

Vehicle Mounted Antenna USER MANUAL

P/N: SNG-XXX-X-XX-X

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1 IMPORTANT NOTICE

**IMPORTANT NOTE: THE INFORMATION AND SPECIFICATIONS
CONTAINED IN THIS DOCUMENT ANNUL AND REPLACE ALL PREVIOUSLY
PUBLISHED INFORMATION CONCERNING THIS PRODUCT**

TEMIX Communications Srl maintains a continuing programme of product improvement and therefore reserves the right to change specifications without notice

! In order to use properly the system and prevent possible causes of malfunctions follow the information provided in this manual.

! IMPORTANT - For more information or insights aspects which may prove unclear, please refer to our technical department:

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During installation of the system observe the following safety precautions:

- Follow all warnings and instructions indicated on the system
- Verify that the voltage and frequency of power source correspond to the values of voltage and frequency of this device
- Do not allow objects of any kind in the openings of the system. The internal components can be crossed by high voltage current.
- Objects extraneous material conductor could produce a short circuit and create risks of fire, electric shock or damage to the system.

SYMBOLS

This manual may contain the following symbols:



Caution - Risk of personal injury and damage to the system. Follow the instructions



Caution - Components crossed by high voltage.

To reduce the risk of electric shock and injuries, follow the instructions.



Caution - Components or parts of the system sensitive to ESD.

To reduce the risk of damage follow the instructions



On - Apply to the system an alternating current.

2 SYSTEM TAMPERING

DO NOT AMEND THE MECHANICAL OR ELECTRIC PARTIES OF THE SYSTEM.

TEMIX Communications WILL NOT RESPOND TO PROBLEMS CAUSED BY AN AMENDED DEVICE.

OPENING AND/OR TAMPERING NOT SPECIFICALLY AUTHORIZED BY TEMIX Communications WILL RESULT IN AN IMMEDIATE TERMINATION OF TERMS OF GUARANTEE.

POSITION



Caution - Slots and openings in the cabinet are provided for ventilation. To insure reliable operation of the equipment and to protect it from overheating, these openings must not be blocked or covered.

Do not place the unit near a radiator or other heat source. Failure observation of these directives can cause overheating.

CONNECTION OF POWER CORD



Caution - The device is designed to operate with power systems with a conductor neutral earthing. To reduce the risk of electric shock, do not connect it to supply systems of different types.



Caution - The device is equipped with a three wires power cord with ground. To reduce the risk of electric shock, insert the cord only in outlets with earthing.














Caution - The device is not equipped of main switch. The device turns on with the only connection of power cords.

3 PURPOSE OF THE DOCUMENT

This 100cm Vehicle Mounted Antenna User Guide describes all the available commands for its proper use and configuration. This manual is intended for operators with a good understanding of the used terminology in telecommunication field with experience in managing telecommunication systems, particularly in the use of Satcom telecommunication antennas.

4 Warning

Signs	Warning content
	When controlling the antenna electrically, please remove the manual crank handle, otherwise the crank handle may be thrown out and cause accidental injury.
	It is forbidden to step on, bump or squeeze the main surface of the antenna, so as not to deform the main surface and affect the electrical performance of the antenna.
	When the antenna is in use, it is forbidden to turn off the software limit enable. When it needs to be turned off under special circumstances, please ensure that the operation after turning off will not cause damage to the antenna.
	After the antenna is powered on, please check whether the status indicator on the front panel of the chassis is always on before unfolding. If the status indicator is not on, please enter the manual interface to check whether the actual angle of the antenna is normal. If it is not normal, it is forbidden to automatically unfold the antenna.
	In the case of no power, if the antenna attitude is adjusted by hand, and then the electronic control mode is activated, the antenna needs to be manually adjusted to the stowed state, and the system is restarted to reset the antenna angle.
	The on-site power supply is 220VAC, and it is forbidden to plug and unplug the cable plugs behind the antenna control unit and the antenna drive unit to prevent damage to the system components and cause system failures.
	When the system is powered off and then powered on again, the power off is at least 5 seconds before power on again.
	When using manual commands to rotate the antenna, especially for manual deployment and collection work, a special person must be responsible for observing the antenna during the rotation, the interference between the feed pole and the vehicle body, and instructing the operator in the vehicle to operate the rotation direction of the antenna, so as to stop the antenna rotation in time when interference occurs, to prevent accidents.
	When the antenna is working, it is strictly forbidden to stand in front of the antenna.
	Keep the surface of the feed dust cover clean and complete. If it is damaged, please replace it in time.
	Before the antenna is ready to be transported, please stow the antenna first, and check whether the connecting screws between the luggage rack and the roof are loose. If they are loose, tighten them immediately to ensure that the antenna is in good transportation condition.

5 General features

- Easy disassembly and assembly, stable structure, superior performance, fast star search, high safety
- The configured GPS has high precision, and the electronic compass has strong anti-interference, which ensures the stability and accuracy of the star function.
- Antenna automatic alignment time does not exceed 5 minutes (RMS).
- Equipped with multiple protection functions such as automatic warning, mechanical limit, and software limit, the antenna operates more safely.

