

RFID Gun reader for SmartCompact



User Manual

SmarTerminal Computers, Inc.

Ver 0.931, SEP 2007

Disclaimer

SmarTerminal and SmartCompact are registered trademarks of Sammi Information Systems Co., Ltd.

All other brand names, product names, or trademarks belong to their respective holders.

Head Quarters

Sammi Information Systems Co.,Ltd.

103-15, Galwor –dong, Yongsan-Gu, Seoul, Korea

Tel. 82 -2-790-5508 / Fax. 82-2-790-5509

Email. sales@sammicomputer.co.kr

Web. www.sammicomputer.co.kr

Us Office

SmartTerminal Computers, Inc.

5200 Orange Ave. Suite 212

Cypress, CA 90630

Tel. 1-714-761-5300 Fax. 1-562-252-8272

Email. sales@smarterterminal.com

Web. www.smarterterminal.com

Table of Contents

Introduction.....	4
Chapter 1 Get to know more about RFID Gun reader.....	5
1.1 Make sure you have everything	5
1.2 Appearance	6
1.2.1 Front side	6
1.2.2 Rear side.....	6
1.2.3 Top side	8
1.2.4 Bottom side	8
1.2.5 Left side	8
1.2.6 Right side	9
1.2.7 With Protective rubber cover	9
Chapter 2 Power settings and connections	10
2.1 Remove / Install batteries in RFID Gun reader.....	10
2.2 Battery charging using power adapter	11
2.2.1 Charging with AC/DC adapter	11
2.2.2 Charging with Battery charger	12
Chapter 3 Setting up SmartCompact RFID Gun reader	13
3.1 How to set CAB Files in SmartCompact.....	13
3.2 How to connect SmartCompact to RFID Gun reader	16
3.3 How to remove SmartCompact from RFID Gun reader.....	17
Chapter 4 Using RFID Gun reader	18
4.1 How to operate RFID Gun reader	18
4.1.1 How to install program files in SmartCompact	18
4.1.2 How to operate RFID Gun reader	21
Appendix A.....	23
RFID Gun reader Specification Highlights	23
Appendix B.....	24
Version Table.....	24

Introduction

This quick reference guide allows you to use all the advanced features of SmartCompact effectively. Please go through it once before using SmartCompact handheld terminal.

User's Information

Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance Information

This device complies with part 15 of 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.

Information to User

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 statement

"To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use only the supplied antenna."

Chapter 1 Get to know more about RFID Gun reader

1.1 Make sure you have everything

- ✓ RFID Gun reader main unit (UHF)
- ✓ Standard battery pack (2200 mAH Li-ion)

Optional accessories

- ✓ Spare battery pack (2200 mAH Li-ion)
- ✓ 3 pack battery charger – under development
- ✓ AC/DC adapter
- ✓ Protective rubber cover

1.2 Appearance

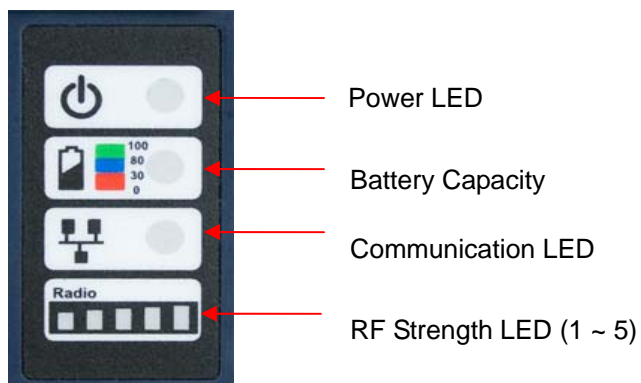
1.2.1 Front side



Features and description

Features	Function / Description
RFID Antenna	RFID antenna is located in front side of Gun reader




1.2.2 Rear side



Rear panel features

Name	Function
Power LED	Shows green light for 5 seconds when user triggers the gun
Battery capacity LED	Shows battery capacity status (see below table for details)
Communication LED	When IrDA communication is successful between Gun reader and SmartCompact, Communication LED shows green light (blinking) as user triggers the gun.
RF Strength LED	Shows RFID power level from 1~5

LED color change according to battery capacity

Name	Function
	0 ~ 30% charged : red
	30 ~ 80% charged : blue
	80 ~ 100% charged : green (fully charged)

1.2.3 Top side



1.2.4 Bottom side



1.2.5 Left side



Features and description

Features	Function / Description
Battery out button	To take out battery, user should push this button.

