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APR300/400 series with Bluetooth Instruction

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1. Introduction

Before attempting to use the Bluetooth function of the APR reader for the first time read through the user manual carefully.

Warning! The original name of any program, as well as all important procedures for processing are printed in **BOLD**. Program paths and actions that have to be made, such as a single mouse click are printed in *Italics*. Keys of the APR Handheld that have to be pressed are printed in [brackets]. Other important information is shown in a `box`.

The APR Bluetooth option enables wireless communication between the APR and a PC or PDA.

2. APR Bluetooth option

2.1 Activation of Bluetooth

Switch on the APR Handheld.

Press [F-Key].

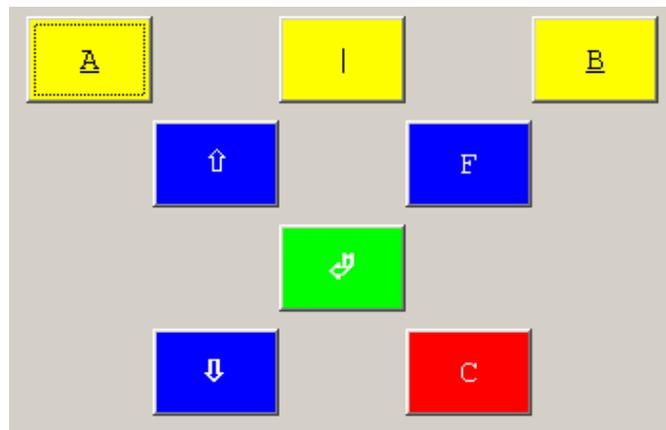
The display indicates:

```
>Setup
  Operation
```

Press [ENTER].

The display indicates:

```
>RF/ID
  Baudrate
```



Press [Arrow Up/Down] until the **Bluetooth** option shows up in the display.

```
>Blue Tooth
  RF/ID
```

Press [ENTER].

By default the Bluetooth option is disabled.

Bluetooth technology needs a significant amount of current, therefore the Bluetooth option should always be disabled if Bluetooth is not used.

Use [Arrow Up/Down] to scroll through the available settings.

```
Blue Tooth
Disable
```

Disable: Bluetooth is switched off. Use this setting, if Bluetooth is not in use to save current.

```
Blue Tooth  
Outdoor
```

Outdoor use: The APR doesn't switch off automatically as long as it is in range of other devices that communicate via Bluetooth (e.g. with a pocket PC where AprDemo is installed on). It is equal whether the communication is active or not. As soon as the Bluetooth connection was shut down, the APR switches off, provided the time ran down, that was given in *Service* → *Blue Power off*. This option is thought for outdoors, e.g. while the APR sends transponder data to a PDA (Online-Mode active).

```
Blue Tooth  
Indoor
```

Indoor use: The APR doesn't switch off automatically as long as it is communicating with any other device (e.g. with Agrident.exe PC software) and there is serial wireless communication between APR and PC/PDA. As soon as the Bluetooth connection was shut down, the APR switches off, provided the time ran down, that was given in *Service* → *Blue Power off* (see chapter 2.2). This option is thought for "office use", to read data from the APR.

Scroll to **Outdoor** and press [ENTER].

Now Bluetooth is active.

While Bluetooth is not in use, we suggest choosing the option **Disable**, to low power demand.

2.2 Automatic disconnecting time (Power off)

After Activation of Bluetooth the display indicates the new sub menu **Blue Power off**. It enables the choice of period after which the APR switches off automatically, as soon as the Bluetooth connection to the PC/PDA is disabled.

```
>Blue Tooth  
Blue Power off
```

Press [ENTER].

The submenu allows to determine the disconnecting time (in seconds).

```
Blue Tooth  
Power off 90 se
```

A period of 30, 60 or 90 seconds can be chosen.

Default: 90 seconds.

For the first Bluetooth connection to PC/PDA, 90 seconds are recommended (standard).

In paired modus 30 seconds are sufficient.

3. Bluetooth with PC software Agrident.exe

3.1 Setup for Bluetooth software (PC)

Make sure that your PC provides Bluetooth function.
The APR has to be switched on and in the range of the PC.

Start the **Bluetooth software** on the PC. It is supplied by the manufacturer of your Bluetooth interface. Let it ask for Bluetooth devices.

The APR should be detected as new Bluetooth device, named APR400#xxx (APR type + serial number).

As soon as the APR is indicated, *connect* to the "serial port" of it. It depends on the Bluetooth software being in use, how this connection has to be arranged (see manual of the PCs Bluetooth software).

With Belkin software (German) it might look like this:



If the Handheld is connected successfully, the Bluetooth software indicates the serial interface in the status line of the window:



3.2 Set up of communication software Agrident.exe

Start **Agrident.exe**. Choose the according COM-Port (see software manual).

