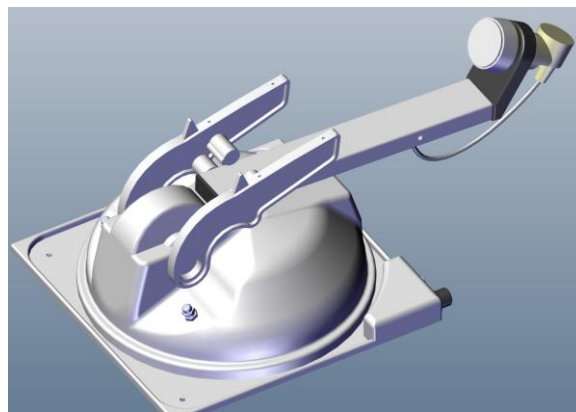
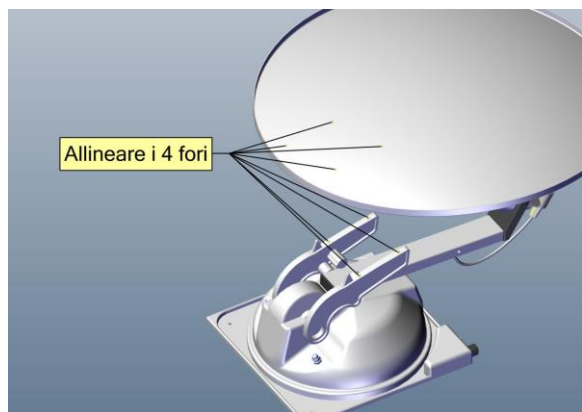
Dish Assembly

Dish is separated by the main body during shipment.

To install it a single Phillis screw driver is needed.

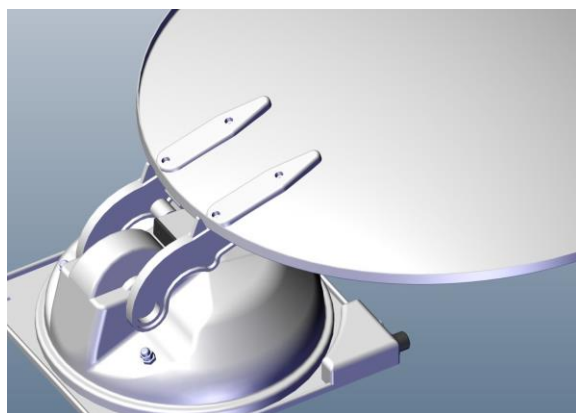
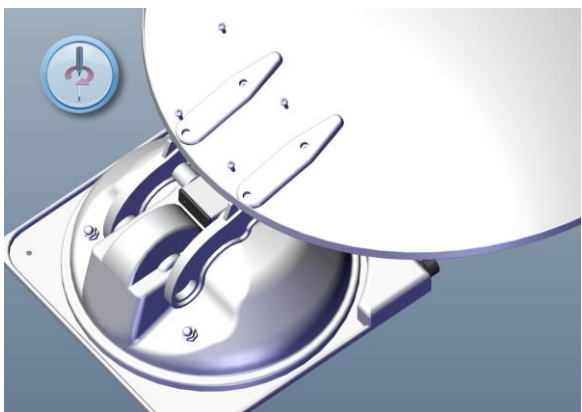
Screws are screwed on the main body and must be removed before installation.

Place the main body on a stable and flat surface



Align the 4 holes on the Dish with the four holes on the two support on the main body

Align the 2 plates with the dish and the main body



Set the four screw firmly

Arm Focus Tuning

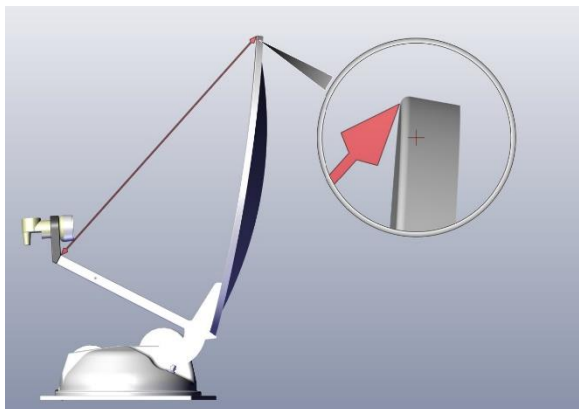
In case of problems pointing a satellite, it is possible that a tuning of the arm/dish angle is needed.

