SoMove Mobile

Altivar configuration software for cellphone

Installation manual

10/2011

Version 2.2.x





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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm, or improper operating results.

Failure to observe this information can result in injury or equipment damage.

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Safety Information



Important Information

NOTICE

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

A DANGER

DANGER indicates an imminently hazardous situation, which, if not avoided, **will result** in death or serious injury.

▲ WARNING

WARNING indicates a potentially hazardous situation, which, if not avoided, **can result** in death, serious injury or equipment damage.

A CAUTION

CAUTION indicates a potentially hazardous situation, which, if not avoided, **can result** in injury or equipment damage.

CAUTION

CAUTION, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, **can result** in equipment damage.

PLEASE NOTE

The word "drive" as used in this manual refers to the controller portion of the adjustable speed drive as defined by NEC.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this product.

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1

What's in this Chapter?

This chapter contains the following topics:

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Safety instructions

Read and understand these instructions before performing any procedure with this drive.

A DANGER

UNINTENDED EQUIPMENT OPERATION

- Read and understand this manual before installing or operating SoMove Mobile.
- Any changes made to a device using SoMove Mobile must be performed by qualified personnel.
- Read and understand the device manuals before you load or duplicate the Configuration from one device to another device.
- Ensure that you select the Configuration suitable for your application

Failure to follow these instructions will result in death or serious injury.

AA DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

• Read and understand all the manuals applicable to the device that you are using with SoMove Mobile. Installation, adjustment, repair, and maintenance must be performed by qualified personnel.

Failure to follow these instructions will result in death or serious injury.

2

What's in this Chapter?

This chapter contains the following topics:

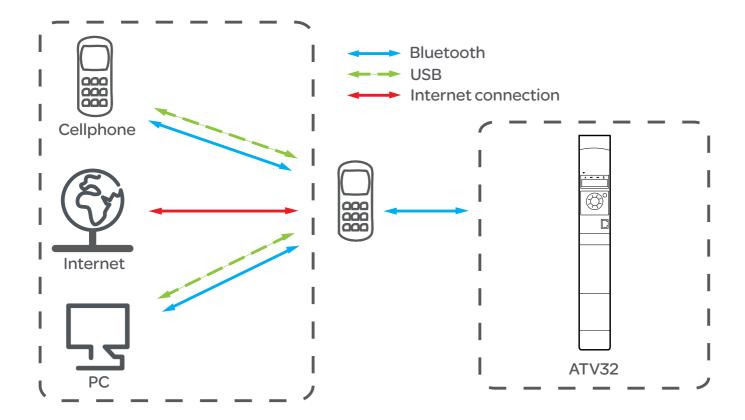
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What can I do with SoMove Mobile

Overview

SoMove Mobile is:

- · a commissioning tool.
- · dedicated to cellphone.
- managing variable speed drives .



Keypad mode

Once connected to a variable speed drive, you can use it in the same way as the local or remote HMIs.

Save and restore configuration files

SoMove Mobile is able to save and restore configuration files. These files can be exchanged with other tools from different ways: Bluetooth, USB (to/from a PC), e-mail, MMS.

These files can be shared with SoMove or with the "Multi-Loader" tool (commercial reference: VW3A8121).

Diagnostic

In addition to the monitoring features provided by the application (keypad or customized HMI), it is possible to take a "snapshot" of the drive status. This snapshot can be exchanged later as a file from the cellphone.

Cellphone Graphic User Interfaces behavior

According to the cellphone brands and family models, you can find various graphic user interfaces.

These features are fully dependent on the cellphone characteristics (screen size, memory...).

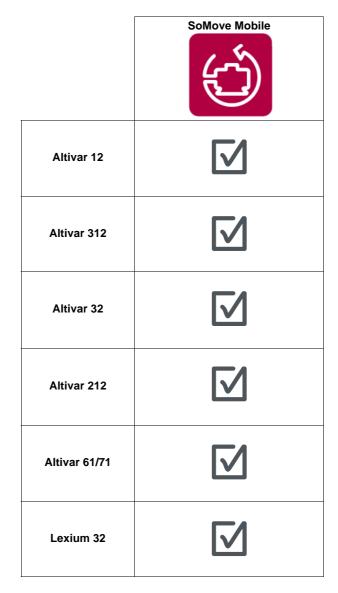
This implies that:

- The graphical aspect of the application may change from one cellphone to another.
- The contextual menus at the bottom of the screen may be different and may have their own behavior (pop menus, key assignments...).

Altivar compatibility

• **SoMove Mobile**: for variable speed drives which have a simple 7 segment HMI or can be managed with the graphic keypad.

This version is available in five languages: English, French, German, Italian and Spanish.



