MMI-240

Features

- 4 Line x 20 Character Display

- Bar Graph Capable

- Connects to The PLC'S Programming Port

- The Number of Messages To View Machine / Process Status is Limited Only by Memory

- Recipe Management with Retentive Internal Registers

- User Friendly Prompts to Change Data and Presets

- 20 Programmable (40 using shift key) Push-Buttons and LED's

- Setup software can convert projects from one PLC brand to another

Programmable Push Button and Message Panel

- Message Chaining and Linking

- Serial Printer Port, Beeper and Open Collector Output

DESCRIPTION
The new MMI-240 from KEP is a great addition to our line of operator interface products. Featuring a 4 line, 20 character LCD or VFD display, the MMI-240 allows the operator to view many parameters at one time. The MMI-240 communicates with the PLC through the PLC's programming port.

FUNCTION KEYS
The MMI-240 has 20 (40 using shift key) user definable keys which can be defined to do one of the following functions:
- Turn specified bits ON or OFF.
- Hold specified bits ON or OFF while the key is pressed.
- Toggle the status of a specified bit (like a selector switch).
- Edit or download constants and recipe values to the PLC.
- Trigger a message for data entry.
- Trigger a message chain or linked list useful for machine setup etc..

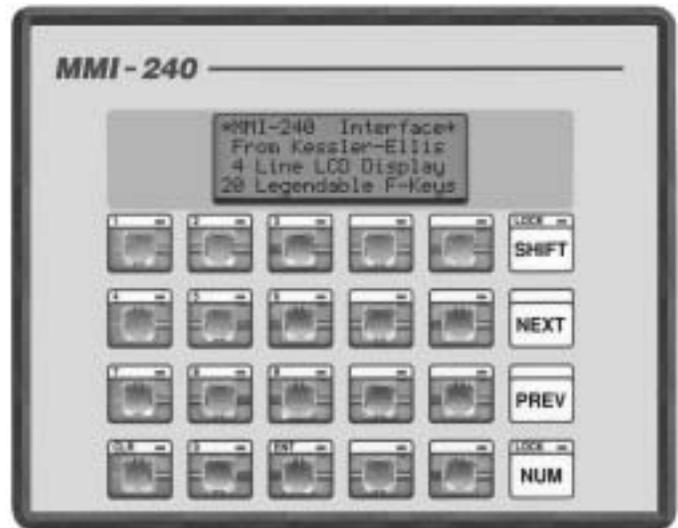Access to Function keys, can be password protected.

ANNUNCIATOR LEDs
The MMI-240 has 20 user definable LEDs for the purpose of annunciation. The LEDs are mapped to a register in the PLC. A Beeper is provided for annunciation.

ENTERING DATA -- The NUM key is used for changing bit, register, preset and accumulator values.

A new value may be entered into a register if:
a) The register is not Password protected; or
b) The Password is assigned a value of 0000.

Press the NUM key to change a bit status, register, preset or accumulator value while it is being displayed. You will notice that the last digit of the displayed value or status is flashing. This indicates that the unit is ready to accept a new value. Use the CLR key and Number keys to change the flashing value. Press ENT to accept the value.

If the register or bit is assigned write protection the unit will prompt the operator for the Write Password when the NUM button is pressed. The password is entered the same way that new data is entered as described above.

MESSAGES
The MMI-240 has a message capacity limited only by memory. A register called the Message Triggering Register (MTR) is defined in the PLC. The MMI-240 reads the contents of this register during every scan. The message corresponding to the number in the MTR is displayed on the MMI-240. A message can be assigned to the upper or lower lines on the MMI-240. Messages can scroll, flash, be displayed for a minimum time, and can be chained or linked to other messages. They can also be directed to print through the serial port.

A list of messages can be defined (called linked messages) and the operator can scroll through this list of messages simply by pressing the NEXT key.

Messages can have PLC data embedded in Decimal, Hex, Binary or BCD format. They can have text dependent on a bit status or can have data displayed as a bar graph making the unit very powerful.
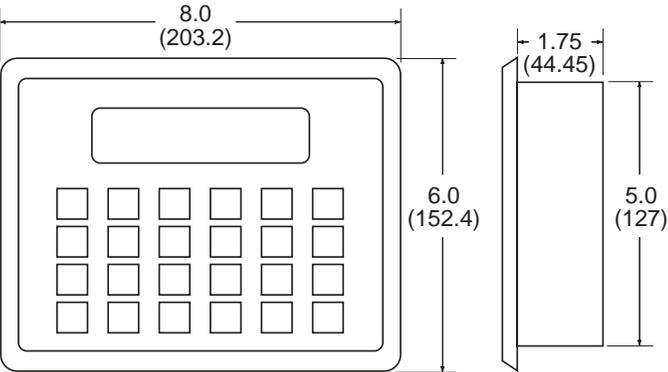
SETUP
The MMI-240 is setup by a PC using MMISOFT, a Windows™ based setup software package. Simply point and click and you are ready to go!