In case of that:

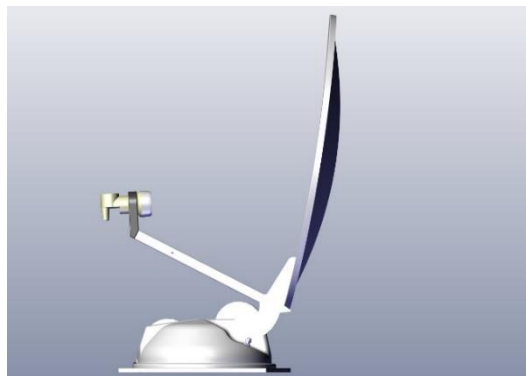
- Switch on the Set Top Box
- Switch On the Antenna pressing the ON button
- Wait until the antenna start the horizontal rotation.
- Press the OFF button



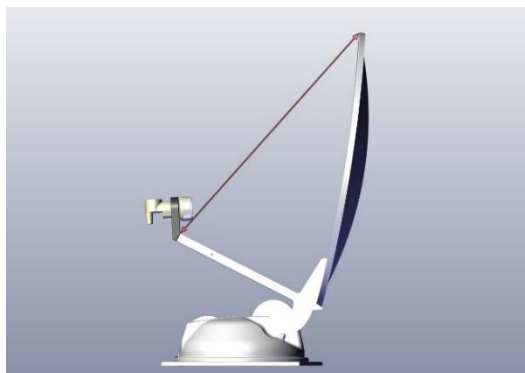
Measure the distance from the hole close to the edge of the dish



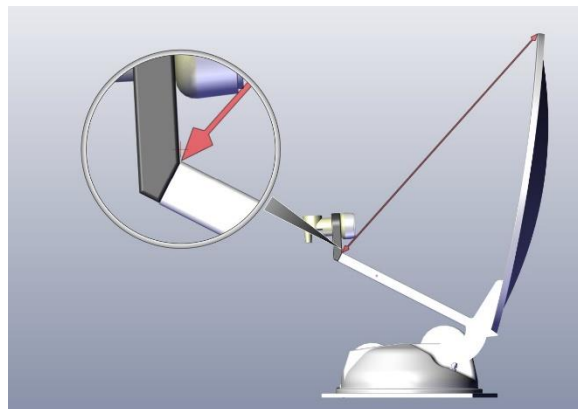
Now switch ON again the Antenna and wait for the complete process.



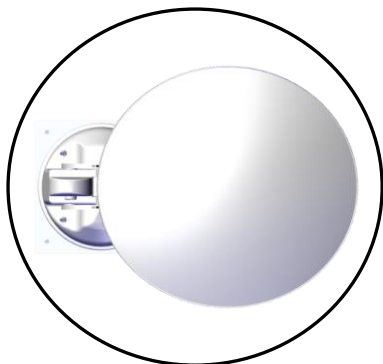
With a screwdriver , turn the screw shown in the picture in order to set the distance between the edge of the dish and the arm to **67** cm for the dish of 65cm and **86** cm for the one of 80cm



To the junction between the arm and the plastic of the LNB handler.



