

ACCREDITED SOLUTION

EXPLORER[®] 700 – UnatSolar TACCOM700



Document Name: EXPLORER 700 – UnatSolar TACCOM700

Revision: A


Introduction: This document describes the Tactical Communication 700 (TACCOM700) from UnatSolar that are self contained within the hard case for ease of transport and quick deployment making it ideal for temporary deployment in remote areas, as well as emergency preparedness applications where high speed Internet connectivity and voice communications are a requirement. In addition the TACCOM700 includes extra universal batteries and solar panels for complete independence of power grid infrastructure.

- Typical Users:**
- ▶ First responders
 - ▶ NGO / disaster relief
 - ▶ Government
 - ▶ Defense

Product Description: The TACCOM700 is watertight, dustproof, chemical resistant and corrosion proof, designed for fitting an EXPLORER 700 terminal. It is a turnkey integrated package consisting of a rugged hard case, along with the EXPLORER 2-wire Handset, as well as 30' network cable with LAN, Phone/Fax and power interconnects necessary for quick and easy field deployment.

The EXPLORER terminal is secured within the lid of the case, while the integrated leveling mechanism allows one to place the unit in an outdoor environment while the case is kept closed. This configuration allows for convenient placement of the EXPLORER terminal while remaining indoors, in most adverse weather conditions.

TACCOM700 features:

- ▶ Watertight, crushproof, and dust proof
- ▶ Easy to transport and can be sets up in minutes
- ▶ Battery back-up
- ▶ Available in Black, Yellow, Gray, Orange & Olive Drab 
- ▶ Solar panel power source (available in different colors)

The TACCOM700 includes:

- ▶ LAN cable 6.6 ft (2 m)
- ▶ AC/DC power adapters + travel adapter kit
- ▶ 2 x 62 Watt solar panels
- ▶ 2 x Solar Charge Controllers
- ▶ 2 x 5 pieces accessory cable kit
- ▶ 2 x myBatteries (200 Wh in total)
- ▶ Power distribution adapter

TACCOM700 options (customized foam to accommodate):

- ▶ EXPLORER 700 terminal
- ▶ Bluetooth Handset + charger cable or EXPLORER 2-wire Handset
- ▶ HP Officejet H470 Mobile Printer Series

Prepared for an IBM Lenovo ThinkPad T60 laptop with power supply (not included). Can be modified upon request to other laptop brands and models.

Specifications:

- ▶ Exterior Dimensions (L x W x D) : 24.4 x 19.7 x 11.6" (62 x 50 x 29,5 cm)
- ▶ Weight w/EXPLORER & Accessories : 49.8 lbs (22,6 kg)
- ▶ Environmental conditions : Immersion MIL-STD-810F, Method 512.4 A 1-meter (3.281 feet) immersion for 1 hour

More product information <http://www.unatsolar.eu/images/UNATSOLAR%20tactical-700.pdf>



UnatSolar Contact details:

E-mail <mailto:info@unatsolar.eu>
Phone +45 7020 8628
Web site <http://www.unatsolar.eu>

Thrane & Thrane Contact details:

E-mail <mailto:solutions@thrane.com>
Web site <http://www.thrane.com>
Thrane & Thrane Distributors <http://www.thrane.com/Contact/Distributors.aspx>

Instructions:

Follow this simple step-by-step instruction to prepare the TACCOM700 for instant deployment.

- Step 1:** The EXPLORER 700 is delivered with the battery separated from the terminal.

There are two SIM slots in the EXPLORER 700, marked USIM #1 and USIM #2 (#2 reserved for future use).

The SIM card is provided by your Airtime Provider. Insert the SIM card as follows:

- a. First press the eject button at the SIM slot marked USIM #1 to release the SIM card holder. Use a pen or similar to press the button (Figure 1a).
The SIM card holder is a small plastic frame designed to hold the SIM card. Take the SIM card holder out and place the SIM card in the holder, with the printed side visible.
- b. Insert the holder with the SIM card into the USIM #1 slot. Place the holder with the printed side facing down. Press gently until it clicks (Figure 1b).



Figure 1a.



Figure 1b.

- Step 2:** Insert the battery. Make sure the battery is positioned correctly as shown in Figure 2.

Press gently until it locks.

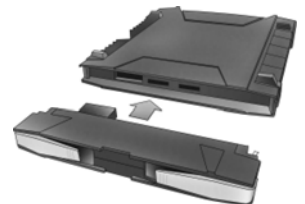


Figure 2.

- Step 3:** Connect the antenna cable to the connector on the antenna module using the short antenna cable provided with the EXPLORER 700. Please refer to Figure 3a.