After some seconds the status line has to switch over from "not connected" to "connected V1.xx" (V1.xx stands for the software version of the Handheld).



The green LED of the APR Handheld indicates in 2 second intervals, while there is a Bluetooth connection.

4. Password for safe connections

Provided the serial Bluetooth interface of the PC is configured as "safe connection", the Bluetooth software might ask for a password, while the first try to connect to the APR Handheld (code word, keyword). The password of the Bluetooth module inside of the APR is "0000" (4x zero).

5. Bluetooth with PDA and AprDemo software

5.1 Set up for Bluetooth software (PDA)

The menu path generally differs between each type of PDA/pocket PC/operating system. This sample is demonstrated on the basis of an iPAQ 2410 with Windows Mobile SE.

5.1.1 Detection of Bluetooth devices

Click on *Start* → *Einstellungen*.



In the window **Einstellungen** select register **Verbindungen**.



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Open the icon **Bluetooth**.

In case that Bluetooth is switched off, the following window appears:



In the window **Bluetooth-Einstellungen** click on *Einschalten*.
The activation of this function might take some seconds.

As soon as Bluetooth is switched on, the following window appears:



Click on the hyper-link *Bluetooth-Manager*.



Tippen Sie auf 'Neu', um via Bluetooth auf andere Geräte zuzugreifen



Click on *NEU* in the bottom line of the window **Bluetooth Manager**.



Now choose *Bluetooth Gerät durchsuchen* in the window **Verbindungsassistent**.

Switch the APR Handheld on.

Await 10 seconds till Bluetooth is initialized on the APR.

Click on *Weiter*.

After some seconds the APR Handheld should be detected and indicated in the **Verbindungsassistenten**.

5.1.2 Port settings



Click on the icon *APR#xxx* (APR type + serial number) in the window **Verbindungsassistent**.



Click on *serial port* in the list **Dienstauswahl**.
Weiter.

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The following window appears:



Click on *Fertig*.

5.1.3 Activation of Bluetooth connection

The window **Bluetooth Manager** appears again.



Double click on icon *APR#xxx*
or touch the icon and keep on it – don't move – to open the **context menu**.

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Select *Verbinden*:



The window **Bluetooth** appears to show that the APR is getting connected.



If the connection fails, an error report is displayed:



In this case please check:

- Is the APR Handheld switched on?
- Is the Bluetooth function of the APR activated (see chapter 2.1)
- Are all settings correct?

Then repeat the steps in chapter 5.1.3.

As soon as the connection is set up, the icon in the **Bluetooth Manager** changes:



The green LED of the APR Handheld indicates in 2 second intervals, while there is a Bluetooth connection.

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The register **Aktive Verbindungen** gives the following information:



Close the window by  in the title bar.

5.1.4 Detection of COM port

The window **Bluetooth-Einstellungen** appears again.

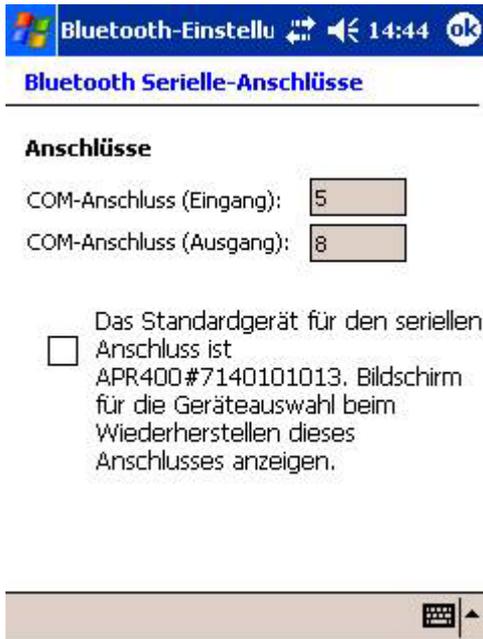


Click on register *Dienste*.



Select *Serieller Anschluss* from the selection list box.

Click on the button **Erweitert...**



Note the value of **COM-Anschluss (Ausgang)**, in our sample "8".

Attention! This port needs to be set in the AprDemo program.

Click on  in the title bar to close the window.

