PMDPro Programming Software
Getting Started Manual

(Manual Part Number MAN-10F50-WIN)

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Manual P/N MAN-10F50-WIN

PMDPro

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Introduction

UTICOR Technology, L.P. is proud to present PMDPro Programming Software, Version 1.0 for Windows 98/NT4.0/2000/ME®/XP. This is a comprehensive interface program that allowings you to program UTICOR's PowerMarquees and PMD products.

With its high level programming, getting started with PMDPro is now easier than ever — even if you are a novice.This software replaces previous MS-DOS based 10F50 software used for programming UTICOR PMDs. In comparison to the old 10F50 software, the new Windows-based PMDPro is more powerful and much easier to use.

The major features of PMDPro are as follows:

- A Message Database makes the project easy to manage
- Powerful controls for each message, such as;
  - — Scrolling, blinking, chain messages, relay control, trigger, embedded data
- Message preview
- Schedule the time of day messages
- A variety of PLC interfaces (e.g., Allen-Bradley, Texas Instruments, GE, Modbus)
- Name your network
- Ethernet communication

PMDPro vs 10F50 software:

- PMDPro is a windows-based software. It will work on Windows 98/ME/NT 4.0/2000/XP Operating Systems.
- Easy to use.
- Easy to Manage – Message Database: Now, you can look at all the messages in a single Excel-like view. Now you can sort the messages based on various properties (e.g., grouping all the messages sent to a particular group/unit number or grouping chained messages separately).
- Message Preview allows you to "preview" your messages as they will look when displayed on different types of marquees.
- You can name your network (group and unit number). This would be easier while defining a message to be sent to Machine Shop – Milling Machine Marquee Display.
- Ethernet communication, You can communicate with a PMD Master / PowerMarquee over Ethernet right from your office computer.
- You can Export Messages to and Import Messages from Excel.

PMD Model Types & PLCs Supported

PMD 300 Series

PMD 300
The PMD 300 is a compact, 80-character vacuum fluorescent display. The standard model front panel measures approximately 14.4" x 6.2" and has built-in mounting studs for mounting. The half-inch high characters are arranged in four rows of 20 characters. The front panel also features three push buttons for operation of the display. The back panel contains the connectors for interfacing to the unit.

PMD 350
The PMD 350 is essentially a PMD 300 that directly interfaces to an Allen-Bradley PLC2, PCL3 or PLC5 through Remote I/O, Block Transfer or Data Highway Plus. Each of these modes operates independently from the other and the 350 can be configured to communicate using any one of them. It has all of the PMD 300 features, but the PMD 350 receives communication through twinaxial cable ("blue hose"). The PMD 300 Parallel Port, the associated Message Control Terminals, and the Power In/ Power Out Terminals have been removed and replaced by the PLC interface connector located on the bottom of the PMD 350. The same is true for the 360, 370 and 375 units.

PMD 360
The PMD 360 is also very similar to the PMD 300 and contains an interface to Siemens/ Texas Instruments Series 545 CPU (and the 560 and 565 CPUs used in conjunction with the SIEMENS/TI RCC module) that have the RS-485 remote I/O module. The PMD 360 will appear as an RBC (Remote Base Controller) to the SIEMENS/TI PLC. The PMD 360 can also listen to an existing RBC and use the information from it.

PMD 370
The PMD 370 is essentially a PMD 300 with an optional Modicon interface board. The interface board allows the unit to directly interface to a Modicon S908 RIO processor. The interfacing is accomplished by the PMD 370 emulating a D908 module in the remote I/O communication system.

PMD 375
The PMD 375 is a PMD 300 that interfaces to Modicon Modbus Plus local area network. The PMD is a node on the network with its own network address. The unit monitors PLC holding registers for message control and data set information.

PMD 380
The PMD 380 has all of the PMD 300 capabilities, but the 380 contains support for a Genius Network Adapter ("GENA") board that allows the PMD to be configured as a node on the Genius I/O system. The 380 can be configured as an I/O block on a Genius I/O system and will receive data from a bus interface module. A bus interface module is typically a PLC with a Genius bus controller module or a PCIM card installed in a personal computer. The PMD 380 will exist on the Genius I/O network as an I/O block broadcasting its inputs to the bus and reading the outputs sent to it by the bus controller.

PMD Message Controller
A PMD Message Controller is essentially a PMD 300 without the vacuum fluorescent display. It allows you to store message programs, log messages, operate slave displays, communicate via computer interface, and all of the other PMD 300 operating features except that the Message Controller requires a slave display to view its messages.

The Message Controller's front panel is very similar to the back panel of the PMD 300. In addition, the Message Controller has the PMD 300's three push buttons on its front panel as well. The Controller is designed for surface mounting; the back panel has slotted mounting holes for this purpose.
All features described in this manual pertain to the Message Controller except for items that apply to displaying messages on the unit itself or unless otherwise noted.

350 Message Controller
The 350 Message Controller is essentially a PMD 350 without the vacuum fluorescent display and has the attributes of the "PMD Message Controller," including the three push buttons on its front panel. It requires a slave display such as a PMD 3000 to actually display its messages.

360 Message Controller
The 360 Message Controller is also essentially its counterpart PMD 360 without the vacuum fluorescent display and has all of the attributes of the "PMD Message Controller," including the three push buttons on its front panel. It requires a slave display in order to view its messages.

370 Message Controller
The 370 Message Controller is a PMD 370 without the vacuum fluorescent display and has all of the attributes of the "PMD Message Controller," including the three push buttons on its front panel. The 370 Message Controller requires a slave message display to show its messages.

