HOWAY GIS

T18 Series GIS Handheld

Quick Start Guide

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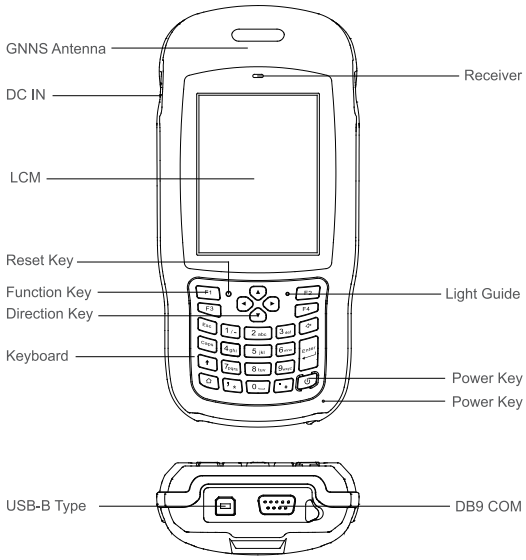
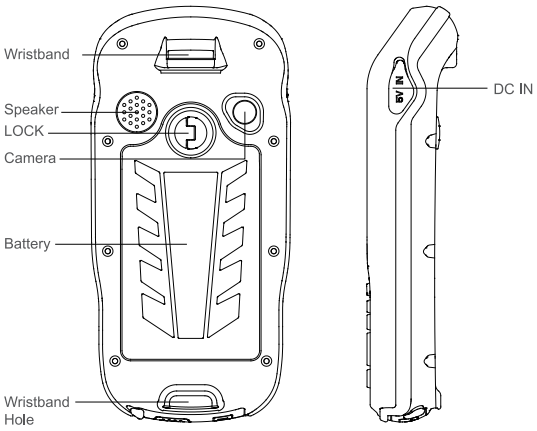
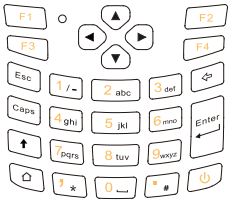
1. Appearance

1.1. General diagram




Wristband
Speaker
LOCK
Camera
Battery
Wristband Hole
DC IN

1.2. Keyboard



The yellow section are the system defaults, and the functions of the 4 hotkeys are below:

F1: Start menu. F2: Off. F3: Camera.

F4: System main interface.

The other keyboard operation:

System Default	System defaults to the digital input method
	, .
Press ↑ (shift)	Lowercase letters
	Switch between / and –
	* #
	Press ↑ (shift) again, it will be digital input method
Press Caps	Capital letters
	Switch between / and –
	* #
	Press the Caps button again for lowercase letters

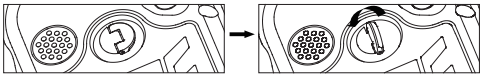
1.3. LED

Operation	Power off	Charging	Full of charge	Using
Light Status	Off	Green light on	Off	Off

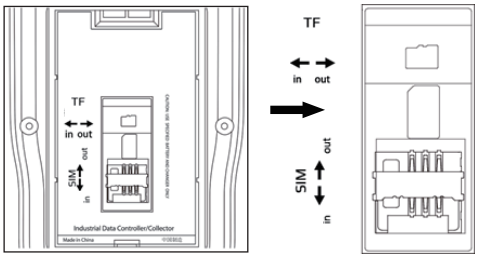
2. Operating Instructions

2.1. Installing the TF card/SIM card/Battery

a) Turn the back cover screw to the open position according to the instructions on a label in the box and take off the back cover.



b) Insert the SIM card and TF card according to the instructions in the battery cabin.



c) Insert the battery according the instructions on the battery label.

d) Close the back cover and turn the back cover screw to the lock position.

2.2. Charging

a) DC adapter: Open the DC IN cover on the right side, and charge with a specialized DC adapter. Charging current can reach 2A.
b) USB cable: A USB cable can also be used to charge the device, and current is limited to 500mA.

2.3. Turning the collector on/off

a) Make sure the battery has enough power, or connect the T18 to a DC adaptor.
b) Press power button for 3~5 seconds to turn on (until the boot screen appears).
c) Press the power button for 3~5 seconds, and confirm to power off.

NOTE: If there are abnormal situations, such as the T18 cannot operate normally, use the tip of the stylus to press the reset key to restart the T18.

2.4. Connecting to a PC

a) Make sure Microsoft ActiveSync application has been installed in) 。 Win-XP PC. And make sure WMDC (Windows Mobile Device Center) has been installed in Vista/Win7/Win8 PC.

b) Connect T18 to a PC with USB cable.

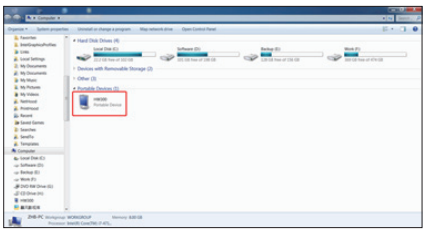
c) ActiveSync/WMDC will connect to T18 and PC automatically. The icon will appear in the tool bar of PC and also the 'Synchronization Setup Wizard' in the meantime, click 'Cancel' or 'connect without setting up your device'.

d) Click 'Browse' to check the files in the T18, and then transfer data between your PC and the T18.

