

# MobileMapper 100 FAQs

Date October 2010

1. Processor.....	1
2. Memory.....	1
3. Battery/Power.....	2
4. GNSS.....	2
5. Connectivity.....	3
6. Communication ports.....	4
7. Other.....	4

## 1. Processor

### **Q: What is MobileMapper 100 processor speed?**

MobileMapper 100 is using state of the art processor running at 806MHz. This allows having high display refreshment speed, capability to support demanding application and manipulate big amount of data. The processor is always running at his maximum speed, offering the best at any time. This is not the case for some competition product which are decreasing the processor speed in some situations in order to save battery power.

Frequency of the external data/program bus on DDR is 130 MHz for 32 bits width.

## 2. Memory

### **Q: What is the memory capacity of the MobileMapper 100?**

MobileMapper 100 has 256 MB of Ram and 2GB of flash memory (iNand). Real internal memory size available for data storage is about 1,9 GB. In addition SD High capacity (HC) is supported. SDHC technology doesn't imply any limitation in size. Ashtech can confirm that cards up to 32GB are supported. But bigger capacity might be also used.

Several manufacturers have been tested like: Sandisk, Kingston, Dane-Elec, PNY, Hama for different capacities.

### **3. Battery/Power**

#### **Q: Is it possible to power MobileMapper 100 from an external battery?**

Yes, this is possible and need a specific cable which is not yet available. In that situation the battery icon displayed at the top of today screen indicates the status of the battery. In the case MobileMapper 100 is powered by external source the icon displayed is . But at the opposite of powering through docking, the battery is not charging even if the icon could give this impression.

#### **Q: Is it possible to start the receiver on the docking station?**

Yes, but only if a battery is installed inside the receiver. It is not possible to start the MobileMapper 100 when on docking station if there is no battery inside the receiver

#### **Q: How long will it take to charge the MobileMapper 100 battery?**

It will require less than 3 hours for an empty battery to be charged on the docking station whether it is a receiver or a spare battery, when it is alone. When both receiver and spare are on the docking this is the receiver which has priority and will be charged first

#### **Q: What can I do if the receiver is not starting?**

It is not possible to switch on a receiver if no battery is present inside battery compartment. This is also the case if the receiver is placed on the docking. This will prevent user to start operation on docking and lose information when going out of docking without clean switch off.

#### **Q: Is it possible to power and external device with MobileMapper 100?**

Yes,

Power output is available on pogo connector, 12V , 0.5 A

### **4. GNSS**

#### **Q: Is it possible to do RTK with MobileMapper 100?**

MobileMapper 100 GNSS platform offers RTK capabilities. RTK option needs to be activated as well as integrated GSM/GPRS modem. On MobileMapper 100 RTK is not possible without activating this option, no limited (up to 3 kms) RTK capabilities is available. Ashtech technology enables impressive float solutions for very long base lines with quick solutions availability at a few decimeter accuracy. This "Flying RTK"

technology is part of Ashtech Blade unique asset. It can be very efficient for GIS users targeting sub foot accuracy.

### **Q: Accuracy indicators in MobileMapper Field**

Inside MobileMapper Field RMS indications are available only if RTK has been activated

## **5. Connectivity**

### **Q : How can I use WiFi with my MobileMapper 100?**

MobileMapper 100 is equipped with a SDIO slot which supports not only memory SD cards but also WiFi radio modules.

### **Q: Which are the compatible SD WiFi card tested on MobileMapper 100?**

MobileMapper 100 is compatible and has been tested with Spectec WiFi SDIO card. The model of the card is SPECTEC 821-SDW . This card exists with 2 different chipsets:

- MediaTek 5911 (old card)
- Renesas KS7910 (new card)

Both chipsets can be found on the market under the same model name of the card: 821-SDW:

- [http://www.wikidevi.com/wiki/Spectec\\_SDW-821\\_\(MediaTek\)](http://www.wikidevi.com/wiki/Spectec_SDW-821_(MediaTek))
- [http://www.wikidevi.com/wiki/Spectec\\_SDW-821\\_\(Renesas\)](http://www.wikidevi.com/wiki/Spectec_SDW-821_(Renesas))
- 

But although the 2 cards have the same label 821-SDW, they do not have same FCC ID printed on the plastic.

