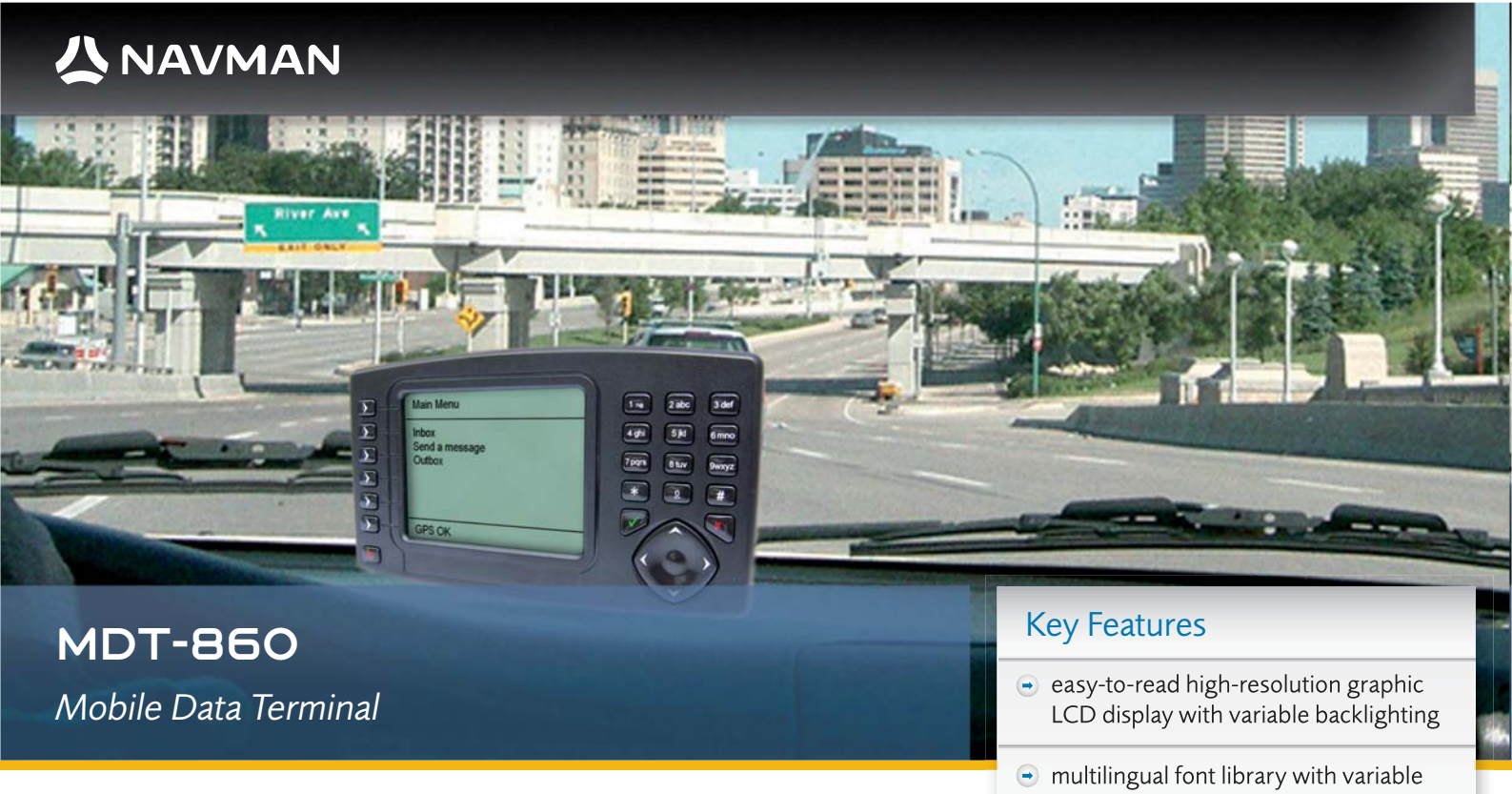
NAVMAN



MDT-860

Mobile Data Terminal

Text Communication and Control Terminal

The Navman MDT-860 Mobile Data Terminal enables the rapid development of a high quality customized product for solution providers. The MDT-860 provides a field proven, cost effective platform on which a vast array of products can be built, including: telemetry devices, modems, RFID readers, barcode scanners, swipe card readers, PLC's, printers, etc

The MDT-860 is a robust solution for sending, receiving and storing messages. The enclosure is designed to survive thermal extremes and vibration. A built-in power supply is provided that is capable of operating in a wide variety of vehicles.

