



MP12 MICROPROCESSOR

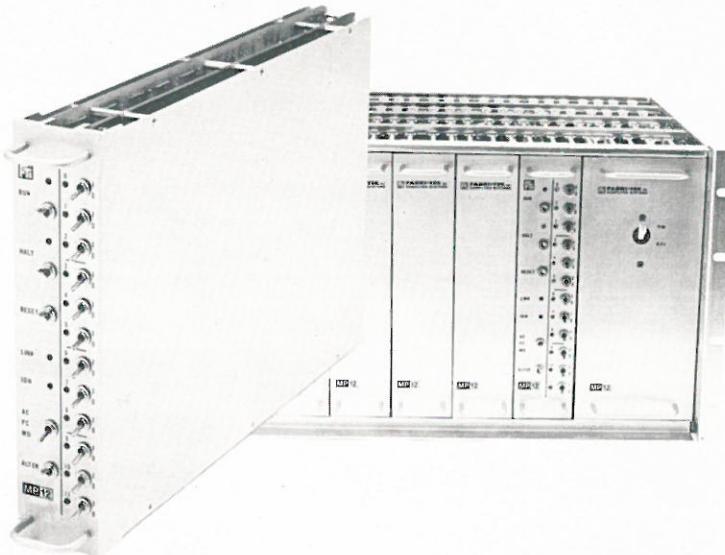


FEATURES:

- INSTRUCTION SET COMPATIBLE WITH PDP 8* – USERS CAN REDUCE COSTS WITHOUT REPROGRAMMING
- COMPLETE FUNCTIONAL PROCESSOR – NOT A DO-IT-YOURSELF KIT
- HIGH PERFORMANCE, HIGH RELIABILITY – ALL TTL
- NON-VOLATILE CORE MEMORY
- FASTER THAN MOS MICROPROCESSORS
- SINGLE +5V POWER SUPPLY AT LESS THAN 40 WATTS
- SMALL SIZE RUGGED MODULE 2" x 9.5" x 15"
- VERY LOW COST WITH "OFF THE SHELF" DELIVERY
- BASIC MP12 MICROPROCESSOR INCLUDES
 - OPERATOR'S CONTROL PANEL
 - INTERRUPT SYSTEM
 - DMA CHANNEL
 - PROGRAMMED I/O CHANNEL
 - TELETYPE INTERFACE
 - POWER FAIL - AUTO RESTART
 - 4K MEMORY
- OPTIONAL ROM MEMORY OVERLAY FOR DEDICATED APPLICATIONS
- EASY AND INEXPENSIVE TO INTERFACE – 22 LINE I/O BUS PROVIDES DMA CHANNEL, PIO CHANNEL, AND INTERRUPTS
- INCLUDES POWER FAIL – AUTO RESTART
- COMPREHENSIVE SELF-SUPPORTING SOFTWARE
 - ASSEMBLER
 - DEBUG
 - BINARY LOADER
 - SOURCE EDIT
 - UTILITY MATH SUBROUTINES
 - PROCESSOR DIAGNOSTIC PROGRAM
 - MEMORY DIAGNOSTIC PROGRAM
 - 360/370 CROSS ASSEMBLER

*TM

MP12



FUNCTIONAL

INSTRUCTION FORMAT: Single Word
INDEX REGISTERS: 8 (AutoIndex)
INDIRECT ADDRESSING: Single Level
FIXED POINT OPERANDS: 12 Bit Standard
with Software Double and Multiple Precision
FEATURES: Power Fail/Auto Restart,
Remote Control Inputs, Integral Teletype
Interface

MAIN MEMORY

TYPE: Magnetic Core
WORD SIZE: 12 Bits/Word
CAPACITY: 4096 Words
CYCLE TIME: 1.5 Microseconds

ENVIRONMENTAL

TEMPERATURE: 0 to 50 C
HUMIDITY: 90% Without Condensation

INPUT/OUTPUT

PROGRAMMED INPUT/OUTPUT: Up to 74,000
Words/Second
DIRECT MEMORY ACCESS: Latency Time
6 Microseconds Max, up to 666,000 Words/Second
I/O WORD LENGTH: Up to 12 Bits
INTERRUPTS: Single Level with Software Con-
trolled priorities

REQUIRES +5V[±] 2% VOLTS AT 8 AMP. MAX.