Antenna Installation

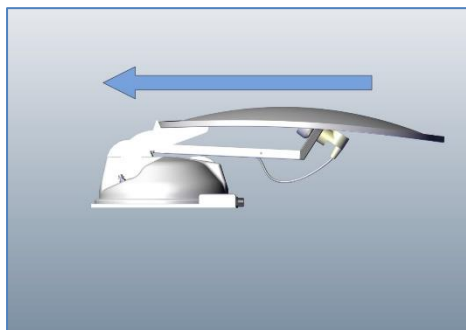
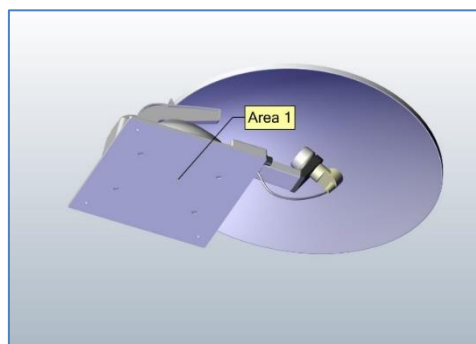


Verify that there is enough space on the roof of the vehicle in order to allow the antenna movement. The antenna always opens first vertically and then horizontally to allow you to reduce the overall operating conditions but, in far south regions, such as Morocco or North Africa, to point the antenna of some satellites could tip very back, so it is necessary that there are no objects that prevent its rotation.

Consider a space of about 130 cm in diameter around the antenna as shown.

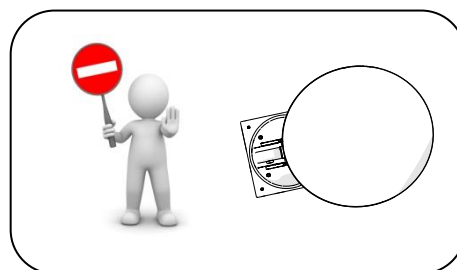
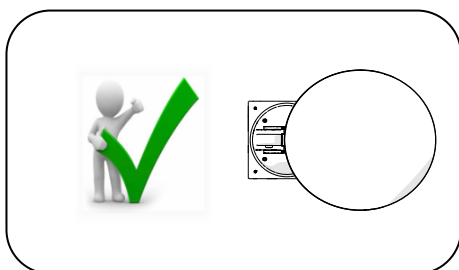
Thoroughly clean the area identified for fitting and removing all traces of grease, dust and debris.

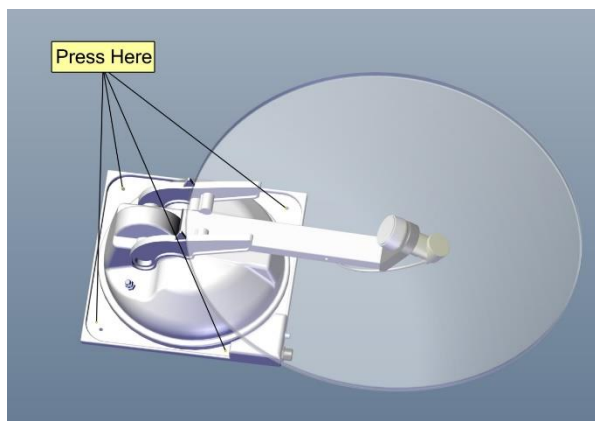
With a caulking gun, apply a uniform layer of polyurethane adhesive on the baseplate of the antenna body (Area 1). Refer to the operating instructions of the adhesive used. Use adhesives compatible with the counter material (ABS) and the roof of your vehicle.



Then position the antenna in the above cleaned area by paying attention to the direction. The arrow in the figure indicates the direction of march of the vehicle.

Be sure that the antenna is parallel to the sides of the vehicle.





Press firmly on all four corners of the aluminum plate and at the center of the cap as indicated by the figure. **Do not press** above the parabola to prevent warping it. This will irreparably damage the mechanics.



Select a suitable adhesive to fix the baseplate ABS to your roof.