See detailed information for functionalities page 38.

Cellphone requirements

The cellphone should fulfill two levels of characteristics:

- The first level consists of the cellphone **Technical data** features,
- The second level is linked to the associated services provided by the mobile network operator, and to the contract subscribed by the user.

First level of characteristics: Technical data.

Symbian operating system for the cellphone

	For the graphic keypad
Configuration (1)	CLDC 1.1
Profile	MIDP 2.0
Supported JSR (1) (Java Specification Request)	JSR 75 (file management) JSR 82 (Bluetooth connectivity)
Memory size for JARs (Java ARchives)	≥ 512kB (without customization files)
Canvas size (screen workspace allocated to the application)	Pixel width ≽ 240 if graphical keypad is used

(1) See definitions page 11

Example

Here is an example of what you can find on a cellphone manufacturer web site:

• The **technical specifications** which describe several features.

APIs	
Java Technology	JSR 139 Connected, Limited Device Configuration (CLDC) 1.1 JSR 118 MIDP 2.0 JST 185 Java™ Technology for Wireless Industry JSR 75 File connection and PIM API JSR 82 Bluetooth API JSR 135 Mobile Media API JSR 172 J2ME™ Web Services Specification JSR 177 Security and Trust Services API for J2ME™ JSR 184 Mobile 3D Graphics API for J2ME™ JSR 205 Wireless Messaging API 2.0 JSR 226 Scalable 2D Vector Graphics API
Certificates	UTI Root

• The memory size for jars.

Memory Functions	
Maximum User Storage	9 MB
Memory Card Type	Micro SD
Memory Card Features	Hot Swap
Maximum Memory Card Size	2 GB
Minimum Heap Size	2 MB

Definitions

• Configuration CLDC and MIDP profile:

The Connected Limited Device Configuration (CLDC) is a fundamental part of the architecture of the Java 2 Platform, Micro Edition (J2ME).

J2ME technology is delivered in API bundles called configurations, profiles, and optional packages.

A J2ME application environment includes both a configuration like CLDC and a profile like the Mobile Information Device Profile (MIDP).

In addition, optional packages provide capability in specific areas of functionality, such as wireless messaging and multimedia capture and playback. The ability to choose from among the various bundles enables product designers and developers to match software capabilities with hardware capabilities very closely. They can use APIs that give them access to the components a particular kind of device actually has, without the overhead of APIs designed for capabilities the device doesn't support.

(Definition from Sun Microsystems)

• Java Specification Request (JSR):

JSR are formal documents that describe proposed specifications and technologies to be added to the Java platform. They specify API extensions for several services or device functions: for example, JSR 82 enables Java application to use a standardized API for Bluetooth services.

So Move Mobile installation (Nokia $^{\mathsf{TM}}$)

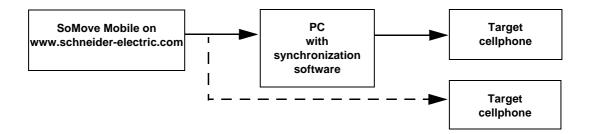
3

What's in this Chapter?

This chapter contains the following topics:

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First solution: Install SoMove Mobile	
Second solution: Install SoMove Mobile	21

Download SoMove Mobile software



Installation from a PC

Once downloaded on your PC, uncompress the files and install the application on your cellphone.

The example on the following pages show an installation corresponding to the Nokia™ E51: you must first install the cellphone software tool on your PC.

USB or Bluetooth?

To install the application on your cellphone from your PC, establish a connection between the two devices. According to your cellphone capabilities, you can use Bluetooth, a USB connection or both. If you plan to use Bluetooth connection:

- Check that your PC is Bluetooth enabled. If not, connect a Bluetooth adaptor (commercial reference: VW3A8115)
- Check that the Bluetooth connection is activated and managed by windows™ (XP, Vista, 7)

Install the cellphone PC Suite

You can find the PC Suite Software on a cellphone manufacturer web site.

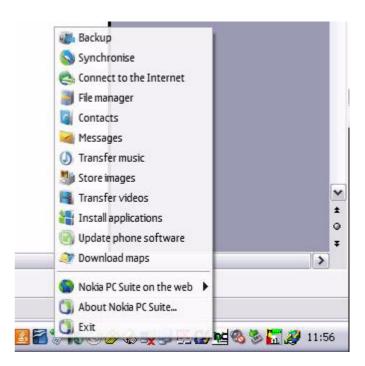
For other brands of cellphones, similar Softwares are also available: "PC Suite" from Sony Ericsson™...