DIMENSIONS: 9.5" x 2.25" x 15.5"
WEIGHT: 6.5 Pounds with TTY Interface and
Control Panel

BARTON
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FABRI-TEK INC.
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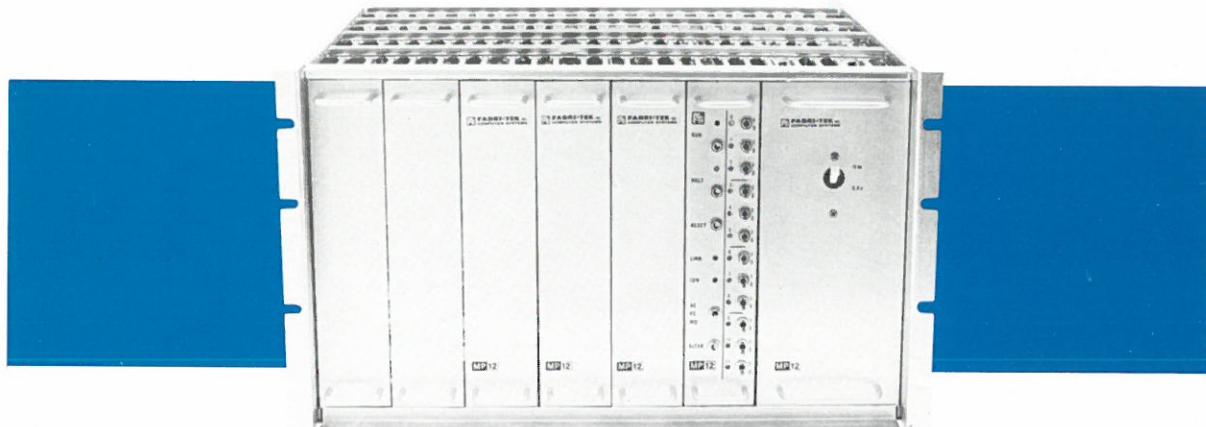
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MP12 MICROPROCESSOR SYSTEM



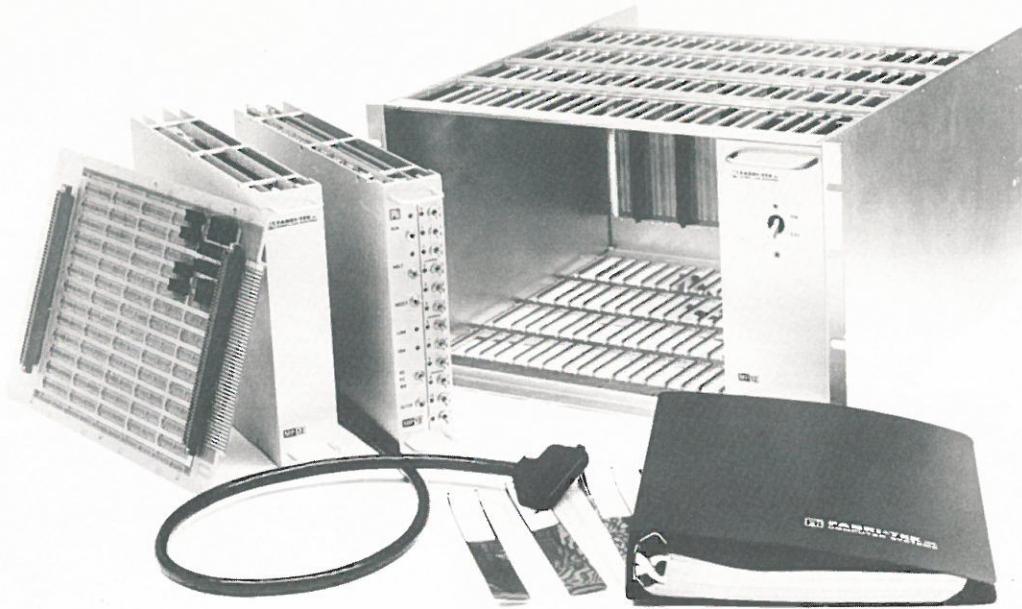
FEATURES:

- WIRELESS PACKAGING OF PLUGGABLE MODULES
- MODULES AVAILABLE ARE:
 - POWER SUPPLY
 - CARD RACK WITH PC BACKPANEL
 - WIREWRAP I/O INTERFACE CARD
 - I/O INTERFACE CABLES
- POWER SUPPLY INCLUDES REAL-TIME CLOCK
- POWER SUPPLY INCLUDES POWER DOWN-POWER UP SIGNALS
- POWER SUPPLY CAN BE OPERATED FROM 120 VAC LINE OR 8-16 VDC FOR BATTERY OR MOBILE APPLICATIONS
- INTERFACE CARDS AVAILABLE FOR:
 - TELETYPE (OPTIONAL WITH PROCESSOR)
 - ASYNCRONOUS COMMUNICATIONS (103 OR 202 MODEM)
 - GENERAL RS232 FOR CRT's ETC.