Programmable Functionality

The MDT-860 enables flexible programming functionality. The programming capability extends to the LCD display, allowing you to create simple menus for pre-defined messages, and variable backlighting. A variable-volume annunciator can be programmed to alert operators to incoming messages.

The MDT-860 is up to the task of handling communication within a global economy. With a built-in multi-lingual font library, the MDT-860 enables communication via text messaging in countries around the world.

Software Development Kit

The MDT-860 Software Development Kit (SDK) offers system integrators a flexible environment for custom application development to meet specific mobile data requirements. The MDT contains robust Flash memory that is large enough to handle complex programming tasks.

Existing MDT-850 applications using the BDF font system can be easily modified with a supplied tool to make better use of the higher resolution screen and numeric keypad. All other functions remain unchanged.

The SDK comes with a conversion utility to allow applications requiring images to be updated to the new C-based format. A range of graphical operations are available, as well as support for bitmap fonts.

Key Features

- easy-to-read high-resolution graphic LCD display with variable backlighting
- multilingual font library with variable font sizes, types and text display functions
- MS Windows based Software Development Kit with programming capability available
- 248 KB battery-backed SRAM
- one RS232 port, one RS232/RS485
- 21 keys + 4-way cursor key (backlit)
- international PC AT keyboard interface (PS/2)
- +8 to 30V input voltage
- ability to withstand wide ranges of temperature, vibration and shock
- environmentally friendly RoHS

MDT-860

Product specifications

Display
- 58 x 77 mm (FSTN LCD)
- white LED backlight, user selectable level
- 320 x 240 pixels, 4 gray levels

Keypad
- 21 tactile keys and a 4-way cursor key, all with variable LED backlighting

External Interface
- two RJ45 connectors, (one RS232, one RS232/RS485 port).
- RS232/RS485 port - selectable through software
- supports port speeds up to 115200 BPS
- RJ45 cable supplied
- international PC AT keyboard interface via RJ25 connector. Adaptor for RJ25 to serial PS/2 connector available
- PS/2 subprocessor for increased throughput

System Memory
- 10 KB RAM (internal processor)
- 32 KB EEPROM
- 1664 KB Flash (as 2x 832KB pages)
- 248 KB Battery-backed SRAM (as 2x 124KB pages)

Annunciator
- piezoelectric
- frequency and volume adjustable

Electrical
- input voltage +8 to +30 VDC

Power consumption (with backlighting ON)
- 118mA @ 12V
- 65mA @ 24 V

Physical
- dimensions: 163 x 95 x 27 mm
- weight: 233 g

Environmental
- operating temperature: –25°C to +60°C
- storage temperature: –40°C to +85°C
- hymidity: < 95% RH non-condensing

Enclosure
- UV stabilized, high-temperature resistant

Compliance
- Complies with E-mark, CE, and C-Tick
- EN 55022 edition 1998
- EN 50082-1: 1997
- 47 Code of Federal Regulations Part 15 - Radio Frequency Devices (FCC, part B)
- The Motor Vehicle Directive 95/54/EC

Software Development Kit (SDK)
- downloadable from the Navman support website*
- supports both native MDT-860 and Windows emulation environment**

* developers must first be approved to access

** requires Borland C+ builder or Microsoft c++ compiler

SDK Library Contents
- basic I/O: For control of piezo speaker, backlight, etc
- display: LCD graphics, text functions and fonts
- timer: 15 managed 32-bit timers
- I2C EEPROM: To control the 32KB (K x 8) EEPROM chip
- keypad: Keypad handling functions
- serial: serial transmit, receive and data queue management
- NMEA: GPS NMEA string handling from GPS receiver
- GPS: Provides support for GPS strings, particularly the $GPRMC string.

Additional Utilities and Conversion Tools
- to compile and link applications, and create binary (BIN) files ready to be loaded to the MDT
- convert true type fonts to BDF fonts
- convert BDF fonts to the MDT font format
- image conversion to display on MDT LCD.

Related documents
- Data Sheet LA010802
- SDK Reference Manual
- NMEA Reference Manual MN000315

Mounting
- BK000095 Flexible suction windscreen mount supplied
- BK000025 Optional heavy duty PanaVise bracket

Ordering information
- AA002360-G OEM MDT-860 terminal, with:
  - keyboard adaptor RJ12 to PS/2
  - power and data cable RJ45 2.9m length
  - flexible suction windscreen mount 150mm long
- CB00054-G Optional MDT-860 Progamming Cable
- BK000025 Optional PanaVise mounting bracket

Contact your local distributor or Navman OEM:

www.navman.com (Commercial Division)