1.2.6 Right side



Features and description

Features	Function / Description
DC input jack	To charge RFID reader, user should connect AC/DC adapter to this DC input jack.

1.2.7 With Protective rubber cover



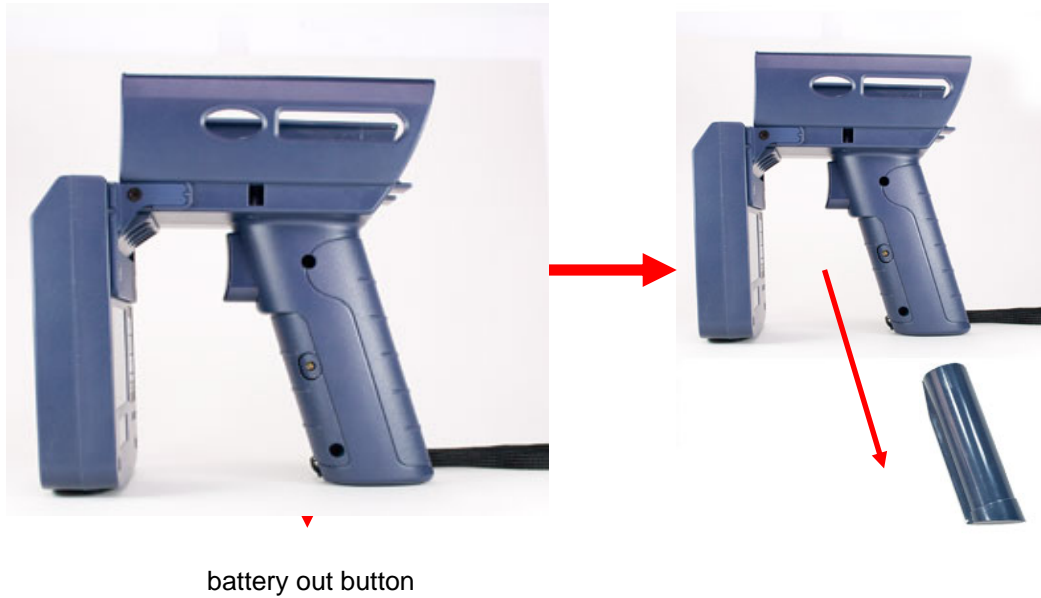
Features and description

Features	Function / Description
Protective rubber cover	To protect from shock and vibration, user can additionally cover SmartCompact and/or RFID Gun reader.

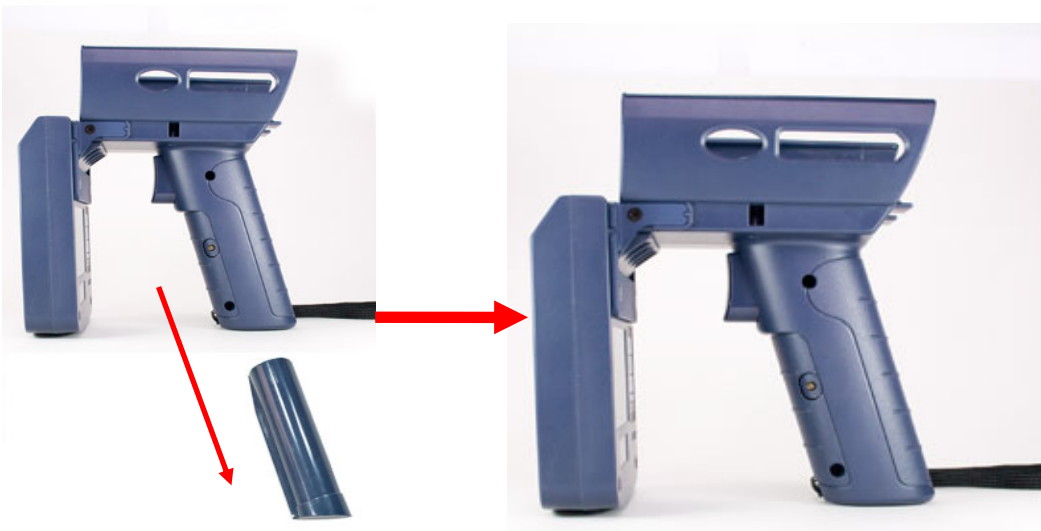
Chapter 2 Power settings and connections

2.1 Remove / Install batteries in RFID Gun reader

Press the battery out button and remove battery in below direction:



Push and secure the battery in the gun reader until hearing a click sound:



2.2 Battery charging using power adapter

In the beginning, user must charge the battery at least for 4.5 hours to use the RFID Gun reader.