375 Message Controller
The 375 Message Controller is a PMD 375 without the vacuum fluorescent display and has all of the attributes of the "PMD Message Controller," including the three push buttons on its front panel. As with all message controllers, the 375 Message Controller requires a slave message display to show its messages.

380 Message Controller
The 380 Message Controller is a PMD 380 without the vacuum fluorescent display and features all of the attributes of the "PMD Message Controller," including the three push buttons on its front panel. The 380 Message Controller requires a slave display to see its messages as well.

PMD 400 Series

PMD 400
The PMD 400 is a compact, 80-character vacuum fluorescent display with 16 configurational function keys and LEDs, and a numeric keypad for complete operator interface. The .35"-high (9.1mm) characters are arranged in four rows of 20 character locations and can be seen up to eighteen feet away. The back panel contains the connectors for interfacing to the unit.

PMD 450
The PMD 450 is essentially a PMD 400 with an optional direct interface board that allows the unit to directly interface to an Allen-Bradley PLC2, PCL3 or PLC5 through Remote I/O, Block Transfer or Data Highway Plus. Each of these modes operates independently from the other and the 450 can be configured to communicate using any one of them. It has all of the PMD 400 capabilities, but the PMD 450 receives communication through twinaxial cable ("blue hose").

PMD 460
The PMD 460 is also very similar to the PMD 400 and contains an interface to Siemens/ Texas Instruments Series 545 CPU (and the 560 and 565 CPUs used in conjunction

with the TI RCC module) that have the RS-485 remote I/O module. The PMD 460 will appear as an RBC (Remote Base Controller) to the TI PLC. The PMD 460 can also listen to an existing RBC and use the information from it.

PMD 470
The PMD 470 is essentially a PMD 400 with an optional Modicon interface board that can directly interface to a Modicon S908 RIO processor. The interfacing is done through a coaxial connector on the bottom of the unit and is accomplished by the PMD 470 emulating a D908 module in the remote I/O communication system.

PMD 475
The PMD 475 is a PMD 400 that interfaces to Modicon MODBUS PLUS local area network. The 475 is a node on the network with its own network address and monitors PLC holding registers for message control and data set information.

PMD 480
The PMD 480 has all of the PMD 400 capabilities, but the 480 contains support for a Genius Network Adapter ("GENA") board which allows the PMD to be configured as a node on the Genius I/O system. The 480 can be configured as an I/O block on a Genius I/O system and will receive data from a bus interface module. A bus interface module is typically a PLC with a Genius bus controller module or a PCIM card installed in a personal computer. The PMD 480 will exist on the Genius I/O network as an I/O block broadcasting its inputs to the bus and reading the outputs sent to it by the bus controller.

P3000 Slave Marquee
The P3000 Slave Marquee is a cost-efficient, alphanumeric slave display. It is the newest of UTICOR's line of Programmable Message Displays (PMD) The P3000 is a large-character LED display that is available in four sizes. It will display messages sent to it from a PMD master display, a computer, or other intelligent device with serial communications capabilities. An optional Ethernet connector is also available.

The P3000 is a large LED slave display available in 2 widths and 2 heights for a total of 4 different sizes. The P3000 is a red LED (also available in High-Bright Red LED display and, in certain sizes, Tri-Color display) display that displays messages in 2", 4", 6", and 8" characters. The P3000 uses suspended mounting: the unit is suspended using a hole in the top of each end plate. The P3000 is composed of blocks of 2 sticks high, so it cannot have an odd number of sticks high.

Software Installation

System Requirements

- IBM or compatible PC (486 or better) with a mouse and separate serial port
- Color VGA display with at least 800 x 600 resolution (1024 x 768 recommended)
- Standard Windows 98/NT4.0//ME/2000® Requirements
- CD ROM Drive
- Microsoft Excel (if you would like to Export and/or Import Messages and Network details from PMDPro software).

Installation of PMDPro Software

Insert the CD on your CD drive and execute setup.exe. Follow the on screen instruction in the installation program.

Project Storage

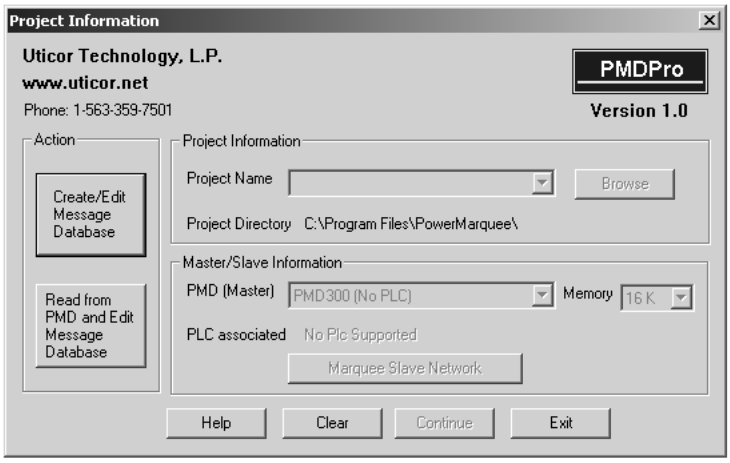
It is advisable to store the projects in a projects directory. A project directory is created when the software is installed. (C:\ Program FIles\ PMDPro\Projects is the default directory.) You may designate another directory where you would like to keep your projects.

Getting Started

Start Project

The first window that will appear when you run your PMDPro Programming Software is the Project Information screen. It provides you with information about the Version of the software and UTICOR's phone number and website. From here you may select whether to start programming the messages (new or open an existing project) or read project from the panel.

Help



For further information use the PMDPro Progamming Software Help topics.