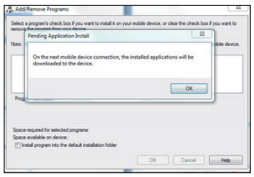
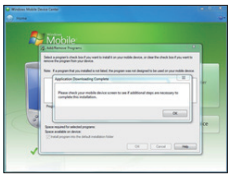
2.5. Installing Applications

2.5.1. Installing Applications via ActiveSync or WMDC

a) Make sure T18 is connected with your PC via ActiveSync or WMDC.



b) Click the installation file on your PC to start the installation of an application.

c) Select an installation directory in the T18 ('Flash Storage' is suggested) , Click 'install'.

NOTE: We suggest installing the application in 'Flash Storage', and saving your data to a TF card.

2.5.2. Directly Installing Applications

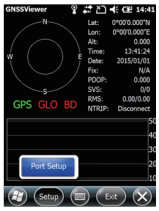
If the installation file is compatible on mobile devices, copy the file into the T18 and click to directly start the installation.

2.6. GNSS status

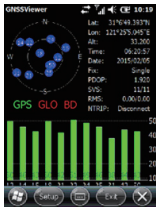
a) Go to \My Device\GNSSViewer and run GNSSViewer.exe

b) T18 supports COM3 and COM5 as GNSS ports and its BaudRate is 9600. Choose a GPS Port and BaudRate by clicking Setup->Port Setup as indicated below.

NOTE: COM3 is a hardware GNSS port, COM5 is a virtual GNSS port.



c) Click 'OK '



2.7. Camera

a) Select 'Start->Picture & Video', select 'Camera' or the 'camera' key icon to take photos.
b) Press the camera key (F3) to take photos.
c) Click screen and select 'OK' to exit.

2.8. User Serial Port

The user serial port is COM2. Transfer data between T18 and other devices using a DB9 serial Cable.

NOTE: This user serial port is at the bottom of T18.

2.9. Wireless Connection (Bluetooth/GPRS/WIFI)

2.9.1. Standard Bluetooth

a) Select 'Start->Settings->Connections->Wireless Management', click the icon to activate the Bluetooth device.
b) Select 'Start-> Settings-> Bluetooth', click 'Add new device…'. Follow the tips shown on the screen to finish the operation of pairing the other BT Device.

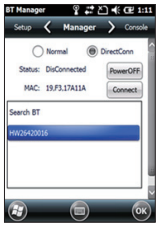
NOTE: The standard Bluetooth virtual ports are COM7 and COM9.

2.9.2. Long Range Bluetooth (Optional)

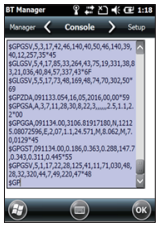
a) Select 'Start->Settings->System->', click 'BT Manage' .

b) Chose the module of 'DirectConn', and press 'Power On'.
c) Click 'Search BT' to start searching for BT devices.
d) After all BT devices have been found, select a device.

e) Click ‘Connect’ to pair with a BT device of your choice. Your screen will display “Connect the BT device successfully” after BT pairs successfully.



f) Click ‘Console’ to check the status of Bluetooth, as shown below.



g) Click ‘Setup’ to setup this Bluetooth, as shown below.

h) The default baud rate is 38400.
i) The 'PIN' code refers to the pairing PIN code of the BT device which T18 want to pair with.
j) If you check 'Auto Conn', T18 will automatically connect to the last pairing BT device when powered up.

NOTE: Long Range Bluetooth port is COM2 which is the same as user serial port. If Long Range Bluetooth been used, user serial port is disable.

2.9.3. Wi-Fi

a) Select 'Start->Settings->Connections->Wi-Fi'.
b) Click 'Search for Networks', select a network listed. Follow the installation guide to input a password and confirm connection to Wi-Fi.

2.9.4. GPRS/3G Data connection

a) Make sure there's a SIM card in the T18.
b) Select 'Start->Settings->Connections->Connections'.

c) Click ‘Add a new modem connection’.
d) Input connection name, select ‘Cellular Line (GPRS)’, click ‘Next’.
e) Input ‘Access point name’, click ‘Next’.
f) Click ‘Finish’ and add new connection successfully.
g) Click ‘Manage existing connections’.
h) Click and hold on “new connection” and select ‘Connect’.
i) If there is the identifier on the signal icon in the top right corner, this indicates a successful

3. Useful Functions

3.1. Screen response

Select ‘Start-> Settings-> System-> Screen ‘, click the ‘Align Screen‘ icon and follow the guide to align the screen.

3.2. Adjusting the backlight

Select ‘Start-> Settings-> System-> Backlight' to adjust backlight according to the guide.

3.3. Removing programs

Select ‘Start-> Settings-> System-> Remove Programs ‘, select the programs you wish to remove in the list and click ‘OK’ to remove.