2.2.1 Charging with AC/DC adapter

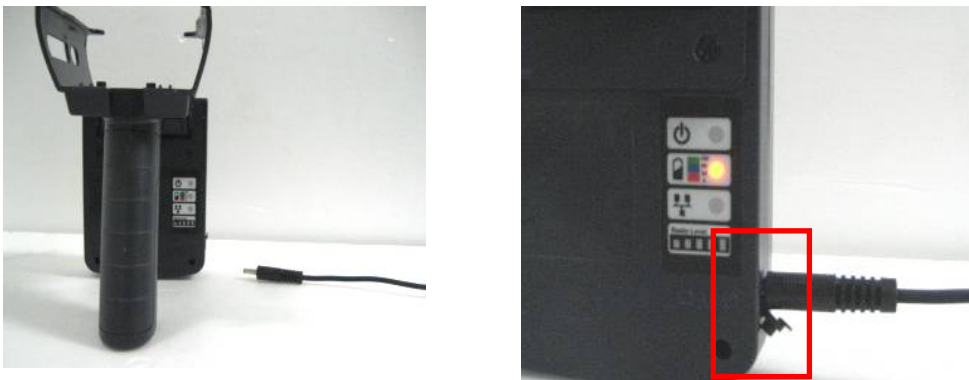
Prepare AC/DC adapter (5V, 3A) and power cable for RFID Gun reader. This AC/DC adapter is compatible with that of SmartCompact.



Insert power cable to AC/DC adapter like below photo:



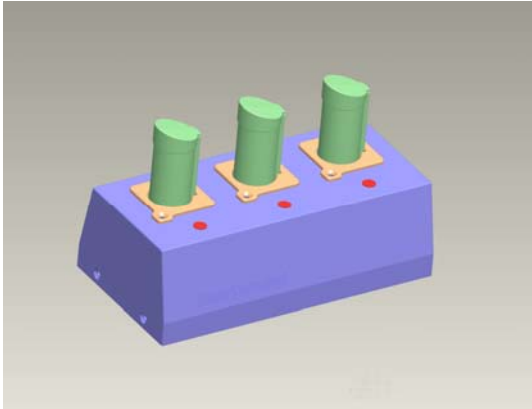
Open RFID Gun reader's DC input jack cover and insert DC adapter output cable.



2.2.2 Charging with Battery charger

To charge the battery pack, user can also use 3 pack Battery charger. Three batteries can be charged at the same time.

Under charging, the LED light is red and turns green after fully charged.



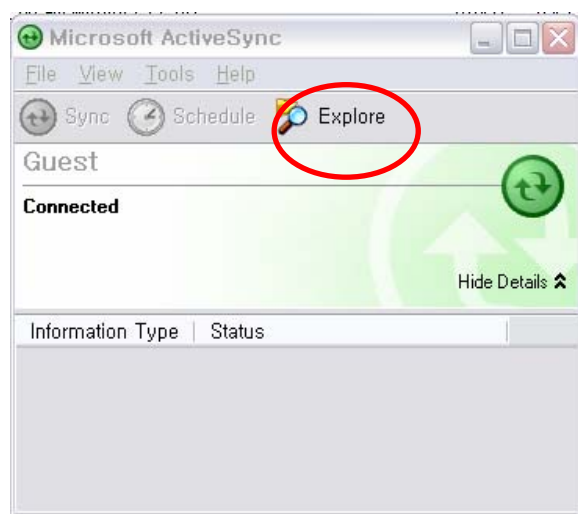
Chapter 3 Setting up SmartCompact RFID Gun reader