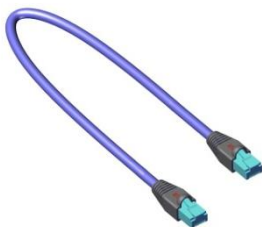
Follow the instructions from the manufacturer of the glue and in any case, let it rest at the appropriate temperature (see manual glue instructions) for at least 24 hours before starting move the vehicle.

Passage of the cables

If it was not already, make a hole for the passage of the two cables required to the antenna operation.

After making the hole, fit the weatherproof box or the cable guide.

Run the two cables supplied in the kit if necessary with the help of an electrician's probe, if you were to encounter resistance, **DO NOT** pull on the cables, you might run into the cable break and then the antenna malfunction. Such failure is not covered by warranty.

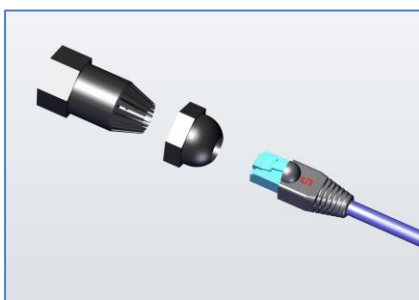
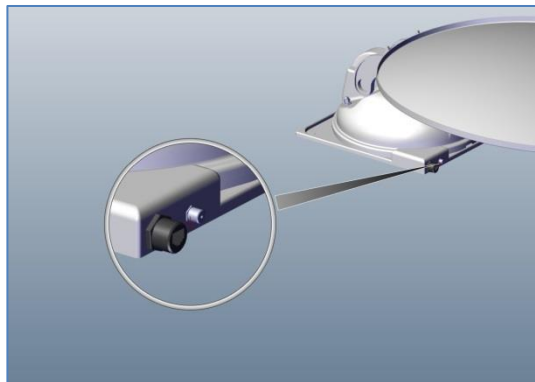


Ethernet cable 5 meters NOT cross

Antenna
Coaxial cable 5 meters



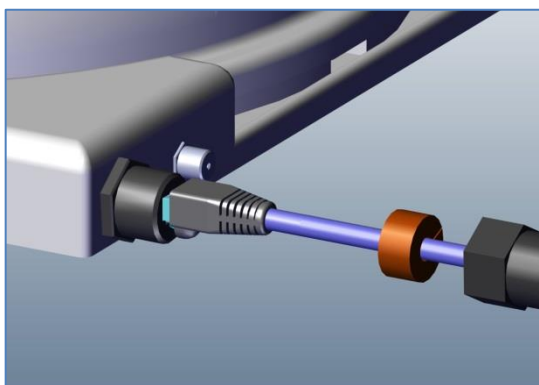
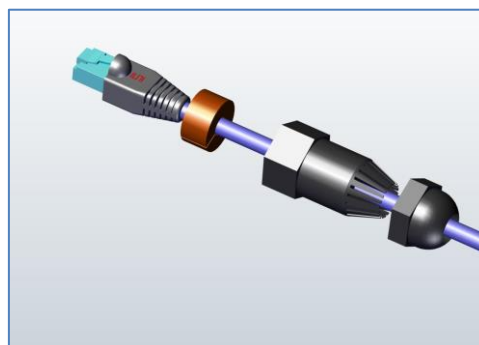
Leave a sufficient cable length between the cable guide and the antenna so you can reach the connectors on the antenna connection body without bending too close or keeping in tension cables.



If not already assembled, install the seal and plastic cap on the end of the Ethernet cable which is then connected to the antenna:

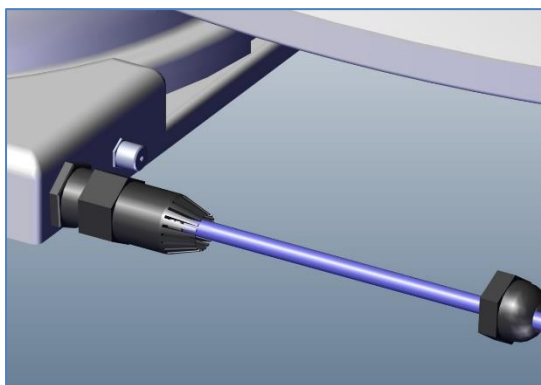
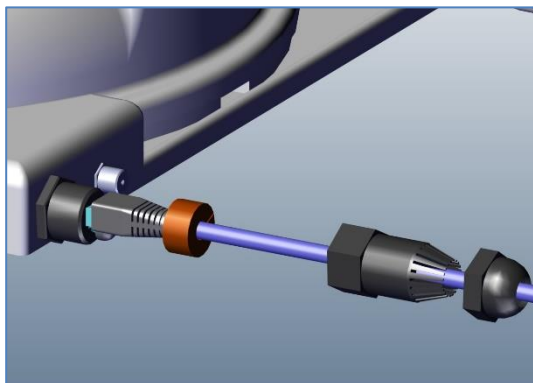
First plug the Ethernet cable into the side of the guard as shown in the figure, first the rear and then plug in the casing front.

Once the cable is into the two parts, open the rubber gasket provided and let it fit around the ethernet cable.

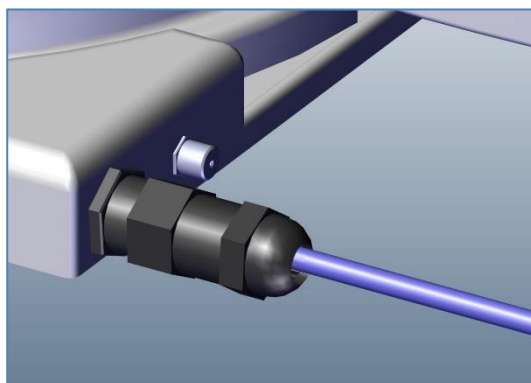


Connect the RJ45 connector of the Ethernet cable to the antenna connector, as shown in the figure, insert the connector until the retaining tab does not Click

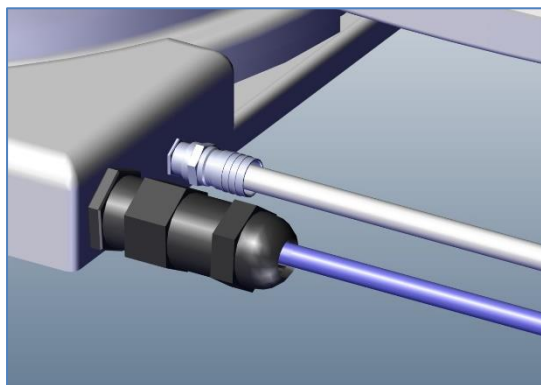
Move the seal close to the connector



Screw the connector body as shown in the figure. Perform the operation carefully avoiding to turn the other party on the dome. **Do this by hand without the use of tools, it is not necessary to tighten too hard.**



Screw the last part on the body of the connector so that the gasket is contained inside avoiding infiltrations of water. **Do this by hand without the aid of tools, it is not necessary to tighten too hard**



Proceed at this point to the antenna cable connection. Be careful not to rotate the antenna connector on the body.



At this point the antenna installation will proceed in the vehicle. Had it not been executed yet, be sure to fully sealed waterproof box or previously mounted cable guide.

Installation of the pointing module

Control and Poynting module must be installed inside the vehicle.

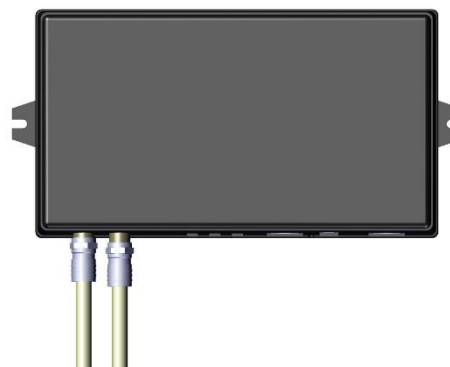
The Pointing module must be installed on the internal wall using two screws.