Interface Card cont.:

- FLOPPY DISK
- MAG TAPE CASSETTE
- HIGH SPEED PAPER TAPE READER
- HIGH SPEED PAPER TAPE PUNCH
- GENERAL PURPOSE (8 BIT INPUT, 8 BIT OUTPUT)
- DIGITAL INPUT (TTL OR OPTICAL ISOLATORS)
- DIGITAL OUTPUT (TTL OR RELAY CONTACT CLOSURE)
- ANALOG TO DIGITAL CONVERSION (16 CHANNEL, 12 BIT)
- DIGITAL TO ANALOG CONVERSION (2 CHANNEL, 12 BIT)
- DATA MODULE (4K x 12 CORE MEMORY)
- HIGH SPEED LINE PRINTER
- CHARACTER PRINTER
- 80 COLUMN CARD READER (WITH ASCII CONVERSION)
- MAGNETIC TAPE (9TK 800 BPI, IBM COMPATIBLE)
- MULTIPROCESSOR
- VERY RUGGED MODULAR PACKAGING

MP12



MICROPROCESSOR SYSTEM COMPONENTS

MP12 SPECIFICATIONS

FUNCTIONAL

PROVIDES: Card Rack, Interconnection Back-panel, I/O Interface cards, I/O Interface Cables, and Power Supply for MP12 Microprocessor and I/O Interface Cards

ELECTRICAL

Requires 120 VAC, 60 HZ, at 2 AMPS Max. or 8-16VDC at 8 AMPS Max., Power Supply Delivers up to 20 AMP. at 5V

MECHANICAL

I/O INTERFACE CARDS: 9.5" x 2.25" x 15.5"
CARD RACK: 19" x 10.5" x 17.5" (Fits standard 19" RETMA Rack)

POWER SUPPLY: 9.5" x 4.5" x 15.5"

I/O CABLES: 5,10,or 15 feet long

Cards can be plugged into the rack on .65" and .75" centers (total of 14 cards and one MP12 and one power supply in one card rack)

RACK TO RACK BUSS CONNECTOR AVAILABLE

ENVIRONMENTAL

TEMPERATURE: 0 to 50 C

HUMIDITY: 90% Without Condensation

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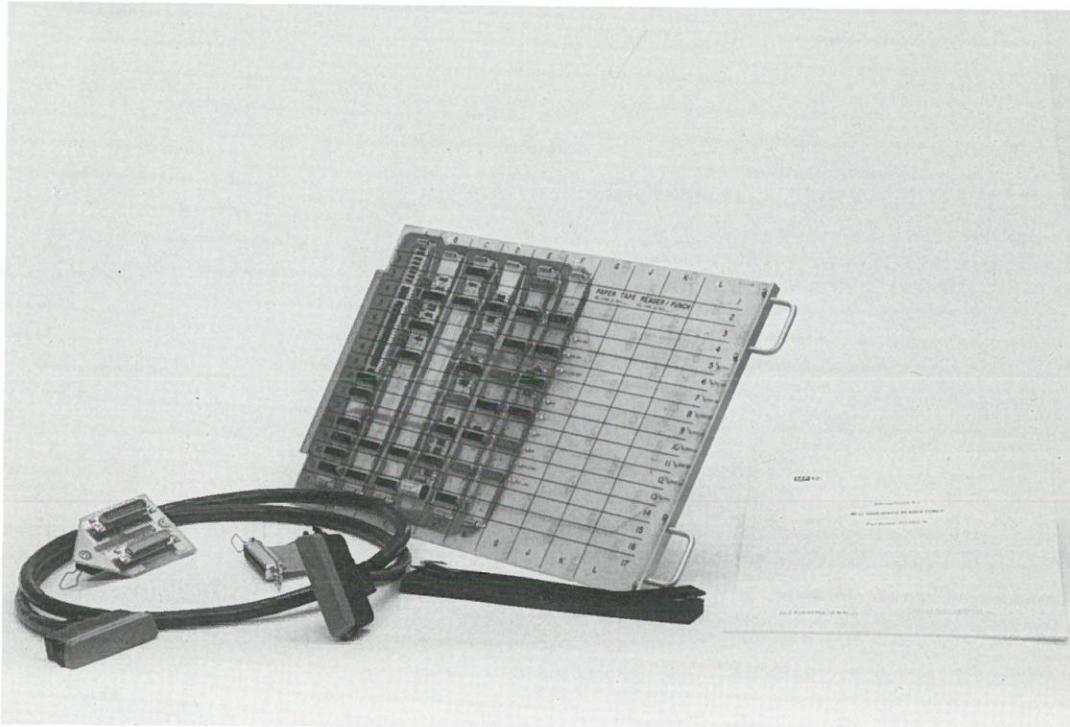
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MP12 READER/PUNCH INTERFACE