Cellphone PC Software (Nokia™)

Several cellphone manufacturers provide free PC Software for synchronization between new PC and the cellphone application. Such Software provides normally a Java ME application installation wizard. Please refer to the indications which are provided with your cellphone PC Software.

Once installed, Nokia™ PC Suite is installed as a service or can be launched as a standard application from a shortcut on your desktop:





Pairing the cellphone with your PC

Note: If you have connected your cellphone to a USB port of your PC, you can go page 20

"Pairing" stands for the first connection process (mutual identification) between 2 Bluetooth devices. There are 2 ways to pair your cellphone with your PC:

- The first one is provided by the PC OS (XP, Vista or 7). see page 20
- The second one is to use the cellphone PC Suite Software. See page 21

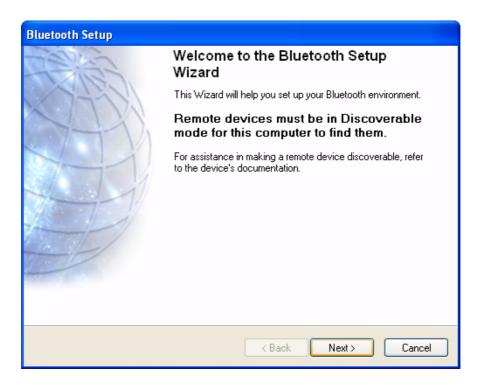
Standard solution (example with Windows™ XP)

1. Add a bluetooth device from the computer by clicking on the Bluetooth > Add a Bluetooth Device.



Note: The Bluetooth connectivity of your cellphone must be activated. These settings are reachable from the "cellphone parameter" menu in the Nokia™ E51: **Parameters > Connectivity > Bluetooth**.

2. Click Next.



3. Select your cellphone in the list, and then click Next.



4. The pairing process starting with the cellphone.



5. Enter PIN code into the cellphone.

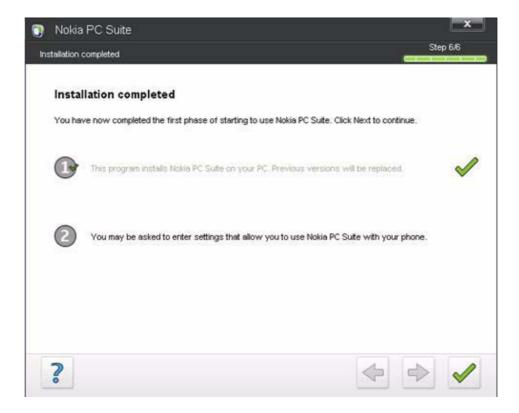


6. You will be after asked to type in your cellphone the access key generated by the PC.



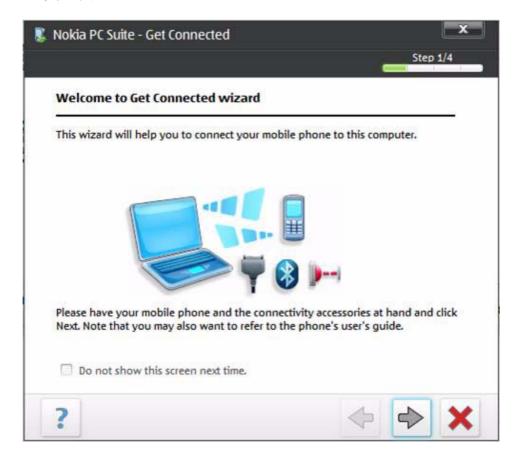
Your cellphone has been added to the Bluetooth devices handled by your PC.

Pairing the cellphone from the PC Suite software

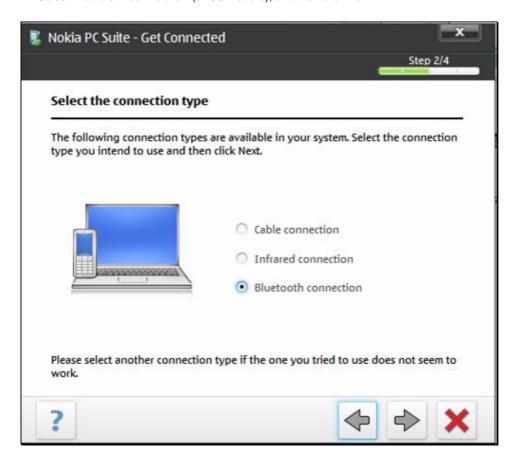


Once your PC has restarted, you will be invited to start the pairing process.