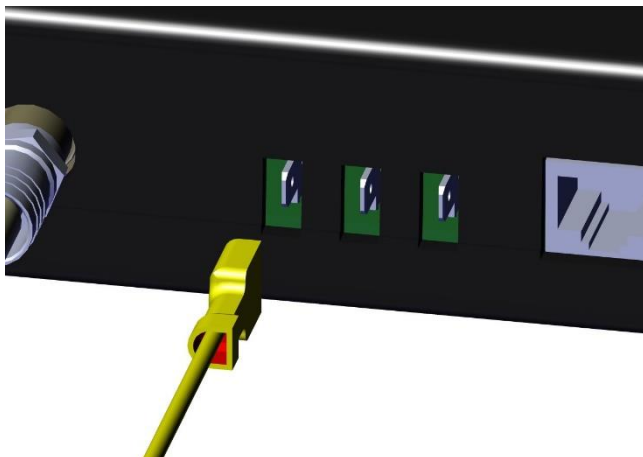
It is better to keep it accessible because the USB connection present on it can be used for future updates.



Connect the antenna cable coming from the external antenna to the left RF input

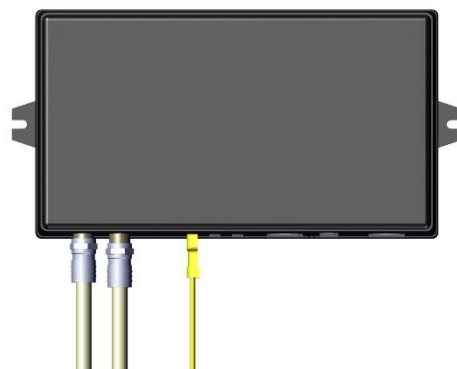
Connect the coax cable provided to the second RF connector and the other side to the set top box input.





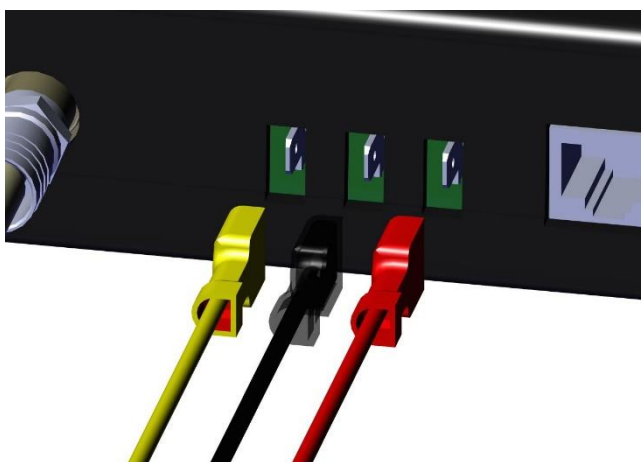
Connect the power supply wires as in the left and below pictures, start with the 12V available only when the ignition key is on.

This wire must provide 12V only when the vehicle is on or when the ignition key is on his first on position..



Connect the negative to the central connector

Connect the positive to the right one



How To connect the Control Module (BeepBox)

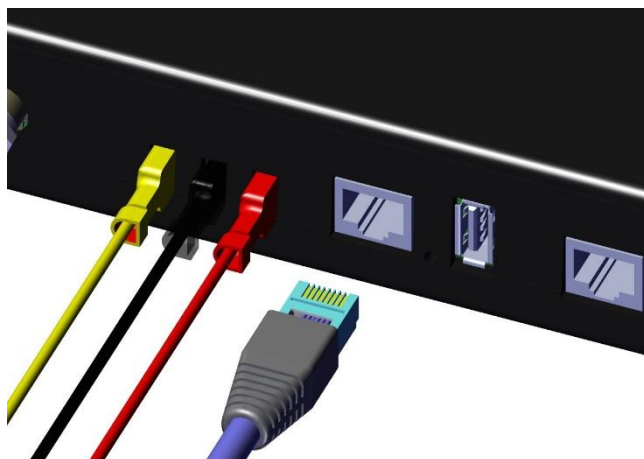
The Control Box must be placed in accessible position, in order to allow to switch on, off and select the satellites.