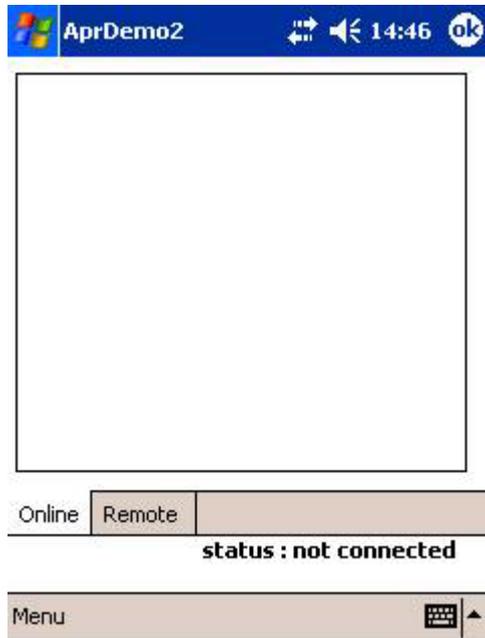
Also close the other windows by  resp. .

The Bluetooth connection of the APR is successfully completed.

5.2 Set up of communication software AprDemo

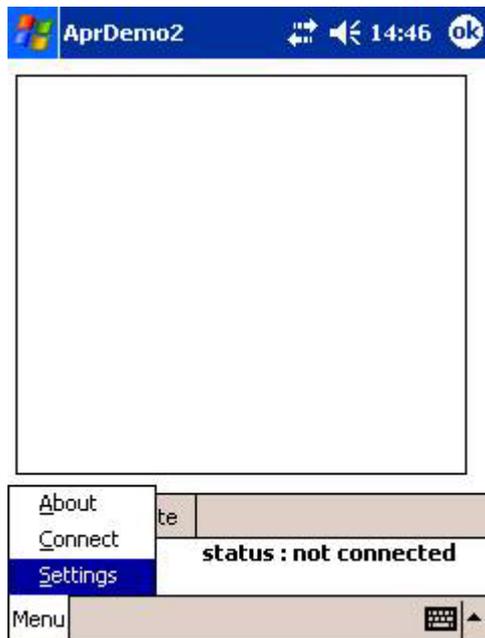
Click on *Start* → *Programme* → *AprDemo* to open the software.

After some seconds the window **AprDemo** appears:



5.2.1 COM port

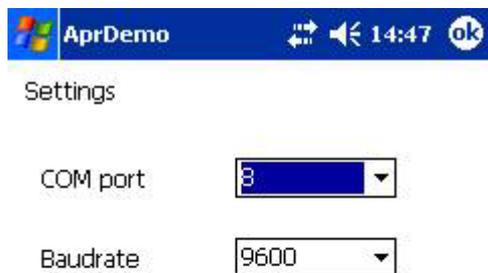
Click on *Menu* → *Settings*.



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Select that **COM port** in the drop-down list you have noted from the window Bluetooth-Einstellungen (see chapter 5.1.4). Generally it is "8", by default.

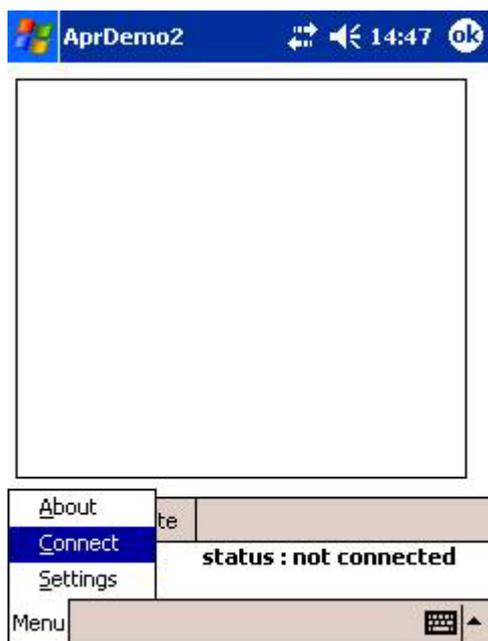


Click on  in the title bar.

5.2.2 Bluetooth connection to APR Handheld

If not already done, switch the APR Handheld on.

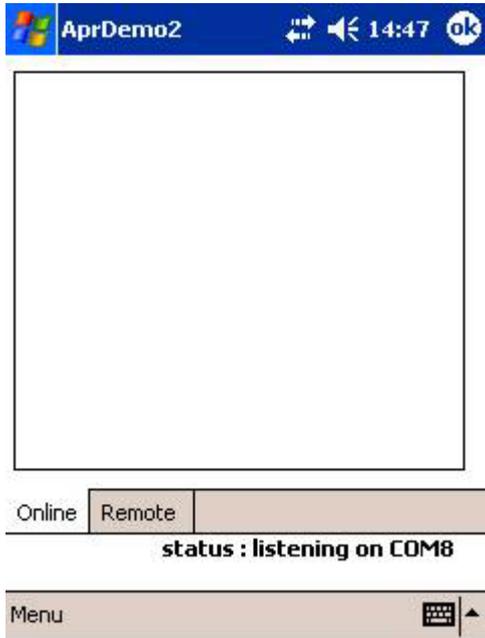
Click on *Menu* → *Connect* to connect the AprDemo software to the Handheld.