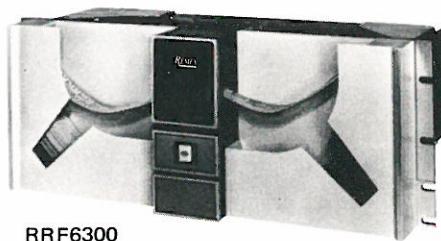
FEATURES:

- DELIVERED IN KIT FORM COMPLETE WITH PRINTED CIRCUIT INTERFACE CARD, CABLE, ADAPTERS, AND DOCUMENTATION PACKAGE
- INTERFACE CARD PLUGS DIRECTLY INTO THE MP12 CHASSIS ASSEMBLY
- AVAILABLE FOR REMEX MODEL RR-6300 PAPER TAPE READER, REMEX MODEL RP-1075 PAPER TAPE PUNCH, REMEX MODEL RA-6375 PAPER TAPE READER/PUNCH, AND REMEX MODEL RCS-1300 DUAL MAGNETIC TAPE CASSETTE SYSTEM
- LOW COST WITH "OFF-THE-SHELF" AVAILABILITY

PRINTED IN U.S.A.

PAPER TAPE READER INTERFACE KIT**PART NUMBER 117-0321-00**

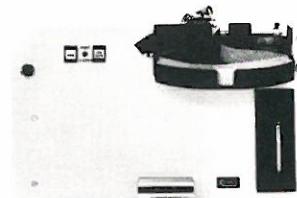
Interface Card and Installation Kit for Remex Model RR-6300 Paper Tape Reader---
The Remex Model RR-6300 Paper Tape Reader reads standard 8 channel punched tape
tape asynchronously at 300 characters per second. Tape handlers for both fanfold
(RRF6300) or reel to reel (RRS6300) operation are available. Installation Kit in-
cludes I/O Adapter (190-1716-00), 5 foot I/O cable (262-0318-05), Adapter to
RR-6300 Paper Tape Reader Connector (190-1780-01), and documentation (schem-
atics, operating instructions, and diagnostic software).



RRF6300

PAPER TAPE PUNCH INTERFACE KIT**PART NUMBER 117-0339-00**

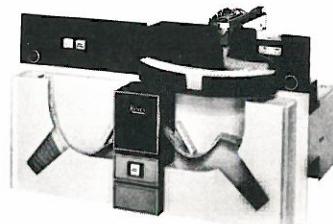
Interface Card and Installation Kit for Remex Model RP-1075 Paper Tape Punch --
The Remex Model RP-1075 Paper Tape Punch perforates standard 8 channel
punched tape asynchronously at 75 characters per second. Tape handlers for
both fanfold (RPF1075) or reel to reel (RPS1075) operation are available. In-
stallation Kit includes I/O adapter (190-1716-00), 5 foot I/O Cable (262-0318-05),
adapter to RP-1075 Paper Tape Punch Connector (190-1780-02), and documentation
(schematics, operating instructions, and diagnostic software).



