

# SUR-PPC

Hand held Pocket PC unit for  
servicing SUR receivers

## Operation Manual



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Updated 5/24/2006

**Parts List:**

- **HP RX3115 Pocket PC with the latest SURsoft PPC software loaded**
- **Otterbox field case**
- **Serial connection cable**
- **SUR-PPC Manual**
- **HP Charging/PC cable**
- **HP original software and cables**

**Introduction:**

The SUR-PPC is a HP RX3115 or other HP model pocket PC with Sonotronics SURsoft PPC software loaded, along with the cable for connection to an SUR. The SUR-PPC is intended to be a basic unit, performing the simple maintenance functions necessary using SUR submersible ultrasonic receivers. The idea is that the SUR's are configured at the beginning of the study using a PC, perhaps in the office. This includes uploading a frequency map, setting blanking times, etc. These are one-time features that are not necessary to change after initial setup. The pocket PC has only the maintenance functions, making for a simple compact unit that can be conveniently carried along while servicing SUR's in the field.

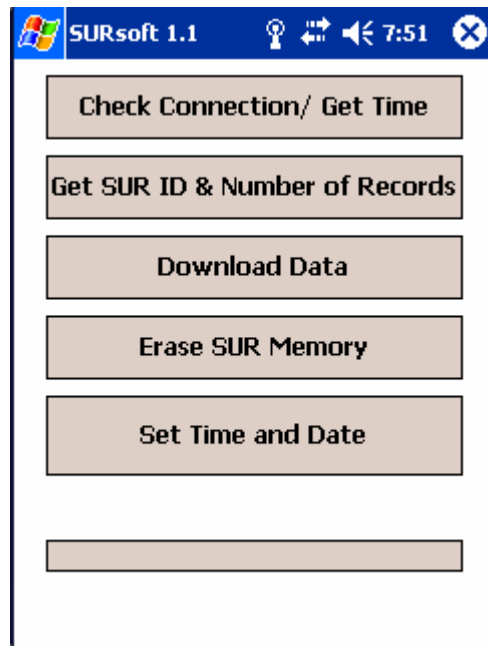
**Connection to the SUR:**

Follow the directions for installing that come with the Otterbox field case for installing the HP Pocket PC in the case.

Connection to the SUR is very straight forward. Simply unscrew the cap on the SUR's serial port, and gently push the SUR-PPC cable into the socket, watching that the pins are entering the connector properly. The other end of the cable naturally plugs into the bottom of the SUR-PPC. Note this end is polarized and needs to be plugged in the proper way, so do not force it in.

Launching SURsoft PPC in the Pocket PC unit: The program 'SURsoft' can be found in the start menu, or can be launched by pressing the play button on the pocket PC. This is the lower left most button on the front of the Pocket PC.

## The Menu:



### ***Basic Operation:***

**Check Connection/ Get Time:** This option gets the current time from the SUR and displays it near the bottom of the screen. This is the first button that should be pressed after connecting to an SUR. This verifies that there is a good connection, and that the SUR is operating normally. If the time is not correct in the SUR, then the battery may be suspect. This does not affect the data stored in the SUR, but it might need a new battery before starting the download. Of course then the time will need to be set.

### **Get SUR ID and number of records:**

This is typically the second command executed when servicing an SUR in the field. It will simply ask the SUR to display its SUR # and the number of records in memory. It will be displayed near the bottom of the screen.

### **Download Data:**

Pressing download data will initiate a data download from the SUR. The SUR-PPC will first prompt you to choose a file path for where to download the data to. The default file name is 'SURxxxx', with the recommendation that you use the SUR number and the date in place of 'xxxx'. Note that the SUR memory is divided into pages, each page containing 26 records. The current page number (not record number) is displayed along with a progress bar to indicate the status of the download.

**Erase SUR Memory:**

This prompts the user to be sure they want to erase memory, then proceeds to erase the SUR memory. Note that if this is done accidentally, it is possible to recover the memory. You should shut off the SUR and contact Sonotronics. We can guide you in how to recover your memory.

**Set Time and Date:**

This will upload the time and date set in the Pocket PC to the SUR. It is therefore important that the Pocket PC is synchronized with the appropriate time if this function is going to be used.

**Built in Pocket PC programs and functionality:**

All of the original programs and utilities are still installed in the Pocket PC. Sonotronics only installs its software, and changes a few power configuration settings in the Pocket PC. One of the items changed is the 'Turn off device after xx minutes on battery power' feature. It is important that the device not power off during data download from the SUR. This will interrupt the data being downloaded and lead to incomplete data files. Please refer to the HP documentation for more information on these

**Other Considerations:**

A fully charged battery in the Pocket PC should allow for download from 3 SUR's with a completely full memory. It is very rare that an SUR memory would be full. Usually, it will be only fractionally full due to the large amount of memory in the SUR's.

The Pocket PC's used by Sonotronics have an integrated SD card slot. To utilize SD cards, you must navigate to the SD card when you press "download data", and the data will be written to the card. This can be an effective way to transfer data from the Pocket PC to your desktop PC. Other ways include doing a file transfer to your PC using the PC to Pocket PC USB cable that comes with the unit. Pocket PC's also have integrated wireless, Bluetooth, and infrared capability. All can be used for transferring files to your PC.

Keeping the wireless options disabled in your pocket PC will increase battery life. Also, keeping the screen on a lower brightness setting will help with battery life. Always turn off the unit when not servicing an SUR to maximize field life.

Sometimes when communication is interrupted the unit can become "jammed".

There are two options to correct this:

1. Doing a hard reset on the Pocket PC. This is accomplished by using the stylus to press the hard reset button, on the lower left corner of the unit.
2. Manually stopping and restarting the SURsoft PPC program. This is done by going start —> settings —> system —> memory —> running programs. Then select SURsoft and press the 'Stop' button with the stylus.

**Troubleshooting:**

In the event the battery becomes fully drained, Pocket PC's lose their memory. Along with this, they will lose the SURsoft PPC program. If this occurs, the files needed to recover SURsoft PPC are in the "ipaq file store" directory on the SUR-PPC.

The two files that must be installed (in this order) are:

**Netcf.all.wce4**  
**SURsoft Pocket PC**

To recover the files, navigate to the files in the ipaq file store, then copy and paste them into your my documents folder. (Do not execute the files in the ipaq file store folder or they will disappear!)

Note these files can also be downloaded from our website.

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