- FCC ID for 821-SDW with MediaTek chipset is : S2Y-WLAN-11B-G
- FCC ID for 821-SDW with Renesas chipset is : S2Y-WLAN-11G-K

Unfortunately, the driver provided by SPECTEC only supports MediaTek 5911 and not Renesas KS7910.

So before buying a SDIO Wifi card from Spectec you need to be sure this card has S2Y-WLAN-11B-G FCC Id.

### **Q: How and for which purpose connect an external phone to MobileMapper 100?**

If you want to connect to a non GSM/GPRS network you can use an external phone connected with Bluetooth to MobileMapper 100 to connect to this network (i.e. CDMA). In that case the full procedure is described in getting started guide of the MobileMapper 100 platform. In particular how to use the dialup string utility provided by Ashtech and how to make a Bluetooth connection.

### **Q: How is Auto dial feature working on MobileMapper 100?**

Auto dial is on by default on MobileMapper 100. That means that if a connection has already been set up through GPRS, each time the unit will be switched on the dialling process will start automatically. If you want to avoid this autodial you can put the Phone function off or if you are using Fast Survey make sure auto dial is not selected in GSM settings.

### **Q: How to connect MobileMapper 100 to a PC?**

Special cable will be available in a few weeks to connect MobileMapper 100 to DB9 serial plug.

Com port 5 has to be selected in GNSS Toolbox for NMEA output

## **6. Communication ports**

### **Q: Which is the Com port to be used for external application?**

NMEA data for 3<sup>rd</sup> party applications need to be configured on Com2 to access the internal GNSS of MobileMapper 100

## **7. Other**

### **Q: What are USB modes available on receiver? On docking?**

USB is only available through docking station both USB host mass storage and USB device for active sync are available

### **Q: What are audio features available on MobileMapper 100?**

MobileMapper 100 is running Window Mobile 6.5 phone edition. This implies that all phone features are available on the platform. Unless they are available and visible it is important to be aware that MobileMapper 100 is not a phone and that voice performances have not been tuned (no echo cancellation). Ashtech focus has been on voice recording quality for voice attributes and here the result is outstanding.

### **Q: About eCompass**

The eCompass, is unfortunately not working in the very first release delivery. Very first firmware maintenance release will include this capability. In the meantime it will not be possible to get the orientation of a picture.

### **Q: Suspend mode**

Microsoft Windows mobile includes a battery saving mode called "suspend mode". On MobileMapper 100 this mode could be activated by short press on on/off (less than 5secs). We don't recommend to use this mode as it could have bad side effects

on some applications. MobileMapper 100 has a very long battery life which could prevent for such a need. When entering the “suspend mode” all GNSS capabilities, and GSM are switched off, so it is important to not enter this mode in a middle of a recording session.

Be careful also not to program automatic switch to suspend mode as it could switch in the middle of an application and or recording session and will have unexpected impacts.

### **Q: How can I make a reset of MobileMapper 100?**

In case a reset of the unit is needed because of freeze of an application, not possible to switch on or any other strange behavior, it is recommended to follow procedure below:

- reset GNSS in GNSS toolbox
- Reboot of the unit by pressing simultaneously, Esc, IN and OK button
- if not working remove the battery and replace it

If the problem persists please contact our technical support department

### **Q: Is 4D shape files format supported in MobileMapper 100 (by MobileMapper Field)?**

No this is not available with this version. We will support 4D shape files in future versions of MobileMapper Field

### **Q: SD card slot**

The SD card slot of MobileMapper 100 needs to be carefully closed in order to offer waterproof protection.

Sometimes it can be difficult to insert a SD card in the slot or to remove it. Stylus can be used to help.