3.1 How to set CAB Files in SmartCompact

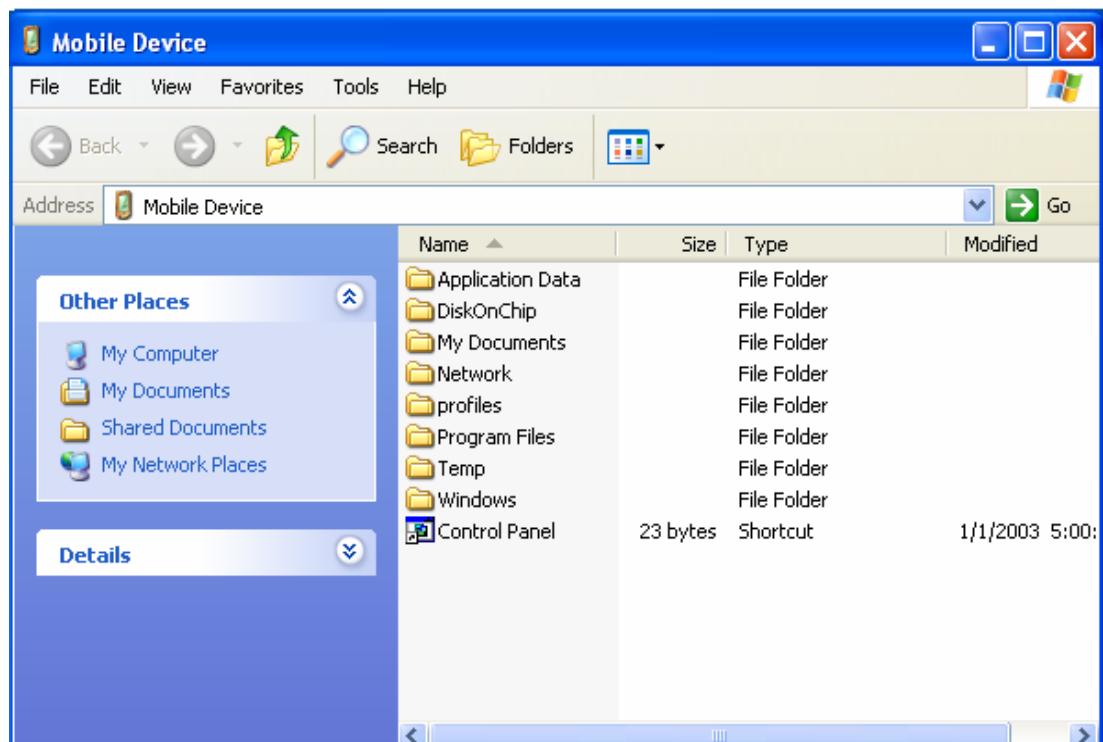
Connect USB Active sync cable between your computer and SmartCompact.



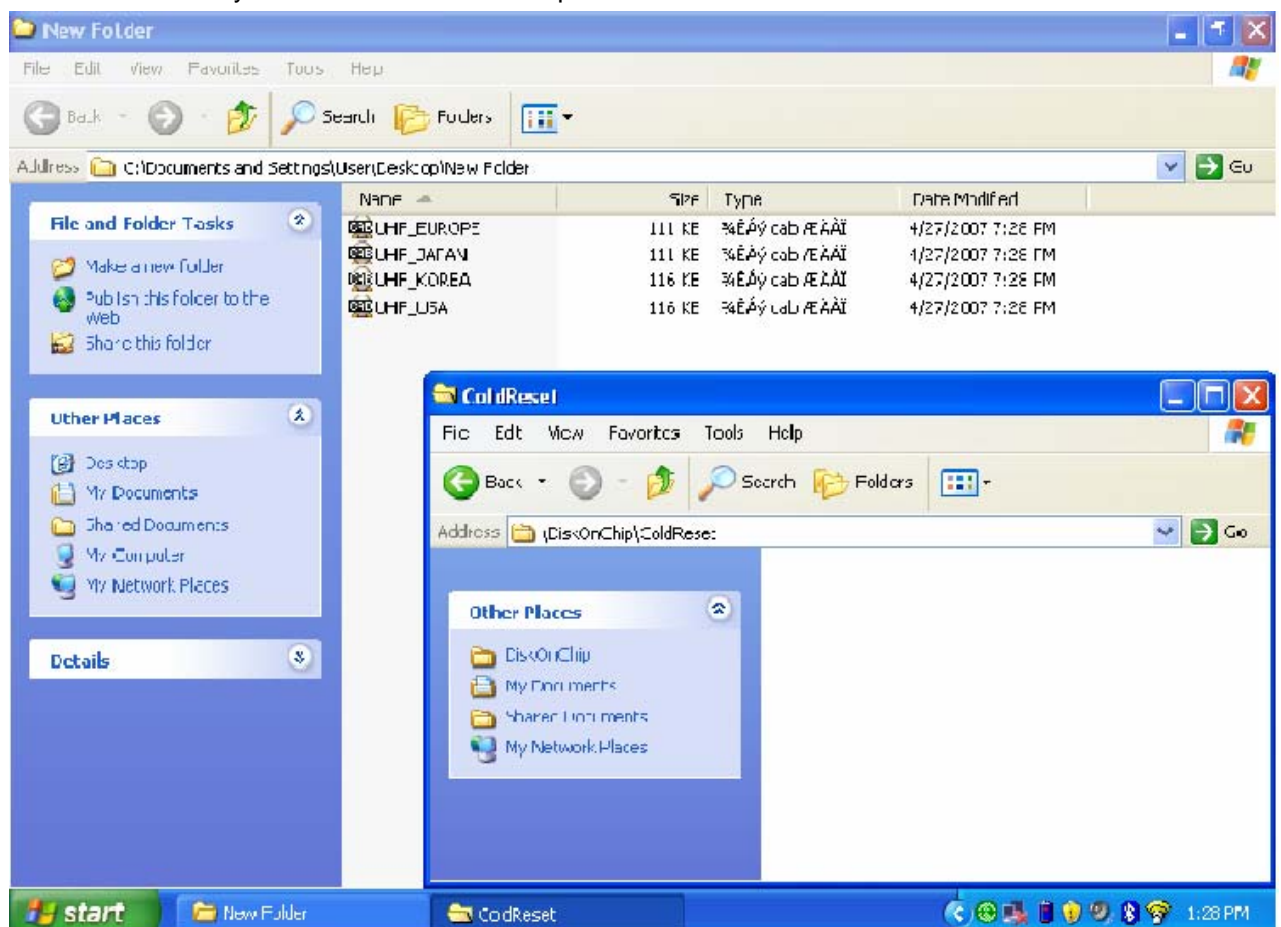
When Active Sync program is opened, click Explore.