1. Click Next.



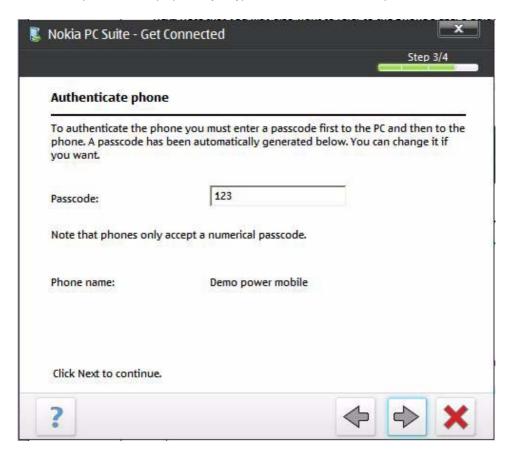
2. Select Bluetooth connection (or USB cable), and then click Next.



3. Select your device in the list, and then click Next.



4. Note the passcode and prepare to you type it when invited on the cellphone, and then click Next.

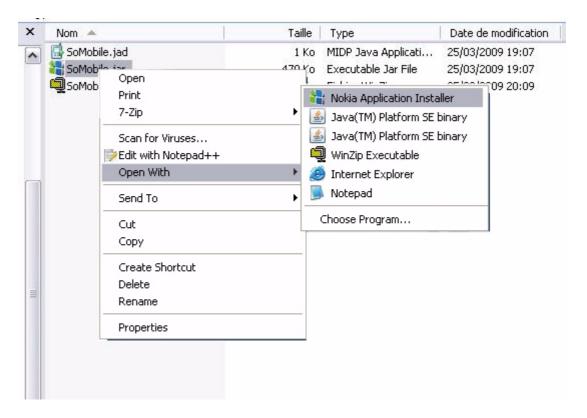


Your cellphone is now linked to your PC.

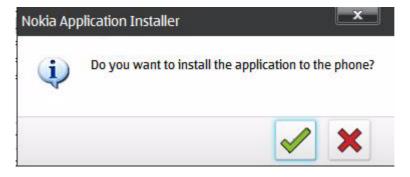


First solution: Install SoMove Mobile

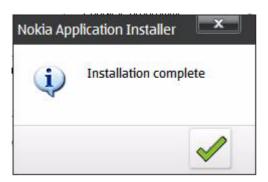
From the folder where you have unzipped the downloaded application, right click the filename with the .jar extension.



2. Click OK.



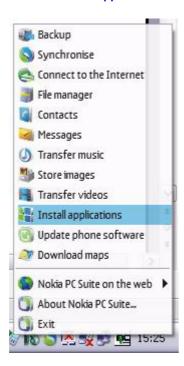
SoMove Mobile is installed on your cellphone.



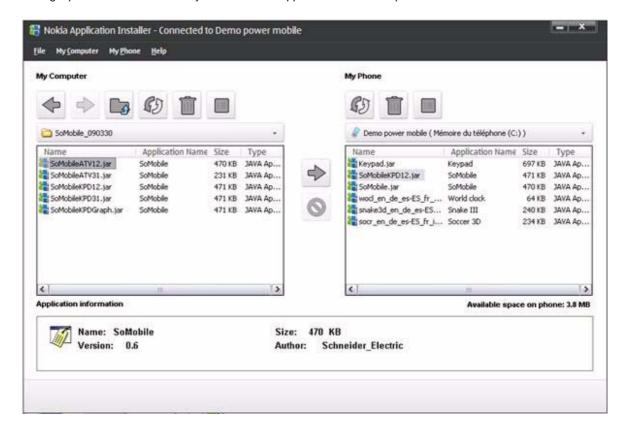
Second solution: Install SoMove Mobile

The alternate solution to install SoMove Mobile is to start the installation from Nokia™ PC Suite Software.

1. Select Install applications.



2. From the left file selector, select the application on your PC, and then click the central arrow. The right part of the screen shows you the installed applications on the cellphone.



Note:

- Use the application installer to manage the installed applications (removing old versions for example).
- On old cellphones (like Nokia[™] 6021), the memory size is about 1 MB, but the size of an application must be less than 50 Kbytes.

Pairing the cellphone with the Universal Bluetooth Interface

The Universal Bluetooth Interface (commercial reference: TCSWAAC13FB) must be paired with your cellphone. Once done, you will not have to pair the adapter in the future, even if you uninstall or upgrade several versions of SoMove Mobile.

Example:

The pairing process with the Nokia™ E51 is the following:

Settings

> Connectivity

> Bluetooth

> Paired Devices

> Options

> Pair new Device

The cellphone starts to scan, the reachable devices will be displayed as soon as they are detected. If the Bluetooth device is reachable, you should see **SE UBI xx:yy:zz** (MAC address) in the list. Press **Pair**, a password will be requested.

Note 1: The last six digits of the MAC Address is printed on each Universal Bluetooth Interface.