The maximum distance from the Pointing module is defined by the provided Ethernet cable and must not be longer than 1.5 meter.

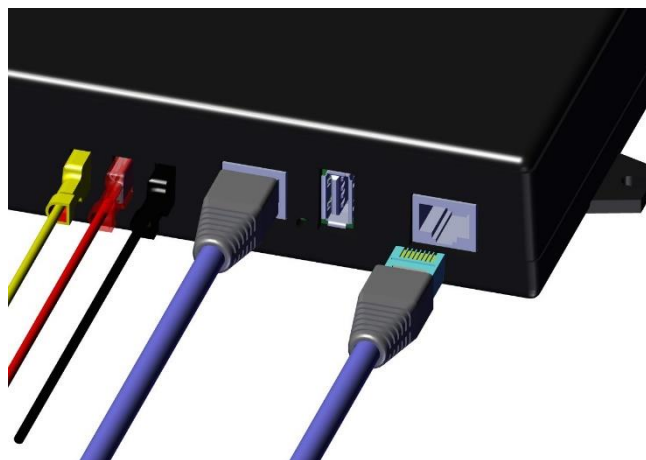


Connect one side of the cable as shown in the picture

Connect the other side to the connector shown in the picture



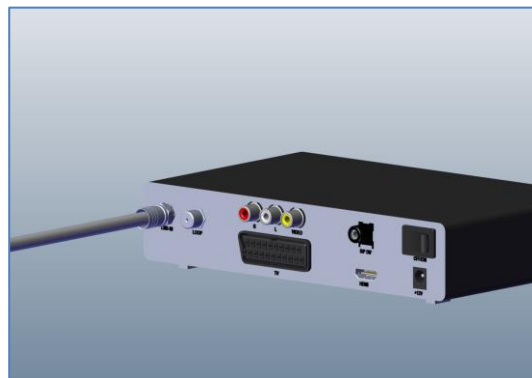
Connection of the control cable of the external antenna



Connect the Ethernet cable coming from the external antenna to the RJ45 connector shown in this picture

How to connect the Set Top Box

Connect the coaxial cable coming from the pointing module to the RF IN of your decoder. (Refer to the manual for your decoder to verify which input to use).



USE of the System SAT-TV 40; 65; 80 with the Pointing module

Description of the system

Every system, use an automatic process to point the satellite which does not require intervention by the user.

The system allow to point a satellite independently by the type or model of the Set Top Box used and independently by the orientation and/or the inclination of the vehicle. Some receiver like the pay per view ones.

The GPS allow to point the satellite with the maximum accuracy.

The Tilt Sensor (if installed) will correct any possible vehicle inclination.

The pointing procedure is started as soon as the set top box is powered up.

Use of the system

Power ON

Press the ON button until the upper two leds start to blink.

The two upper leds start to blink.

Boot procedure require almost 8 seconds, after that the system will start to search for the selected satellite.



Switching OFF

To switch off the system press the OFF button.

While the antenna close, the two upper leds will blink simultaneously.

Another way to close the system is turning on the vehicle. After few seconds the vehicle is on, if the system was installed properly, the antenna must close down.

While the vehicle is on, the central LED will stay ON.



Satellite selection

After the Boot process and as soon as the search start, one of the upper leds will stay fixed ON while the other one will blink.

The fixed one indicate which satellite (SAT1 or SAT2) is selected.

This system allow to search for 2 satellites, previously programmed in the factory.



Left LED is SAT1 while the right one is SAT2.

To change the satellite, press the left or right arrow accordingly with the blinking led.



The selection is possible even during the search process.



If both leds remain on, this means that the satellite stored into the antenna is not one of the two available in the pointing module. Just press the left or right arrow to select one of the two available..

