SIEMENS

MOBY E/F
MOBY STG Hand-Held Terminal

User's Guide Release 02/99

MOBY-Handterminal STG

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MOBY STG Hand-Held Terminal

User's Guide

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Safety Guidelines

This manual contains notices which you should observe to ensure your own personal safety, as well as to protect the product and connected equipment. These notices are highlighted in the manual by a warning triangle and are marked as follows according to the level of danger:

Note

draws your attention to particularly important information on the product, handling the product, or to a particular part of the documentation.

Qualified Personnel

The device/system may only be set up and operated in conjunction with this manual.
Only **qualified personnel** should be allowed to install and work on this equipment. Qualified persons are defined as persons who are authorized to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practices and standards.

Correct Usage

Note the following:

Warning

This device and its components may only be used for the applications described in the catalog or the technical description, and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens.

This product can only function correctly and safely if it is transported, stored, set up, and installed correctly, and operated and maintained as recommended.

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Disclaimer of Liability
We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcomed.

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1 General

The STG E/STG F is a powerful addition to the MOBY E/MOBY F identification systems. It is a mobile hand-held terminal based on the PSION Workabout mx and is designed for applications in the areas of logistics, distribution and service. In addition, it is an indispensable aid when commissioning and testing.

1.1 Application Areas

The MOBY hand-held terminal can be used with MOBY E and MOBY F. The included service and test program (STG) makes it easy to read and write all data memories of MOBY E or MOBY F.

In addition, it is very simple for customers to program their own applications on the hand-held terminal. A C library is available from Siemens for programming the hand-held terminal read heads. Implementation of applications in the areas of warehousing, logistics and commissioning is easy.
Very sturdy in design and protected against splashed water, the hand-held terminal can also be used in rugged environments. Its display is easy to read, and in dark areas, display illumination can be turned on.

1.2 Product Description

The MOBY hand-held terminal consists of a basic device and a read head from MOBY E or MOBY F. The basic device is a PSION Workabout mx. This device is the worldwide standard for hand-held terminals. In addition, the terminal includes a memory card with the MOBY service and test program including a user's manual. The memory card is inserted in the basic device. The service and test program starts automatically when the hand-held terminal is turned on. All data memories of MOBY E and MOBY F can be processed with the hand-held terminal.

The following functions can be executed.

- Read data from the MDS
- Write data to the MDS
- Delete the entire data memory (write with a filler value)
- Read and display the ID number of the MDS
- Represent and edit the data in hexadecimal and ASCII format
- Enable/disable password protection for all write-access functions
- Menu prompting in various languages (currently German and English)
- Store read MOBY data in files. Approximately 1.8 MB are available for this on the hand-held terminal.

The read/write head is screwed to the PSION basic device. The head is equipped with a serial TTL interface for communication with the basic device. The read head is powered by the basic device. The read/write head and the STG program can also be ordered separately so that customers can continue to use an already existing PSION Workabout or order a Workabout with a different interface and keyboard configuration directly from PSION.

The charging device (including 230 V plug-in power pack) for recharging the batteries must be ordered separately. The charging device is designed for mounting on walls or vehicles. When mounted on a vehicle, a special PSION cable is required for the charging function. See appendix A.

For applications, a C library is available to the user with the functions of the read head. Users can develop their own programs (cf. chapter 5.6) with the optional C development environment.

2 Commissioning the STG

2.1 Included Components

The STG consists of several components which are listed individually on the delivery slip.

Ordered Components	Order Number	Pack List	Pack Number
MOBY-hand-held erm na MOBY E	6GT2 303-0AA00	PSION Workabout mx	A5E00016735
		MOBY E read head	6GT2 303-1AA00
		Memory card incl. STG software and user's manual	6GT2 303-1CA00
		NiCd battery	A5E000 20084
MOBY-hand-held erm na MOBY F	6GT2 403-0BA00	PSION Workabout mx	A5E00016735
		MOBY E read head	6GT2 403-1BA00
		Memory card incl. STG software and user's manual	6GT2 303-1CA00
		NiCd battery	A5E000 20084

2.2 Assembly

Perform the following steps in the order shown below.