5.1 Product working conditions

- No obstruction in front of antenna;
- After the vehicle has been parked smoothly, power on antenna and starts to work;

5.2 Antenna System Description



Figure 1.1 Schematic diagram of antenna composition

5.3 Antenna Structure

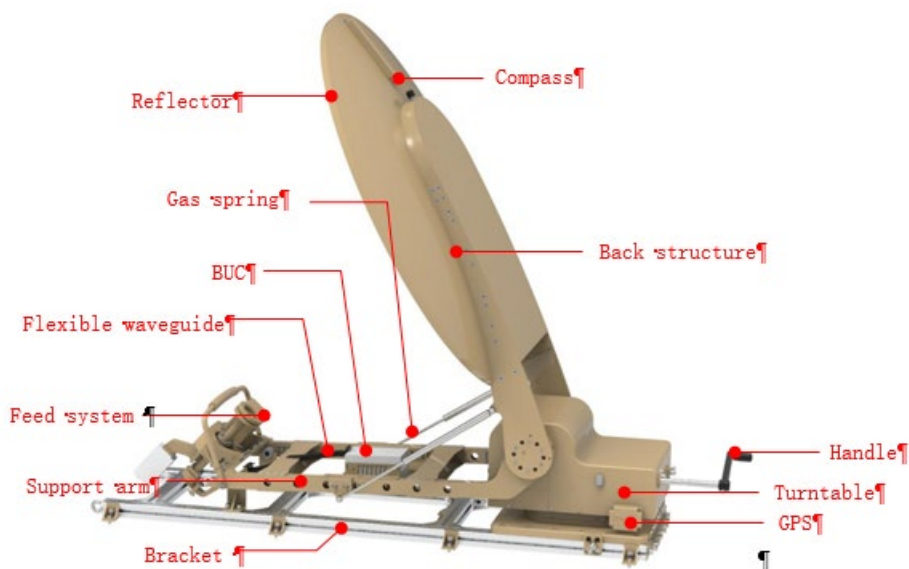


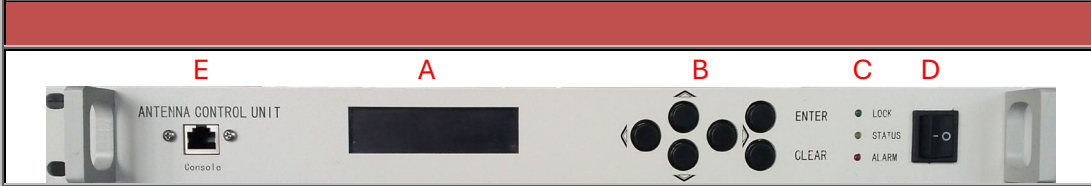
Figure 1.2 Schematic diagram of antenna structure





5.4 Antenna Base interface

Antenna Base Interfaces		
No.	Items	Description
XS1	Power	Power supply interface
XS2	M&C	Communication interface
XS3	BUC Power	BUC power
XS4	RF-RX	RF input
XS5	RF-TX	RF output
XS6	BUC Monitor	BUC Monitor



5.5 Antenna Control Unit (ACU)

5.5.1 Front Panel

		
No.	Items	Description
A	Display	Used to display the system display
B	Button	Including up, down, left, right, confirm (Enter), return (Clear)
C	Indicator light	Used for satellite lock status (Lock), antenna stow status (Status), alarm (Alarm) and other indications
D	Switch	Used to turn on and off antenna
E	System Upgrade	System upgrades for antenna

No.	Items	Description
	Up	Select or change the selected item or text where the cursor is activated, so that the number where the cursor is activated increases upwards;
	Down	Select or change the selected item or text where the cursor is activated, so that the number where the cursor is activated decreases downwards;
	Left	Toggle the cursor to the left, or select the left or previous option;
	Right	Toggle the cursor to the right, or select the right or next option;
ENTER	Confirmation	Menu icon: enter the menu activated by the cursor; Setting interface: save the parameters under the current interface; Movement interface: start movement;
CLEAR	Return	Setting interface: cancel the operation; Motion interface: motion stop; Others: return to the previous menu;

5.5.2 Rear Panel

								
	A	B	C	D	E	F	G	H
No.	Items	Description						
A	220VAC Input	220VAC power input, built-in 5A insurance						
B	XS1 DC Output	Servo power 24VDC output to antenna						
C	XS2 M&C	Connected to the antenna, used for sending control commands						
D	Fan	Controller ventilation and heat dissipation						
E	XS3 RX	Not Used						
F	XS4 Remote	Remote monitoring of antenna						
G	XS5 Modem	Connect modem						
H		ACU ground wire						

5.5.3 Cables







No.	Items	QTY	Photos
1	M&C cables	1	
2	DC Output cable	1	
3	BUC Power supply wiring	1	
4	BUC Monitoring wiring	1	
5	RF cable	2	
6	Chassis power cable	1	

Table 1.1 Cable List