Figure 3a.

Then connect the other end of the cable to the antenna connector on the transceiver. See Figure 3b.



Figure 3b.

- Step 4:** Note: To ensure accurate information on the battery capacity you should fully charge, then fully discharge the battery (until the EXPLORER 700 automatically shuts down), and finally recharge the battery. The EXPLORER 700 can be used during the discharging process, but the remaining battery capacity may not be displayed correctly.

Step 5: Charge all batteries and EXPLORER Bluetooth Handset.

Step 6: Pack all accessories into the TACCOM700 and close the case.

The TACCOM700 is now ready for deployment.

After the initial preparation of the TACCOM700, follow below steps to setup a communication center:

Step 1: In order to obtain the best possible signal, it is important that the EXPLORER 700 antenna is pointed correctly towards the satellite (Figure 4). This will ensure good performance and minimize the power consumption.

Set up the EXPLORER 700 outdoors (10m / 33ft antenna cable included) where it has a clear line-of-sight to the satellite, i.e. not blocked by objects like buildings, trees, passing cars etc.

The EXPLORER 700 must be placed in such a way that during transmission, no person should come closer than the minimum safety distance of 40 inches (1 m) to the front of the antenna.

To switch-ON the EXPLORER 700, push the Power button next to the display (Figure 5) and hold it down until the green Power indicator lights up. It normally takes one or two seconds.

Step 2: To help obtaining the best possible signal strength, the EXPLORER 700 uses a pointing sound to indicate the signal strength during pointing. The frequency of the tone increases with the signal strength.

Rotate the EXPLORER 700 left or right until it points in the correct horizontal direction (Figure 6).

Step 3: Tilt the antenna slowly up or down until it points in the correct vertical direction (Figure 7).

Hold the transport lock and the support bracket while moving the antenna. Do not place your hands on the antenna.

Step 4: The built-in display shows the current satellite signal strength. Use this information to fine-adjust the antenna position as shown in step 2 and 3.

If the right most part of the signal strength bar is grey (Figure 8), it indicates that the level has previously been higher than the current level.

When fine-adjusting the antenna, the display may take a while to update the signal strength. Wait a second or two after each move to make sure the display is updated.

When you have the highest signal strength you can obtain, press OK on the keypad (Figure 9).



Figure 4.



Power button

Figure 5.



Figure 6.



Figure 7.



Figure 8.



Figure 9.

Step 5: Connect the computer to the one of the LAN interfaces on the EXPLORER 700 terminal (Figure 10).



Figure 10.

Step 6: The TACCOM700 is now ready to make and receive calls, access the Internet, send and receive e-mails, run video conferences, stream live video, access your corporate network, etc.

Step 7: There are four ways to recharge the EXPLORER 700. All four power sources can be connected directly to the DC input.



Figure 11.

- ▶ EXPLORER AC/DC power adapter
- ▶ P3-62W solar panel
- ▶ myBattery (adapter tip C, 19V)
- ▶ Car cigarette lighter outlet (both 12V & 24V supported)

The default behavior of the EXPLORER terminal is to power up automatically when applying external power. You may want to change the setting in the terminal, so that the EXPLORER is only powered if the Power button is pressed manually.

This will enable charging and maintenance of the battery without having to manually switch-OFF the terminal each time.

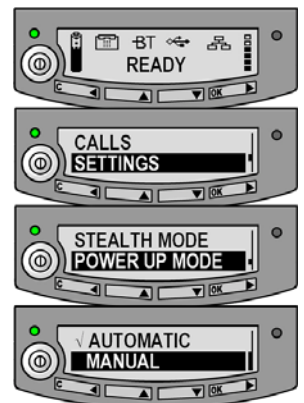
Manual power up can be configured under SETTINGS from the EXPLORER display and keypad.

Step 1: Press the ▼ button.

Step 2: Press the ▼ button until SETTINGS appear. Press OK.

Step 3: Press the ▼ button until POWER UP MODE appears. Press the OK button.

Step 4: Press the ▼ button once and select MANUAL and press OK.



You can preserve power by following below guidelines:

- ▶ Point the EXPLORER antenna carefully to obtain best possible signal strength.
- ▶ Upgrade the EXPLORER terminal firmware to latest software release.
- ▶ Switch-OFF the EXPLORER terminal when not used for more than 15 min.

Note:

Do not attempt to charge the myBatteries from a car battery, this may damage the circuitry in the myBattery. This will require a special adapter.

If the TACCOM700 includes a HP inkjet printer it is strongly recommended to close the valve before airfreight. Simply open the valve when it arrives at the destination to relieve the pressure.

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