- Install button cell.
- Insert batteries.
- Insert the flash program memory with the STG application in the upper slot (A).
- Install read head, and screw down.

Assembly is complete.

2.3 Turning on the Device

Note

Before you turn on the device, insert the hand-held terminal in the charging device and allow it to charge for at least 14 hours.

After charging, the hand-held terminal is ready for use.

After the terminal is turned on, initial startup takes several seconds. The MOBY application is then started automatically. The editor of the STG appears. See chapter 3.

The device goes off automatically after no keys have been pressed for 5 minutes. When turned on again, the hand-held terminal continues with the same screen it was displaying before it was turned off manually or automatically. See chapter 5.4.

2.4 Setting the MOBY E/F Operating Mode

After the STG has been assembled and turned on for the first time, the hand-held terminal is set for MOBY E operation. If you are using another read head (i.e., MOBY F or MOBY E/SIM) with the hand-held terminal, you will have to change the operating mode. This is done by pressing the "Menu" key with the "EXTRAS/COMMUNICATION/Protocol" function.

2.5 User Interface

Use of the STG program on the hand-held terminal is described in chapter 3.

All functions of the STG program can be called with the "Menu" key.

3 Using the STG

3.1 Keyboard

The keyboard of the PSION is divided into 3 parts.

- 11 control keys directly below the display
- Numerical key block with 16 keys
- ASCII keyboard (30 keys) including shift key

Control keys: Contrast, display illumination, on/off, and cursor keys

Numeric input block with Enter key

ASCII keyboard plus shift and special function keys (Ctrl, ⌤)

3.2 Antenna on the Read Head and Antenna Field

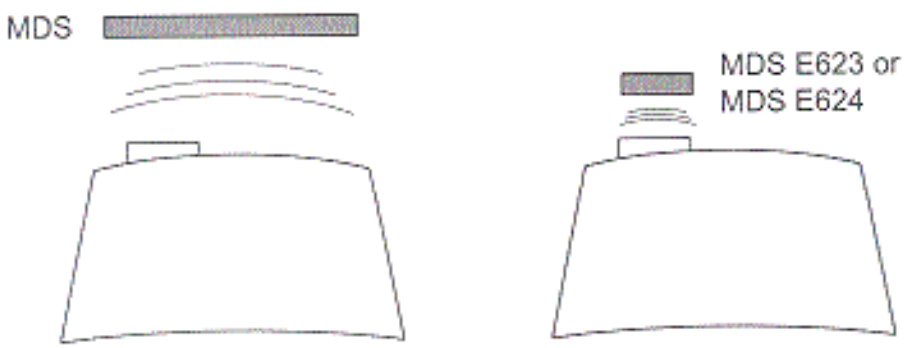
The antenna of the read head is located on the top of the hand-held terminal as shown in the figure below.

Reading an MDS

The various types of MDSs offer different ranges. The following table gives you an overview.

MOBY F	
MDS F125	80 mm
MDS F415	50 mm
MDS F124	60 mm
MOBY E	
MDS E600 (ISO card)	18 mm
MDS E611	30 mm
MDS E624 (button)	10 mm
MDS E623 (pill) [1]	5 mm (3 mm, when MDS is mounted in metal)

1 The pill can only be read on the head portion provided for this.



The antenna field for the STG read head

Antenna field for MOBY E

With the MOBY E read head, 2 antennas are integrated in the reader. These must be positioned on the read head based on which MDS you want to read. Remember that the MDS E623 can only be read on the antenna provided for this. See figure. The MDS E624 can be read on both the button antenna and the surface antenna.

3.3 Charging Function

The battery charging procedure is started as soon as the hand-held terminal is placed in the wall or vehicle holder. Charging is activated and indicated with a green LED.
An empty battery requires at least 14 hours for a complete charge.

High-speed battery charging

The batteries supplied by Siemens can be charged at high speed so that the MOBY hand-held terminal can be operated directly in the high-speed charging device available from PSION. A full charge takes 1 hour.