RPF1075

PAPER TAPE READER/PUNCH INTERFACE KIT**PART NUMBER 117-0322-00**

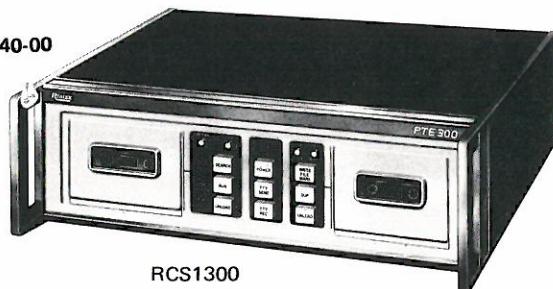
Interface Card and Installation Kit for Remex Model RA-6375 Paper Tape Reader/
Punch --- The Remex Model RA-6375 punches standard 8 channel punched tape
asynchronously at 75 characters per second and reads standard 8 channel punched
tape asynchronously at 300 characters per second. Tape Handlers for both fanfold
(RAF6375) or reel to reel (RAB6375) operation are available. Installation kit in-
cludes I/O adapter (190-1716-00), 5 foot I/O cable (262-0318-05), adapter to
RA-6375 Paper Tape Reader/Punch Connector (190-1780-00), and documentation
(schematics, operating instructions, and diagnostic software).



RAF6375

DUAL CASSETTE TAPE DRIVE INTERFACE KIT**PART NUMBER 117-0340-00**

Interface Card and Installation Kit for Remex Model RCS 1300 Paper Tape Em-
ulator. The Remex Model RCS 1300 Paper Tape Emulator is a Dual Cassette
Magnetic Tape System that is a functional replacement for a combination Paper
Tape Punch and Paper Tape Reader. Installation Kit includes I/O adapter
(190-1716-00), 5 foot I/O Cable (262-0318-05), Adapter to RCS 1300 Paper
Tape Emulator connector, and documentation (schematics, operating instructions,
and diagnostic software).



RCS1300

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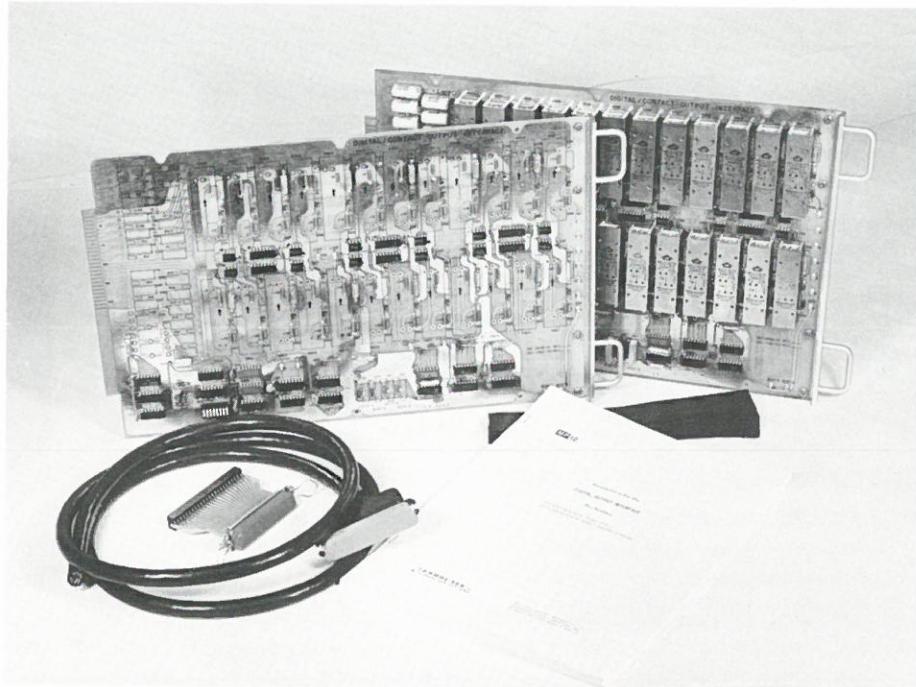
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MP12

DIGITAL INPUT INTERFACE DIGITAL OUTPUT INTERFACE



FEATURES:

- DELIVERED IN KIT FORM COMPLETE WITH PRINTED CIRCUIT INTERFACE CARD, CABLE*, I/O ADAPTER, AND DOCUMENTATION PACKAGE
- INTERFACE CARD PLUGS DIRECTLY INTO THE MP12 CHASSIS ASSEMBLY
- FOUR DIFFERENT INTERFACE CARDS AVAILABLE
 - TTL LEVEL INPUT
 - OPTICALLY ISOLATED INPUT
 - TTL LEVEL OUTPUT
 - CONTACT CLOSURE OUTPUT
- TWENTY FOUR INTERFACE SIGNALS PER INTERFACE CARD
- INPUT INTERFACE OPTIONALLY INTERRUPTS ON STATUS CHANGE

*117-XXXX-00 Kit does not include cable, 117-XXXX-10 Kit
Includes 10 foot long cable (Available separately as 262-0314-10).