How to start the searching process

Satellite search will start as soon as the boot ends, after pressing the ON button.



Change satellite after antenna locked.

After the antenna will lock the selected satellite, in order to reduce the power consumption will be put in stand by.

To move from the selected satellite to the other one, just press the left or right arrow, the antenna will start another procedure.

How to update the system in case of broadcaster frequency change

In case of change of the broadcasted channels, we will provide on our website the updated file useful to update the pointing module..

To update the system is enough to copy this file into an USB stick and insert the stick into the pointing module

The update file is available on our website www.techno-media.it.

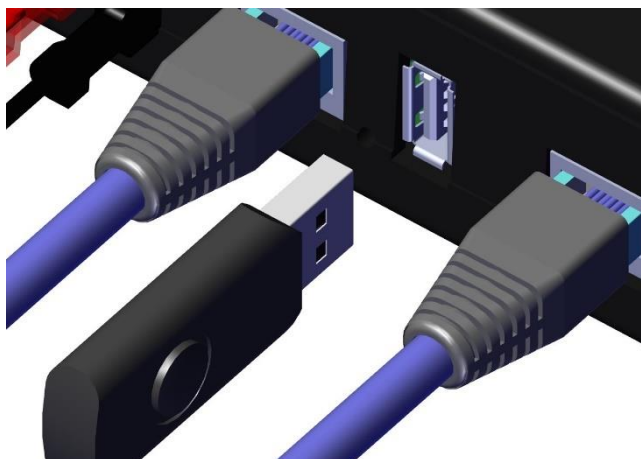
Transponder Update Process

- 1) Download the file from www.techno-media.it in the section Update, the file name is Frequencies.tcm
- 2) Copy the downloaded file into the USB stick on the root directory



Do not modify the file in order to avoid risk of system malfunction

- 3) Switch on the system pressing the ON button and wait the end of the boot sequence
- 4) Insert usb stick into the USB socket as shown in the below picture.



- 5) After few seconds a long beep will be sounded.
- 6) Remove USB stick
- 7) Switch off the system pressing the OFF Button

FW update of the external Antenna



In some case should be needed to upgrade the FW of the external antenna. This operation must be performed carefully and only when suggested by Techno-Media srl.



Only proceed with the FW update if the batteries of the vehicle are fully charged.

The process takes few minutes

Update Process

- 1) Download the updated Firmware from www.techno-media.it in the Update Section
 - a. File is in ZIP format
 - b. Extract the ZIP file in the root directory of the USB stick
 - c. After extraction, there will be several files on the root directory
 - d. Do not modify or open any of those file, any modification could cause update failure and make the system not working.
- 2) Switch off the vehicle and remove the ignition key
- 3) Keep the on board inverters switched off
- 4) Switch on the system pressing the ON button
- 5) Wait that the boot process ends (upper leds blinking)
- 6) Insert the usb stick in the pointing module

7) Press the down key and keep it pressed



8) While keeping the down key pressed, press the left and right keys.



9) The FW update process will start and the SAT2 led will blink for all the update process time.



After the process starts, do not operate with any controller key

Do not switch on the vehicle

Do not use any other device in the vehicle which is powered by the same battery

10) During the update process the BeepBox will sound a short beep.

11) At the end of the update the system will sound a long sequence of short beeps

12) Now the system will close down the antenna and switch off.

13) Now you can use start again the system if needed.

PROTECTION

Motor Protection

If an obstacle is within the movement range of the antenna blocking the turning or rising movement, the system will notice the user playing 2 sequences of three beeps and stopping the movements. To restart the system, remove the obstacle and press the CLOSE. For more information on the Beep signaling please refer to 'Beep Signaling Details'



Take all necessary precautions if you must get on the vehicle roof. Avoid using metal rods for the removal of obstacles when weather conditions are adverse.

PHW_00094003 + PHW_00096101
Vi ringraziamo per il vostro acquisto