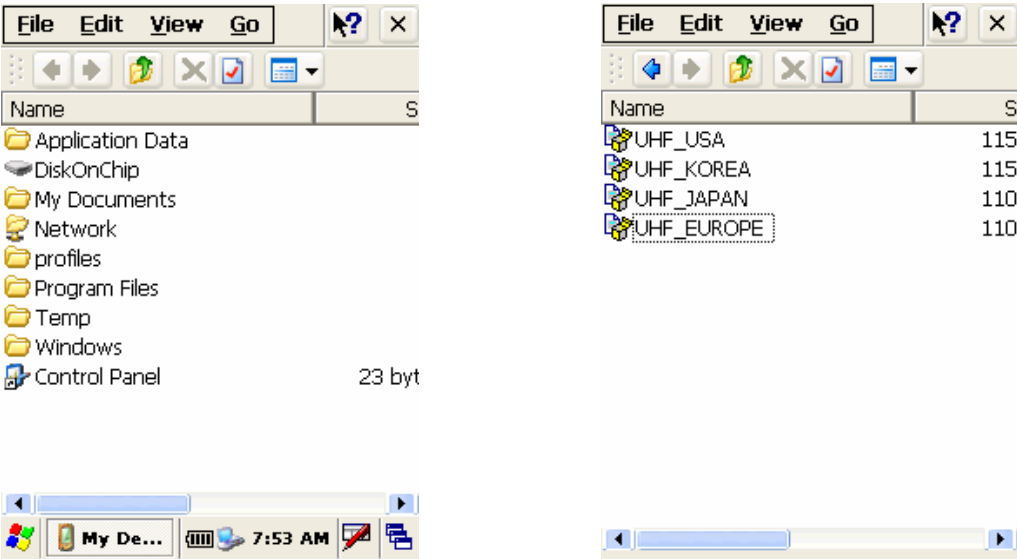
Click DiskOnChip folder.



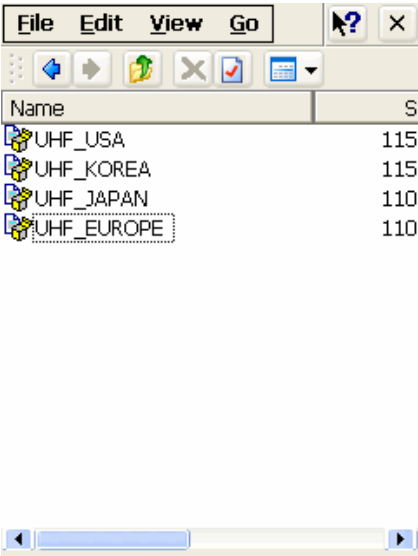
Save necessary CAB file in the DiskOnChip folder.



Click DiskonChip/Cold Reset folder of SmartCompact.