Note 2: This password is always the same for the TCSWAAC13FB Universal Bluetooth Interface: **6699**. Your cellphone is now ready to communicate with the Modbus Bluetooth adapter.

Enabling authorizations

Once installed on the cellphone, you can access SoMove Mobile applications in the **Application** folder of the cellphone.

Before launching the application, select it and choose options: you must check the application access settings, this will allow the application to access the cellphone folder and to create data (create configuration files, etc).

Note:

- Both files (.jad and .jar) contained in the zipped document must be kept together in the same folder. If you use a direct **Send to**, you must select both files before right clicking them.
- If application access and connectivity authorizations are not set on Always allowed, you will be asked each time
 to confirm by Yes/No if you allow data access or connectivity.
- It is important to enable all the items of the app. access > communication and app.access > data access settings.

SoMove Mobile first launch

During the first launch, you will be requested to select the working folder where SoMove Mobile will store and load its configuration files. Confirm by Yes, and when done, you should see the welcome screen of SoMove Mobile.

According to the cellphone, you will have to navigate into the predefined folders (which are not modifiable) before activating **Select**.

If you select a location in these predefined folders, you will get an error and you will be invited to select a new location.

SoMove Mobile installation (BlackBerry®)

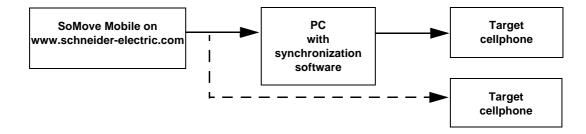
3

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This chapter contains the following topics:

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First solution: Basic install with BlackBerry® Desktop Manager	<u>28</u>
Second solution: Quick install with prompt command windows.	<u>31</u>

Download SoMove Mobile software



Installation from a PC

Once downloaded on your PC, uncompress the files and install the application on your cellphone. The example on the following pages shows an installation corresponding to the BlackBerry 9700TM: **Note**: First install the cellphone software tool on your PC.

USB or Bluetooth?

To install the application on your cellphone from your PC, establish a connection between the two devices. According to your cellphone capabilities, you can use Bluetooth, a USB connection or both. If you plan to use Bluetooth connection:

- Check that your PC is Bluetooth enabled. If not, connect a Bluetooth adaptor (commercial reference: VW3A8115)
- Check that the Bluetooth connection is activated and managed by windows™ (XP, Vista, 7).

Install the BlackBerry® Desktop Software.

You can find the BlackBerry® Desktop Software on the cellphone manufacturer web site.

Cellphone PC software (BlackBerry®)

Several cellphone manufacturers provide free PC Software for synchronization between new PC and the cellphone application. Such Software provides normally a Java ME application installation wizard. Please refer to the indications which are provided with your cellphone PC Software.

1. Click Next and follow instructions.



2. Install completed, click Finish.



Install SoMove Mobile BlackBerry®.

You have 2 options for installation SoMove Mobile.

First solution: Basic install with BlackBerry® Desktop Manager, see page 28 (Recommended).

Second solution: Quick install with prompt command windows, see page 31.





First solution

Second solution

Note 1: When using BlackBerry ® Desktop Manager, you need a higher or equal version to V2.0 SP2 of Microsoft.NET Framework.

Note 2: For use SoMove Mobile your OS BlackBerry ® need to be higher or equal to v4.5

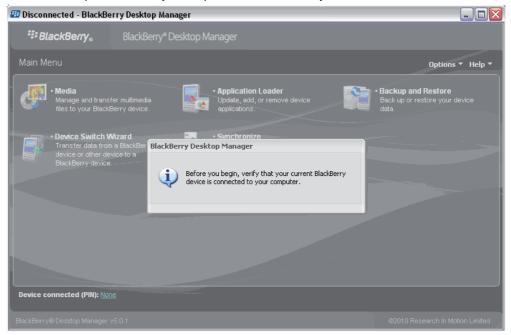
First solution: Basic install with BlackBerry® Desktop Manager

Install SoMove Mobile BlackBerry®

Once installed, BlackBerry® Desktop Manager is installed as a service or can be launched as a standard application from a shortcut on your desktop:



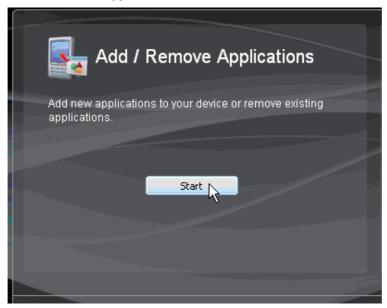
1. Connect cellphone to USB, your cellphone is now linked to your PC.