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After some seconds "status: listening on COMx" is indicated (x stands for the port number).



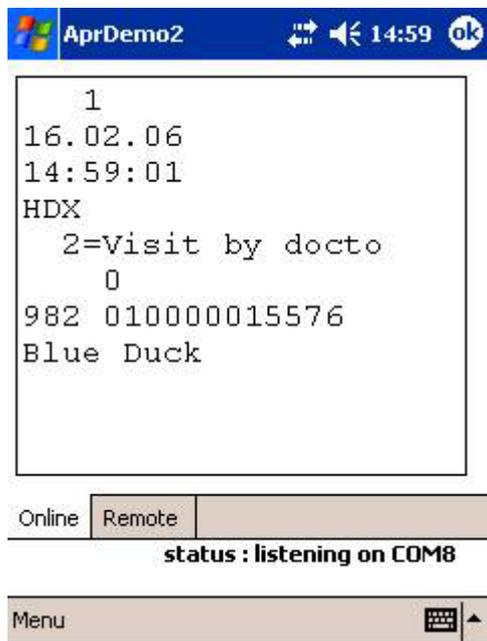
The green LED of the APR Handheld indicates in 2 second intervals, while there is a Bluetooth connection.
If it doesn't indicate, click on *Menu → Disconnect* and try again *Menu → Connect*.

The Bluetooth connection is not available before the green LED doesn't indicate.

5.2.3 Online data transfer

If the Online-Mode of the APR Handheld is activated, a transponder can be read and its number will be transferred directly to the AprDemo software.

Sample 1: Online-Mode data long.



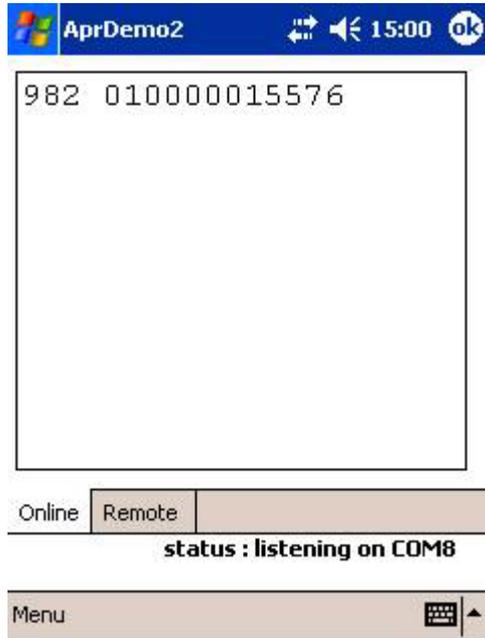
Explanation on displayed data:

- Data set number
- Date
- Time
- Transponder type
- ActionCode number & alias
- ActionCode+ value
- Transponder number
- Alias of the animal

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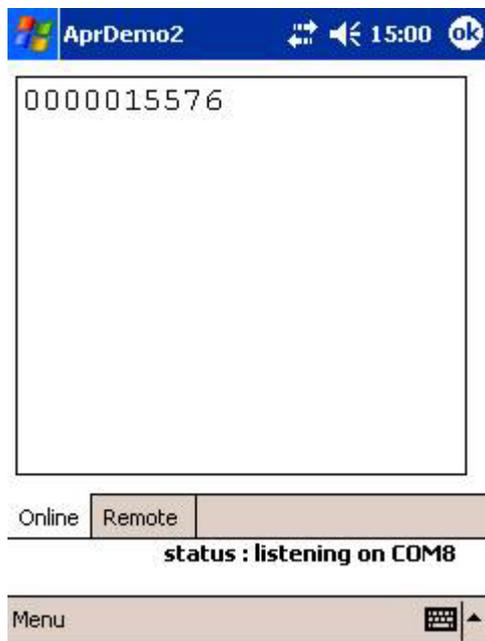


Sample 2: Online-Mode Data short.



Only the transponder number is indicated.

Sample 3: Online-Mode SCP-Format (.



Only the last figures of the transponder number are indicated.

6. Trouble shooting

Problem	Reason
Bluetooth connection to PDA/PC doesn't operate.	<ul style="list-style-type: none">• Make sure that the APR is switched on.• Activate the Bluetooth function of the APR (see chapter 2.1).• Select the right COM port in the AprDemo resp. Agridetn.exe software (see chapter 3 and 5.2.1.).
How to change the display format of a read transponder number.	See manual of your APR Handheld.

For any further problem please contact us:

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