Click corresponding Cab File. (ex : UHF_KOREA)



3.2 How to connect SmartCompact to RFID Gun reader

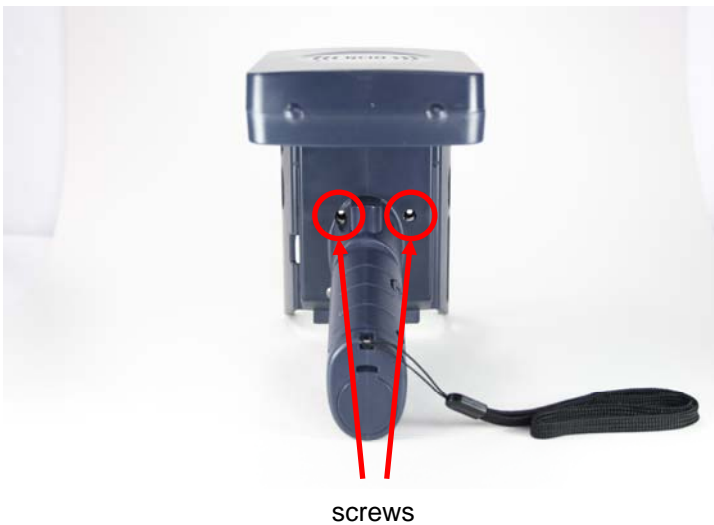
Insert SmartCompact to RFID Gun reader in below direction:



SmartCompact combined to RFID Gun reader:



Tighten the screws (2 pcs) firmly in order to hold the combination.



3.3 How to remove SmartCompact from RFID Gun reader

Loosen the screws (2 pcs) in order to undo the combination.



Remove SmartCompact from RFID Gun reader in below direction:



Chapter 4 Using RFID Gun reader

4.1 How to operate RFID Gun reader

To operate RFID Gun reader, user needs RFID Gun reader and SmartCompact (power on) with program files installed.



4.1.1 How to install program files in SmartCompact

To install program files in SmartCompact, user can follow one of below three methods:

1) Using Sync cable

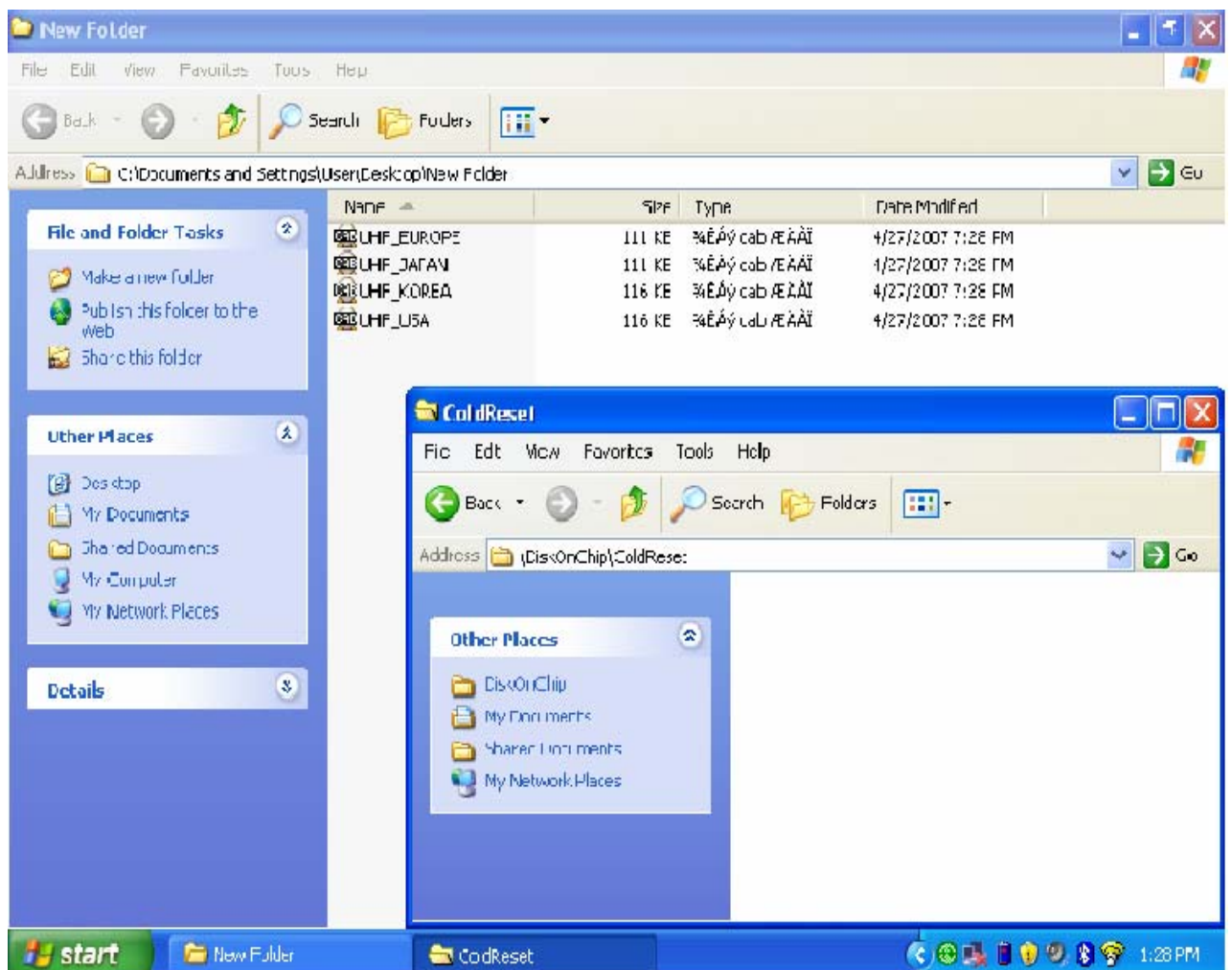
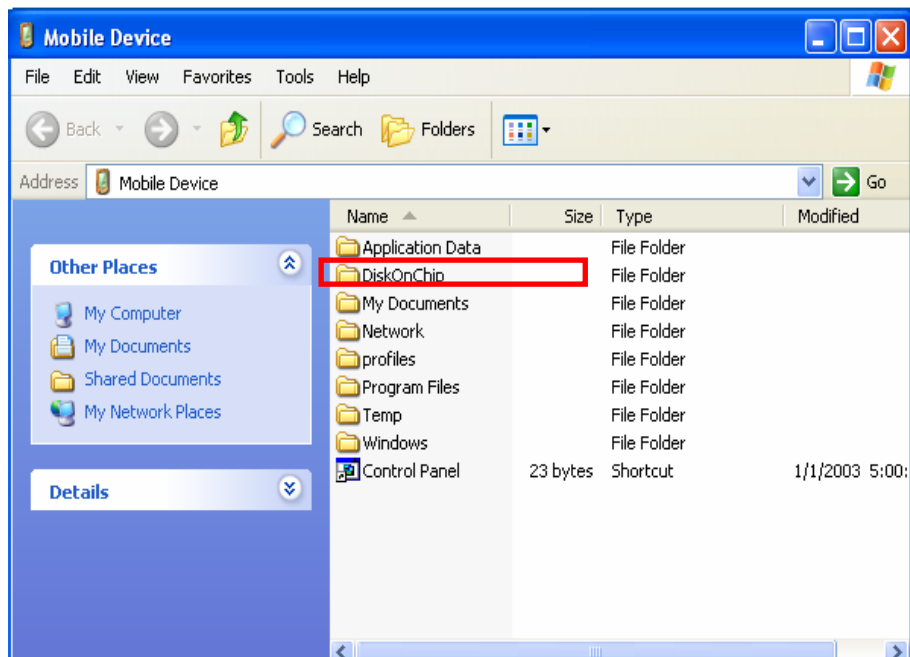
To do this, user should have Microsoft ActiveSync program (v.4.2 or higher) installed in the computer. Connect SmartCompact to the computer with USB or Serial Sync cable. (USB sync cable is provided in SmartCompact standard package. Serial sync cable should be purchased additionally)



When Microsoft ActiveSync program is opened, click "Explore"



When Explore window is opened, copy and paste necessary program files from computer to DiskOnChip folder of SmartCompact (shown as Mobile Device).