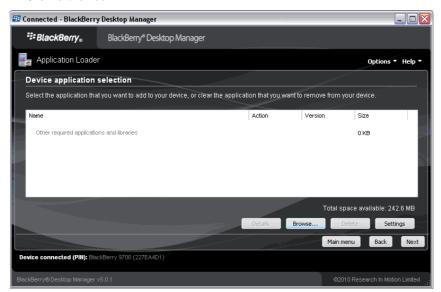
2. Select "Application Loader".



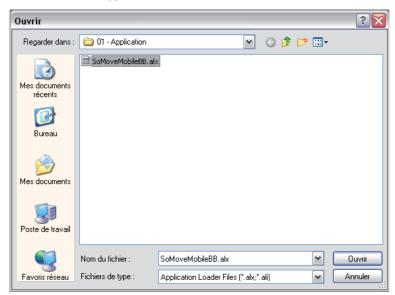
3. Add / Remove Applications and click to "start".



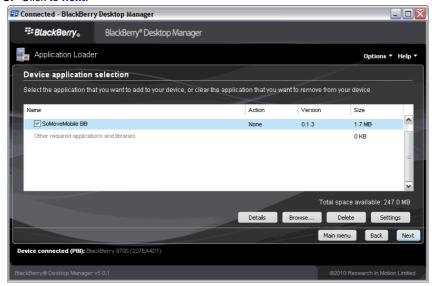
4. Click to browse...



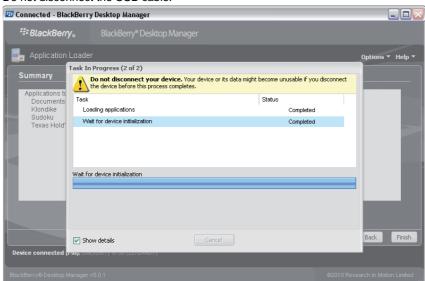
5. Check that the application " SoMoveMobileBB " is selected.



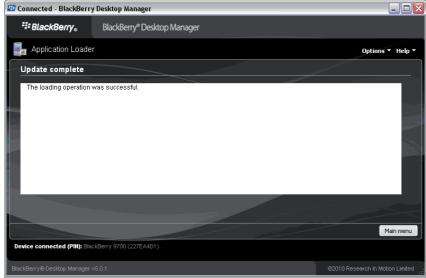
6. Click to next.



7. Waiting for loading application and device initialization. Do not disconnect the USB cable.



8. The loading operation was successful, SoMove Mobile is installed on your cellphone. You can disconnect the USB cable.



- 9. Launch SoMoveMobileBB from Applications into the cellphone.
- **10.** Select an installation folder in the cellphone.

You can start SoMove Mobile BlackBerry®.

Second solution: Quick install with prompt command windows.

Install SoMove Mobile BlackBerry®

- 1. Copy the files in the folder '..\01 Application' to the folder '..\02 Tools'.
- 2. Open the prompt command windows and write the destination directory for application « JavaLoader.exe » '..\02 Tools'.
- ${\bf 3.}\;$ Connect the USB cable on the cellphone to the PC.
- 4. In prompt command windows, write 'JavaLoader load SoMoveMobileBB.cod'.

```
C:\WINDOWS\system32\cmd.exe

D:\documents and Settings\ XXXXXX \Desktop\02 - Tools>JavaLoader load SoMoveMobileBB.cod

RIM Wireless Handheld Java Loader
Copyright 2001-2009 Research In Motion Limited
Connected
Loading SoMoveMobileBB Done
1459552 bytes sent at ~3868138 bps
Disconnected
```

Wait for the command execution and completion of treatment by cellphone. The application is in the folder "Application" of the cellphone.

- 5. You can disconnect the USB cable.
- 6. Launch SoMoveMobileBB from Applications into the cellphone.
- 7. Select an installation folder in the cellphone.

You can start SoMove Mobile BlackBerry®.

Your first steps with SoMove Mobile

4

What's in this Chapter?

This chapter contains the following topics:

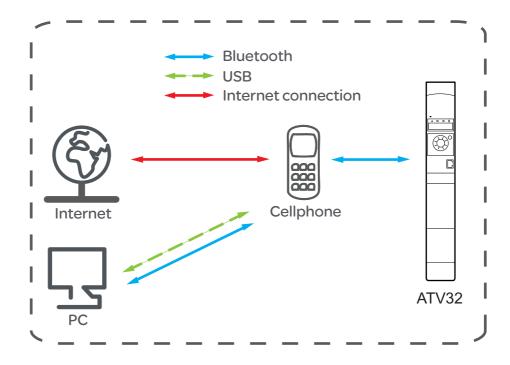
Topic	Page	l
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Introduction

Before starting SoMove Mobile, configure the communication link with the Bluetooth adapter.

