HF RFID Reader

RF1100

User Manual

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Introduction

Congratulations on your purchase of our RF1100 RFID reader. This product is designed for use with any PDAs, handheld devices, or laptops with a PCMCIA or CF card interface slot. The RF1100 provides a high frequency transmission speed which allows communication between the contactless cards and a host, such as PDAs or laptops.

Package Contents

- One RF1100 RFID reader
- One CD with User Manual and RFID UI executable files

System Requirements

Before using the RF1100 RFID reader, make sure your PDA or laptop meets the following requirements:

- Operating system: Windows® CE 5.0 and above for PDA; Windows® 2000/XP/XP Embedded for laptops
- One PCMCIA or Type-I or Type-II CF interface slot
- PDA synchronization software installed (ActiveSync required)

Installation

## Installing the RF1100 RFID Reader

The RF1100 RFID reader can be inserted into any CF slots or PCMCIA (via adapter) slots of any compatible PDAs or laptops.

When using a PCMCIA slot, first install the RF1100 to the supplied CF to PCMCIA card adapter as shown.

Slightly insert the RF1100 into card adapter. If the card is unable to slide in, flip the card adapter and slide into again.

RF1100

CF to PCMCIA card adapter
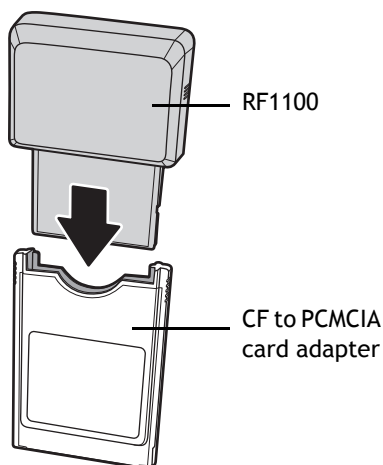
Then insert the RF1100 RFID reader into the PDA or laptop PCMCIA card slot as shown.
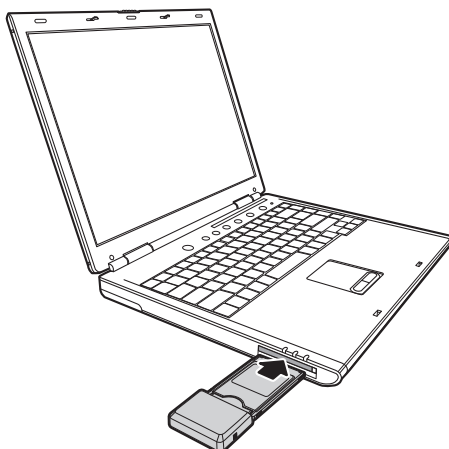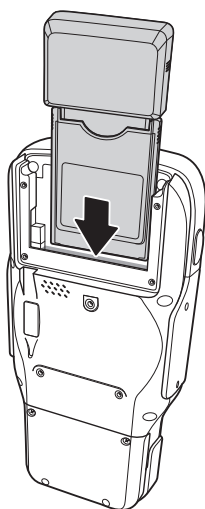
If your laptop does not have a CF or PCMCIA card slot, you need to connect a multi-slot card reader to the laptop, then insert the RF1100 reader into the CF slot as shown.
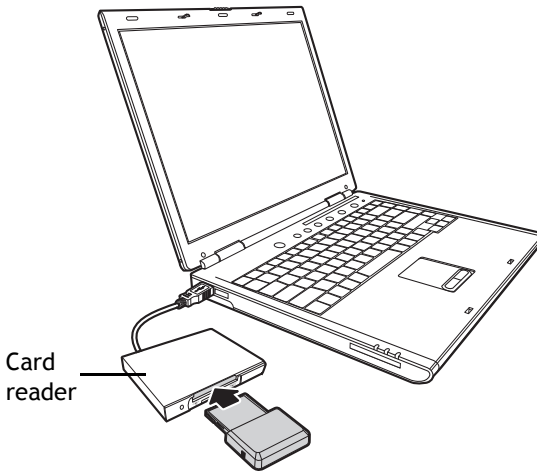
Card reader

Note

If you have purchased HT1100 and would like to use with RF1100. See HT1100 User Manual for the assembly instructions.

Installing the RF1100 Driver on a Laptop

Before using the RF1100 RFID reader on a laptop with Windows 2000/XP/XP Embedded installed, you need to install a software driver onto the computer first. Follow the steps below to start the installation:

1. Make sure that the PDA synchronization software (Active-Sync suggested) is installed on your laptop.

2. Insert the RF1100 RFID reader into the CF or PCMCIA (via adapter) card slot of the laptop.

3. The following window appears. Select **Install from a list or specific location (Advanced)**, then click **Next** to continue.

4. Select the directory where the driver is located. Click **Next**.
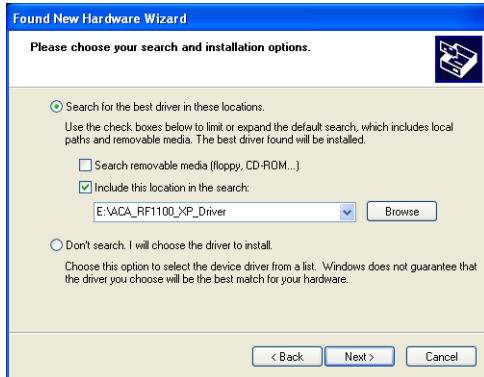
5. Click **Continue Anyway** when the following hardware warning message appears.