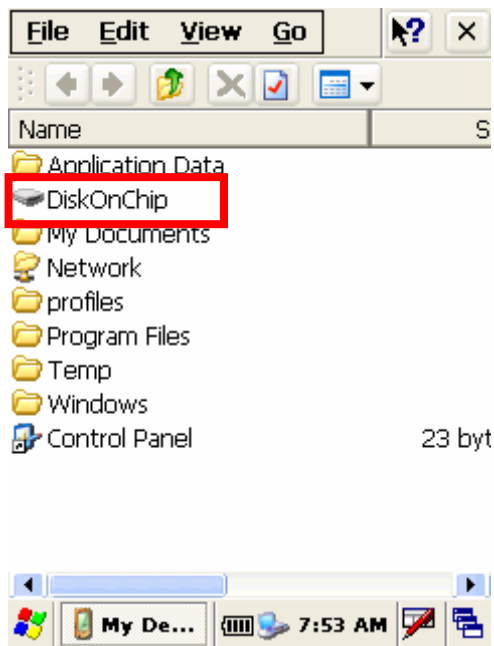


2) Using CF/SD cards

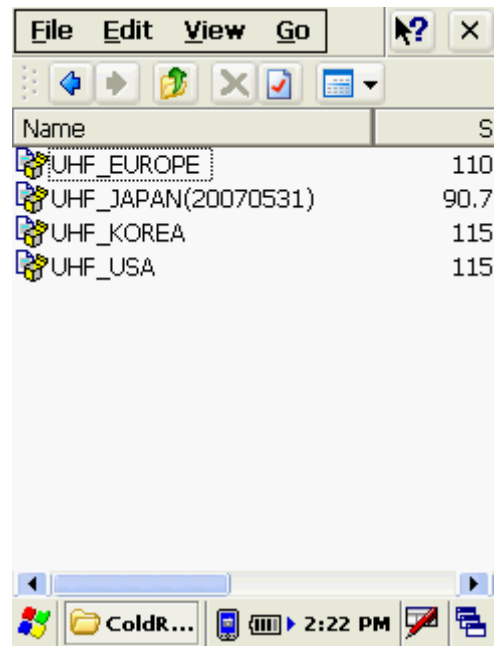
User can save necessary files to CF or SD card and insert it into SmartCompact. Check the locations of CF/SD card slots below:



Copy the necessary files and paste them to DiskOnChip folder of SmartCompact.



My Device



DiskOnChip > Coldreset folder













4.1.2 How to operate RFID Gun reader

Slide SmartCompact to RFID Gun reader in below direction.



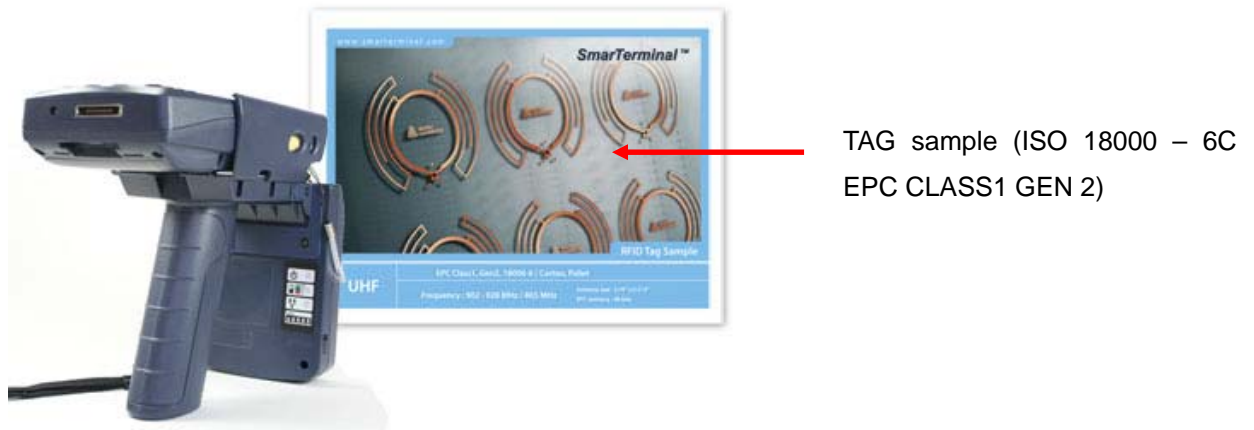
After combining SmartCompact and RFID Gun reader, click to open program CAB files to install. (ex : UHF_KOREA)



File Edit View Go				 	
     					
Name				S	
	UHF_USA			115	
	UHF_KOREA			115	
	UHF_JAPAN			110	
	UHF_EUROPE			110	



After program setting is done, target the RFID tag in front of antenna side and trigger the RFID Gun reader.



UHF Gun reader can read in 0.5-1.5m distance and supports EPC C1G2, ISO18000-6B/C tags.

Appendix A

RFID Gun reader Specification Highlights

RFID Gun reader(optional)

Radio frequency UHF (US: 902-928MHz)

Tag support UHF: EPC C1G2, ISO18000-6B/C

Output power: 0.5W(A type UHF)

Antenna type UHF: 80mm x 80mm

Appendix B

Version Table

Version: 0.93	Release Date: 09/03/2007
Version: 0.931	Release Date: 02/01/2008