Please follow the next instructions.

What do I need to use SoMove Mobile?



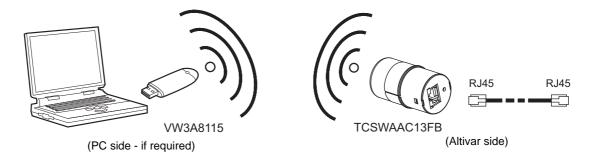
Note: To avoid communication interruptions, it is recommended to stay within 16 feet (5 meters) and remain clear of any obstacles that would block the Bluetooth wireless signal.

If Bluetooth is integrated in the product, refer to the drive-programming manual to find the PIN code.

• Example for ATV32. The pin code menu is available in the following menu: CONF- > FULL- > COM- > BTH- > BTPI [PIN code]

If Bluetooth is not embedded, here are possible options:

A Bluetooth adapter (commercial reference: TCSWAAC13FB), or the full connection kit for PC (commercial reference: VW3A8115) which is not Bluetooth enabled. (see page 22: Pairing the cellphone with Bluetooth adapter)



A DANGER

UNINTENDED EQUIPEMENT OPERATION

When several drives are equipped with Bluetooth adapter VW3A8114

· Check which drive is connected with the cellphone, by verifying the blue LED on the adapter.

Failure to follow these instructions will result in death or serious injury.

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Enabling authorizations

Once installed on the cellphone, you can access SoMove Mobile applications in the **Application** folder of the cellphone.

Before launching the application, select it and choose options: you must check the application access settings, this will allow the application to access the cellphone folder and to create data (create configuration files, etc).

Note:

- Both files (.jad and .jar) contained in the compressed file must be kept together in the same folder. If you use a direct **Send to**, you must select both files before right clicking them.
- If application access and connectivity authorizations are not set on Always allowed, you will be asked each time
 to confirm by Yes/No if you allow data access or connectivity.
- Enable all the items of the app. access > communication and app.access > data access settings.
- When enabling authorization, the cellphone must be run with its SIM card installed.

SoMove Mobile first launch

During the first launch, you will be requested to select the working folder where SoMove Mobile will store and load its configuration files. Confirm by Yes, and when done, you should see the welcome screen of SoMove Mobile.

In the cellphone, you will have to navigate into the predefined folders (which are not modifiable) before activating **Select**.

If you select a location in these predefined folders, you will get an error and you will be invited to select a new location.

5

What's in this Chapter?

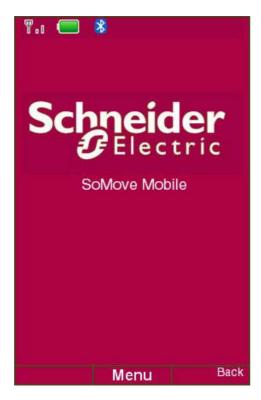
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Description of main parts

Once you have launched SoMove Mobile and enabled all the authorizations, you should see the welcome screen.

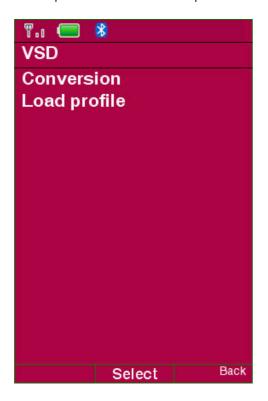
1. Use standard navigation of the cellphone for enter to the menu.



The application is made of 3 main parts:

- VSD: On line edition, saves or restores a configuration file.
- Conversion: compresses or decompresses the configuration file into a .jpg file. This is useful to exchange configuration files between cellphones by MMS on the GSM network.
- Load profile: this feature will be used with next versions of SoMove PC Software.

These 3 parts are detailed in the chapter "On line mode - Detailed information", page 38.