3.4. Auto power off*

(*NOTE: The device does not support the Auto power off function, instead use Go-to-sleep mode.)

Select 'Start-> Settings-> System-> Power-> Advanced', set the power off time in different conditions. Backlight will be off according to selected settings.

3.5. Clean Boot

Select 'Start-> Settings-> System-> Clean Boot', to restore factory default settings according to the guide.

NOTE: The password is '1234'. Restoring factory settings will clear the system configuration, please be cautious.

3.6. PWConfig

Select 'Start-> Settings-> System-> pwconfig'.
NOTE: While on "Screen off" mode, the device won't hibernate.

4. Accessories

4.1. Standard Accessories

Item	Name	Description	Quantity
1	DC Adapter	DC 3.7V from battery and 5.0V charging by adapter	1
2	USB cable	USB to B-TYPE USB cable	1
3	Serial cable	DB9 serial cable	1
4	Li-ion Battery	3.7V/6500mAh	1
5	Strap	Black, 180*12mm	1
6	Stylus	Black, 127mm	1
7	Screen protection film	57*76mm, 3H & Screen Microfiber Cloth	2
8	User guide	Digital version	1

4.2. Optional Accessories

Item	Name	Description	Quantity
1	TF card	Memory Capacity: 8G	1
2	External battery charger	5V/2A	1
3	Mounting bracket and Pole (Claw) Clamp	HW-02	1
4	External GNSS antenna	GPS L1, BD B1, Glonass G1 Gain: 40dB TNC Connector	1
5	External antenna cable	Fischer to TNC cable	1
6	TNC to TNC cable	TNC male to TNC male cable, 3m long	1
7	Centering rod	Centering rod	1

5. Environmental Specifications

a) Operating temperature: -20℃ ~+60℃
b) Storage temperature: -30℃ ~ +70℃
c) Drop: 1.5m drop tested on all surfaces
d) Casing: Dustproof and resistant to heavy wind driven rain per IP65 standard
e) Humidity: 5% ~ 95% (non-condensing)

6. Warranty Terms

HowayGIS T18 Series are guaranteed against defective material and workmanship under normal use and application consistent with this Guide. The equipment is guaranteed for the period indicated, on the warranty card accompanying the product, starting from the date that the product is sold to the original purchaser by HowayGIS' Authorized Dealers.

During the warranty period, HowayGIS will, at its option, repair or replace this product at no additional charge. Repair parts and replacement products will be furnished on an exchange basis and will be either reconditioned or new. This limited warranty does not include service to repair damage to the product resulting from an accident, disaster, misuses, abuse or modification of the product.

Warranty service may be obtained from an authorized HowayGIS warranty service dealer. If this product is delivered by mail, purchaser agrees to insure the product or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location and to use the original shipping container or equivalent. A letter should accompany the package furnishing a description of the problem and/ or defect.

The purchaser's sole remedy shall be replacement as provided above. In no event shall HowayGIS be liable for any damages or other claim including any claim for lost profts, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, the product.

NOTE: Please use the original factory parts.

7. Contact information

Company: Shanghai HowayGIS Co., Ltd
Add: RM230,Fawkes Building, No. 1985, Road Chunshen, Shanghai, China
Tel: +86-21-64850330
Fax: +86-21-64850330
E-Mail: prince@howaygis.com

8. Appendix – Product Safety Warnings

Safety and compliance information

- Use responsibly –Read all instructions and safety information before use to avoid injury.

Battery safety

- Charge battery only in temperature ranging from 32 ℉ to 140 ℉ (0℃ to 50℃)
- CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type of battery recommended by the manufacturer.
- The maximum operating ambient temperature of the switching power supply declared by the manufacturer is 50℃.

- Dispose of used batteries according to battery manufacturer's instructions.

Wi-Fi safety

- Turn Wi-Fi off in areas where Wi-Fi use is prohibited or when it may cause interference or danger, such as in airplanes while flying.

Care and maintenance

T18 is an electronic product and should be treated with care. To reduce the risk of fire, electronic shock, or product damage take the following advice:

- Do not expose this device to rain, moisture, or any type of liquid that corrodes electronic circuits. If your device gets wet, immediately turn the power off. Allow the device to dry completely before using it again.
- Clean the display with a soft cloth, and be careful not to wipe the display with anything abrasive.
- Do not expose your device to extreme heat (60℃) or cold (-20℃). For example, do not leave it in the trunk of your car in high heat conditions.
- Do not attempt to open the device other than as instructed in this manual.
- Rough handling can break internal circuitry.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Use only the recommended accessories.

CAUTION!

CONNECTION TO A USB INTERFACE MUST BE LIMITED TO USB2.0 VERSION OR HIGHER
CONNECTION TO “POWER USE” MODE IS PROHIBITED.

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Information (SAR) :

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. *Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the poser required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the device as reported to the FCC when tested for use at worn on the body, as described in this user guide, is 0.72W/kg (Body-worn measurements differ among devices, depending upon available enhancements and FCC requirements.) While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID:2AAZD-T1024WM

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal

For handheld operating condition, SAR meets with FCC limit 4.0W/kg.