Text Interfaces

SPECIFICATIONS

Power	12 to 24 VDC, 6W Maximum
Display	LCD Backlit Liquid Crystal Display; 4 lines; 20 characters per line; character height is 0.2" VFD Vacuum Fluorescent Display; 4 lines; 20 characters per line; character height is 0.2"
Bezel	NEMA 4 / IP65 rated membrane keypad
Temperature	Operating: - 0 to 50 degrees C Storage: -40 to 90 degrees C
Humidity	10% to 90% (Non condensing)
Size	8" W x 6" H x 1.75" D (203.2 mm x 152.4 mm x 44.45 mm)
Panel Cutout:	7.1"W x 5.1"H (180.3 mmWx 152.4 mm H)
Communication	Using the programming or the standard communication port of the PLC
Memory	32k EEPROM
Open Collector O/P	24 Volts at 100 mA maximum
Immunity to ESD	8 kV Air, 6 kV Contact as per IEC801-2
Immunity to Transients	2 kV as per IEC801-4 2 kV 1 us Impulse Noise
Radiated Susceptibility	10 Volts/meter as per 1EC801-3
Emissions	EN5501,1 CISPR A
Approvals	CE Pending

Dimensions:

8.0
(203.2)

1.75
(44.45)

6.0
(152.4)

5.0
(127)

PANEL CUTOUT: 7.1 (180.3) X 5.1 (129.5)

All Dimensions in inches (mm)

MMI Setup Software Information

The Windows® based MMI setup software is a convenient way to setup this PLC Interface Product.

How To Order:

EXAMPLE: **MMI240**   **V**   **A**

Series
   MMI-240

Display Type
   L= LCD
   V=VFD

Options (add to end of part number)
   A = 115 VAC Power
   B = 230 VAC Power

For PLC Type
Use Smart cable part number as indicated below. Also refer to SMIC Cables in the Accessories Section of this catalog.
The MMI-240 will not operate without a smart cable and software.

EXAMPLE: **SMIC-**   **GE90-**   **05**

Series

PLC Type

AB500	AB SLC500 types with DH485 port
ABDF1	AB SLC500 5/03, 5/04 with DF1 port
ABMICRO	AB MicroLogix only
ABAIC	For use with AB AIC Modules
ARO	All Aromat FP1 Series
FUJI	Fuji Flex Series NB, NJ and NS
GE90	All GE 90 Series SNP Port
IDECM1	Idec M1 and FA2J
IDECM3	Idec Micro3 Series
K205	Koyo DL230, DL240, DL250
K305	Siemens Simatic 335, Koyo 340
K405	Siemens Simatic 425, 435, Koyo 440
KEY	Keyence KV 10,16,24,40 & 80, KV300
MOD	Modicon Micro 84; 884; 984; Open Modbus and J-Bus
MODMICRO	Modicon Micro 984
MITFX	Mitsubishi FX Series
MITFXO	Mitsubishi FXo only
OMCK25	Omron C Series, (Host link modules)
OMCH9	Omron CH Series
OMCQM	Omron CQM1 Series
SIS5	Siemens S5 Series, 95, 100, 102, 103, 115
SIS7	Siemens S7-200 Series
TSBEX	Toshiba EX Series & M Series Program Port
TSB485	Toshiba EX & M Series RS-422 Link Port
TSBT1	Toshiba T1 only
TSBT2	Toshiba T2 and T3
TSX07	Telemecanique TSX 07 (nano), TSX 37
TSX17	Telemecanique TSX 17
TSX47	Telemecanique TSX 47-40, TSX 47-20

Cable Length
05 = 5 feet

Accessories:
ZA9M9F -   Five feet of cable with DB9 male connector and DB9 female connector.
                (PC end, normally used for "AT" COM1)

ZA9M25F - Five feet of cable with DB9 male connector and DB25 female connector.
                (PC end, normally used for "XT" or "AT" COM2)

MMISOFT - Setup software for MMI-1XX, IMMI-2XX and IMC2

Our software makes Function Key setup a snap!
Create, Edit and View messages with Point & Click Ease!