DIGITAL INPUT INTERFACE KIT Part Number 117-0325-00

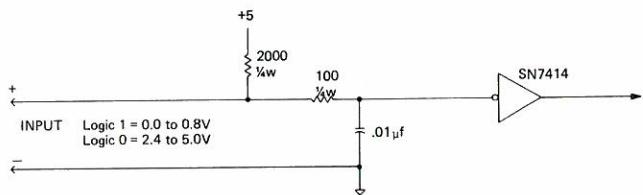
Interface card and installation kit for 24 TTL level input signals. The 24 inputs are divided into two independent 12 bit groups addressed as separate input devices. Inputs can be configured to generate a processor interrupt signal on positive transitions, negative transitions, both positive and negative transitions, or no interrupts at all by jumpers on the interface printed circuit card.

Installation kit includes:

I/O Adapter (190-1716-00)

Documentation (Schematics, Operating Instructions, and Diagnostic Software)

Input Circuit Configuration



DIGITAL INPUT INTERFACE KIT Part Number 117-0326-00

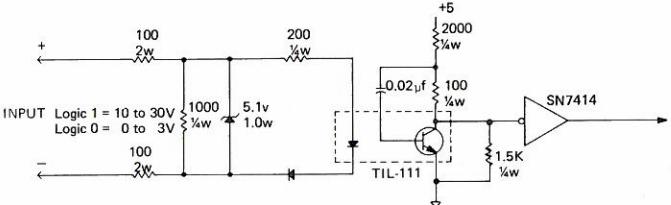
Interface card and installation kit for 24 optically isolated digital input signals. The 24 inputs are divided into two independent 12 bit groups addressed as separate input devices. Inputs can be configured to generate a processor interrupt signal on negative signal transitions, positive signal transitions, both positive and negative signal transitions, or no interrupts at all by jumpers on the interface printed circuit card.

Installation kit includes:

I/O Adapter (190-1716-00)

Documentation (Schematics, Operation Instructions, and Diagnostic Software)

Input Circuit Configuration



DIGITAL OUTPUT INTERFACE KIT Part Number 117-0327-00

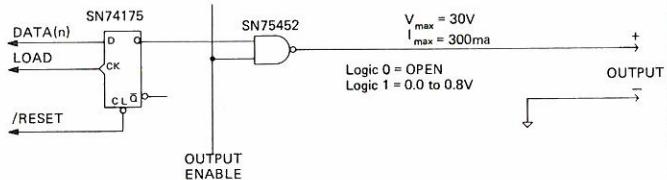
Interface card and installation kit for 24 TTL level output signals. The 24 outputs are divided into two independent 12 bit groups addressed as separate output devices. Outputs can be static signals or pulsed signals as selected by jumpers on the interface printed circuit card.

Installation kit includes:

I/O Adapter (190-1716-00)

Documentation (Schematics, Operation Instructions, and Diagnostic Software)

Output Circuit Configuration



DIGITAL OUTPUT INTERFACE KIT Part Number 117-0328-00

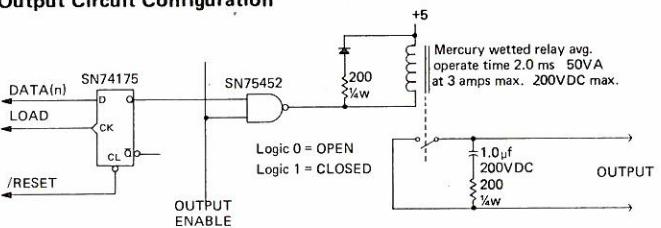
Interface card and installation kit for 24 contact closure outputs. The 24 outputs are divided into two independent 12 bit groups addressed as separate output devices. Outputs can be static signals or pulsed signals as selected by jumpers on the interface printed circuit card.

Installation kit includes:

I/O Adapter (190-1716-00)

Documentation (Schematics, Operating instructions and Diagnostic Software)

Output Circuit Configuration



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