On line mode - Chart

SoMove Mobile Main menu > VSD

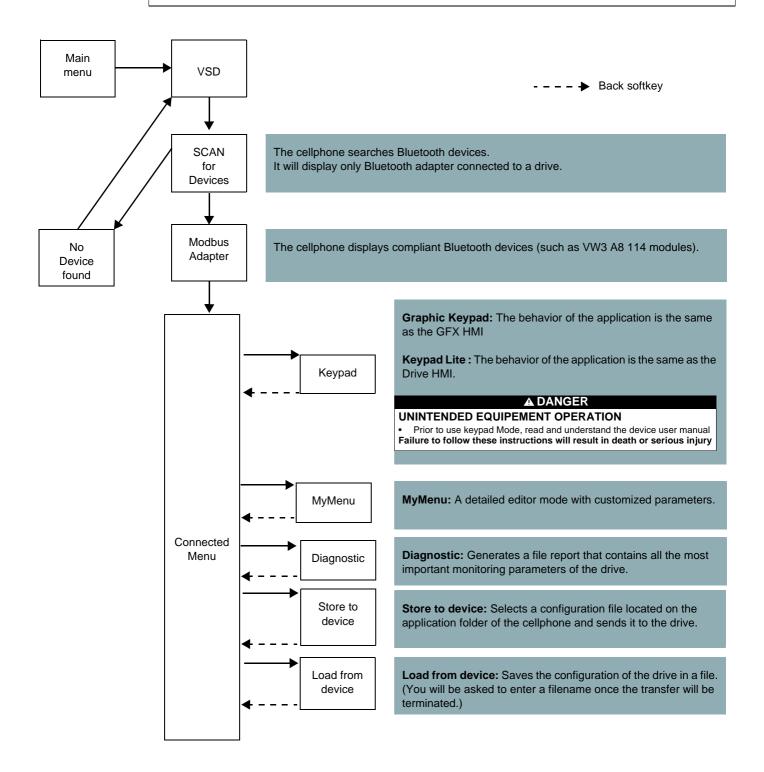
A DANGER

UNINTENDED EQUIPEMENT OPERATION

Before entering on line mode.

- Read and understand this manual before installing or operating SoMove Mobile.
- Any changes made to a device using SoMove Mobile must be performed by qualified personnel.
- Read and understand the device manuals before you load or duplicate the Configuration from one device to another device.
- Ensure that you select the Configuration suitable for your application.

Failure to follow these instructions will result in death or serious injury.



On line mode - Detailed information

	ATV12	ATV312	ATV32	ATV212	ATV61/71	ATV31	LXM32
Graphic Keypad			•	•	•		•
Keypad Lite	•	•	•				
MyMenu	•	•	•		•	•	
Diagnostic	•	•	•	•	•	•	•
Store to device	•	•	•	•	•	•	•
Load to device	•	•	•	•	•	•	•

Keypad menu

SoMove Mobile in keypad mode has the same behavior as Local HMI and Graphic display terminal.

AWARNING

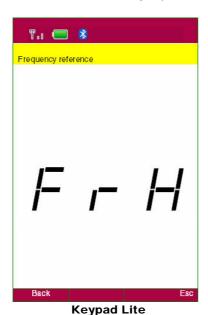
LOSS OF CONTROL

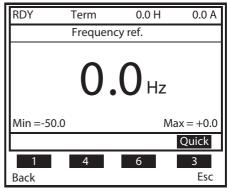
Depending on the configuration of the drive you are connected, the up/down keys of your mobile phone might modify the frequency reference of the drive.

 Read and understand the behavior of Local HMI described in the user manual of the drive prior to use the keypad mode.

Failure to follow these instructions can result in death, serious injury or equipment damage.

Example: on an ATV12 set in local mode, up/down keys of your mobile phone will modify the frequency refererence of the drive. It is necessary to press 2 seconds the "ESC" key to escape from this mode to the parameters menu.





Graphic Keypad

When entering the Keypad mode, the application behaves like the local HMI (or the graphic keypad).

- Use the cellphone pad up/down and enter keys to navigate into the menus or to modify values.
- The ESC soft key plays the same role as the ESC key of the drive.
- The Back soft key leaves the Keypad mode and goes back to the On line mode menu.

At the top of the screen, a full text description of the parameters is displayed.

This feature is active when the keypad displays a VSD parameter.

It is not active when the keypad displays values or menu titles.

On line editor

When entering the MyMenu mode, you will see a list of parameters.

To edit one parameter, just select it with the cellphone pad. A detailed description of the parameter is shown (code, description, unit, value).

Use the edit key to change the current value of the parameter.

My menu

This entry allows you to choose a predefined menu defines the content of the Mymenu setting. To create such profile configuration please refer to SoMove PC Software documentation.

Diagnostic

Diagnostic menu is used to generate a report that contains the most important parameter values.

The option enables you to save it in a .txt file. You can use this file later by transferring it from your cellphone to any correspondent. (PC and cellphone)

The file is saved in the cellphone application folder.

Store to device/Load from device

A DANGER

UNINTENDED EQUIPEMENT OPERATION

- Check that the modification of the configuration of the device is compatible with the wiring diagram used.
- Confirm that the correct program is in the device.

Failure to follow these instructions will result in death or serious injury.

The "Store to device" function is used to write a configuration file to the drive. This file can come from several sources:

- A previous "Load from device" operation,
- Imported from SoMove PC Software,
- Imported from the multiloader tool (via a PC). The files exported from SoMove and from the multiloader tool are consistent.

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