

This radio module will only be installed by the applicant into host devices they market.

This installation guide is representative of one such implementation and contains all of the necessary regulatory statements and warnings.

Handheld Reader Installation Guide

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1 Introduction

The Handheld Reader (HHR) is a mobile device used to interact with Container Security Devices (CSD). It is comprised of a rugged Personal Digital Assistant (PDA), a Compact Flash Reader (CFR), a GPRS Modem, and CommerceGuard Security Client Software. The HHR is used to arm and disarm CSDs when starting and ending container shipments respectively. The HHR can also be used to inspect the status of CSDs anywhere along the shipping route.

The brand name of the PDA used for the CommerceGuard Handheld Reader is ReconX. The ReconX has two Compact Flash slots where the Compact Flash Reader and the Enfora GPRS Modem are installed. The Compact Flash Reader provides the HHR communication over 2.4 GHz ISM radio with Container Security Devices (CSD) used in the security system. The GPRS module allows wireless communication with the UHR over the GSM-network.



This guide describes how to prepare the HHR for use in the CommerceGuard Security system.

2 Handheld Reader Assembly and Installation

Four steps are necessary to prepare the Handheld Reader for operation: (1) Prepare the Personal Digital Assistant, ReconX (2) Install the Compact Flash Reader (3) Install the Enfora GPRS Modem, and (4) Install CommerceGuard Security Client Software to the ReconX. The following subsections describe these steps.

2.1 Prepare Personal Digital Assistant

1. Install modified CF cap on ReconX
2. Set the ReconX date and time
3. Start>Settings>System>Clock & Alarms
4. Make sure that Home is checked, tap to GMT +1 Paris, Madrid; fill in local Time and Date

2.2 Compact Flash Reader Installation

Install the CFR into the back Compact Flash slot.



Figure 1. Compact Flash Reader



Figure 2. Installing the Compact Flash Reader to the ReconX

2.3 Enfora GPRS Modem Installation

1. Install the Enfora GPRS modem into the front Compact Flash slot. The Enfora modem comes labeled as either "Enfora" or as "Weitel". Both labels are valid for the Enfora modem – See Fugure 3 below.



Figure 3. Enfora GPRS Modem



Figure 4. Installing the Enfora GPRS Modem to the ReconX

2. Configure the Enfora GPRS modem

The following directions apply when using a SIM card from Telenor in Sweden. please consult with your GSM network operator If you are using a different GSM network operator.

- a. Start>Settings>Connections>Connections
 - b. Tap on "Add a new modem connection". Enter a unique name for the connection in the dialog box for "Enter a name for the connection"
 - c. Make sure that the selected modem is "Enfora-GSM0110" and then tap "Next"
 - d. Enter "*99#" for the connection number and then tap "Next"
 - e. Leave the username and password blank and then tap on the "Advanced" button
 - f. Set the following:
 - i) Baud rate: 115200
 - ii) Extra dial-string modem commands: +cgdcont=1,"IP","internet.telenor.se"
 - iii) Uncheck "Wait for dial tone..."
 - iv) Uncheck "Cancel if not connected..."
3. Tap on the "OK" button
 4. Tap on the "Finish" button
 5. Restart the ReconX by pressing the start button in 5 sec

6. Activate the connection:
 - a. Start>Settings>Connections>Connections
 - b. Select "Manage existing connections"
 - c. Tap and hold in the list where your new connection appears. A pop-up menu will appear. Select "Connect".
 - d. The first time you connect you will be asked to enter username and password. Leave both blank and check "Save Password".
7. Verify your connection: Launch Internet Explorer and verify that the Enfora GPRS modem connects to the Internet

2.4 Security Client Software Installation Instructions

1. ActiveSync 4.1 needs to be installed on the client PC
2. Setup a partnership with the ReconX
3. Connect the ReconX via the USB cable
4. Click "Cancel" on the Synchronization Setup Wizard
5. The ActiveSync "Connected" globe will turn green Install
 - a. Install "Security Client Setup.exe" from the desktop computer
 - i) SVN IS12 Release:
[https://172.17.50.57/repository/dev/Global Shipping Industry/CommerceGuard/Product Documentation/Releases/tags/ATS 10100 CommerceGuard System/ATS 10100 R3R \(IS10 Final\)/ATU 30 001 R1M \(ClientNet\)/ATP 45100_4 \(3.0.10\)](https://172.17.50.57/repository/dev/Global%20Shipping%20Industry/CommerceGuard/Product%20Documentation/Releases/tags/ATS%2010100%20CommerceGuard%20System/ATS%2010100%20R3R%20(IS10%20Final)/ATU%2030%20001%20R1M%20(ClientNet)/ATP%2045100_4%20(3.0.10))
 - ii) Unzip 1_19003_ATP_45100_4 CSD Evaluation Tool 3.0.10.zip
 - iii) From the desktop run Security Client Setup.exe
 - iv) This installer installs .NET CF 2.0 and the Security Client Software
 - v) When the installer stops press ok on ReconX then ok on PC and the installer will continue
 - vi) To finish press ok on PC, ok to read file then the ReconX will restart by it selves
 - b. Install the CG root certificate
 - i) Run "SpAddCert" from the ReconX and install the certificated listed:

- (1) Start>File Explorer, and navigate to the directory My Device->Program Files->Security Client. Find the program file SpAddCert.
 - (2) Run SpAddCert, type ok, type ok, type ok
 - ii) Restart the ReconX
 - iii) Verify that the "Test certificate" are installed in the ReconX:
Start>Settings>Systems>Certificates>Root
- c. The ActiveSync "Connected" globe will turn green Install "Security Client Setup.exe" from the *desktop computer*

3 Known ReconX Issues

- Because the ReconX has persistent memory you can't just remove the battery to perform a hard reset. You need to do a soft reset and then as the device is booting up hold down the "Start" and "OK" hard buttons on the device. After a few seconds you'll be given a prompt to confirm that you want to clear the persistent memory.
- ReconX does not show the "connected" icon when the GPRS modem is connected.
- ReconX automatically configures proxy when connected to PC via ActiveSync.

4 Regulatory Information

This device complies with part 15 of the FCC Rules and with RSS-210 of Industry Canada 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.

Per FCC 15.105 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 commercial 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 CommerceGuard personnel for help

Per FCC 15.21 changes or modifications not expressly approved by CommerceGuard could void the

user's authority to operate the equipment.

This equipment shares a frequency band with a wide range of equipment: e.g. industrial, scientific, and medical equipment such as microwave ovens, premises radio stations (radio stations requiring licenses), and specified low-power radio stations (radio stations not requiring licenses) for RFID used for factory production lines as well as amateur radio stations (radio stations requiring licenses).

1. Before use, confirm that no premises radio stations and specified low-power radio stations for RFID or amateur radio stations operate in your vicinity.
2. In the event that this equipment causes harmful interference to any premises radio station for RFID, immediately change frequencies or halt radio wave emission and contact us at the information indicated below for consultation on interference avoidance measures (e.g., partition installation).
3. Contact us at the information indicated below if this equipment causes harmful interference to any specified low-power radio stations for RFID or amateur radio stations or if other problems arise.

(Regulatory text required by Japanese Standard, ARIB-STD-T66, Annex 2, Section 2)