6. The installation process starts.

7. When the installation is complete, click **Finish** to close the wizard.

How to Use the RFID UI Utility

The RF1100 RFID reader can be used to work with any ISO 14443A/B and 15693 contactless cards. The contactless cards can transmit UID data to the RFID reader when they are in an applicable read range. To launch the RFID UI, do the following:

1. Insert the RF1100 RFID reader into the PDA or laptop CF or PCMCIA (via adapter) slot.

| Note	When using the laptop to execute the RFID UI program, make sure that the RF1100 driver is installed on the laptop before use. Refer to the section **"Installing the RF1100 Driver on a Laptop"** on page 3 for more details.
	Software driver is not required for some of ACA products such as HT1100 and HT1300.

2. Locate the RFID UI executable file copied to the PDA or laptop. Double click or tap on the corresponding executable file to open the RFID UI. (*RFID_ceUI_v1007.exe* for PDA and *RFID_x86UI_v1008.exe* for laptop.)

| Note	Updated driver will be released at any time without notice, please contact your local service centre.

3. There are three tabs at the top of the RFID UI screen: 15693, 1443A, and 1443B. Select the tab depending on the ISO card type to read its unique identification code (UID).
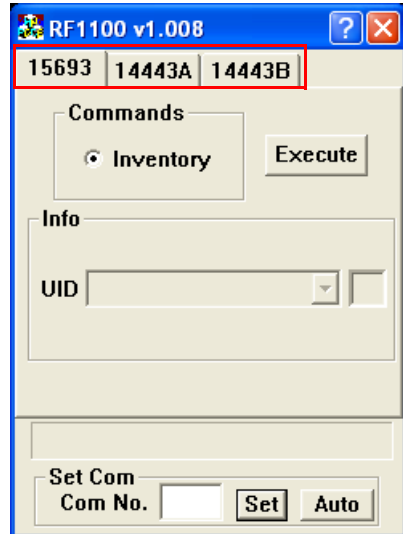
4. Click or tap **Auto** on the bottom of the RFID UI screen to scan for an available COM port for use. When complete, the **"Set protocol 15693/ 1443A/1443B OK"** message appears in the status bar as shown.
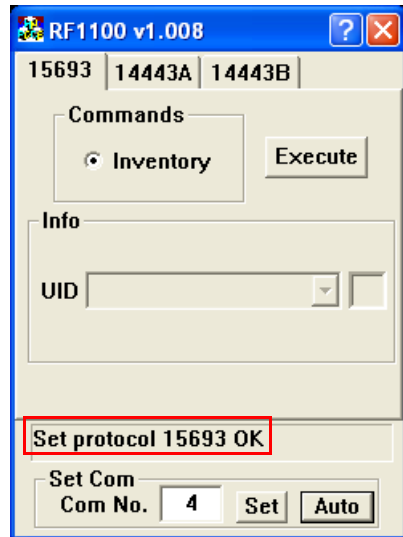
5. Place the ISO card within a distance of the RF1100 RFID reader (see maximum reading distance of each card in the section **"About the ISO Cards"**). Then click or tap **Execute** on the screen to read the ISO card UID.

6. The ISO card UID is displayed on the screen.
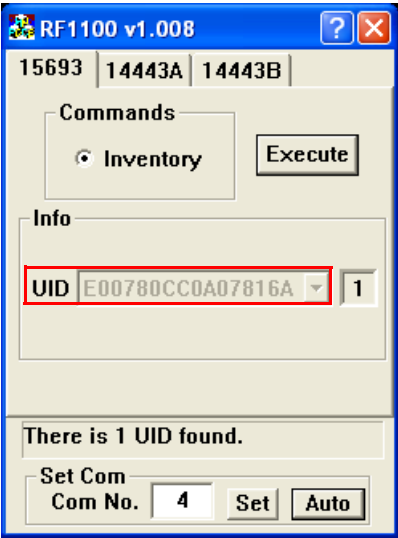
About the ISO Cards

The supported operating frequency and reading distance of each ISO card type are described as follows:

Card Type	ISO-1443 (A & B)	ISO-15693
Operating Frequency	13.56 MHz	13.56 MHz
Maximum Reading Distance	4-6 cm	10cm

Specifications

Items	HF RFID Reader Module
Model No.	RF1100
Host Support	Windows 2000/XP/XP Embedded, Windows CE 5.0
Interface Type	Compact Flash Type-1
Standard Support	ISO14443A/ ISO14443B/ ISO15693
Reader Type	Contactless
Operating Frequency	13.56MHz
DC Source	5V from CF Interface
Current Consumption	a) Idle mode: 7mA b) RF-OFF mode: 8.5mA c) RF-ON mode: 160mA
Operating Distance	a) 4cm from the top cover surface of HT1100 b) 6cm for NB/PDA installation c) Up to 10cm for large-size antenna options
Host Interface	CF interface
Host Communication Baud Rate	115200bps
Physical	79.1 x 54.8 x 12 mm; 20g
Environment	Operating Temperature: -20 to 60ºC Storage Temperature: -40 to 70ºC
Certification	EM Compatibility in FCC, Part 15 and CE compliance