VIP-MC IP Master Clock

Provides clock synchronization

- 1RU package
- PoE or local 24Vdc powered
- Supports DHCP or Static
- Connect and Go - Corrects 4 most utilized clock corrections upon powerup
- Control multiple clock type corrections simultaneously
- Simple wiring connectors supports multiple wire gauge sizes
- Web browser access to setup, clock sync modes, and real-time control functions
- Four form C isolated high voltage relay outputs synchronized clock correction (DC or AC powered clocks)
- 2-wire digital correction output for Valcom wired clocks configured for 2-wire protocol
- Automatic daylight savings time correction
- Synchronized clock correction for 58th / 59th minute type clocks (AC or DC powered clocks)
- NTP enabled for highly reliable and accurate time
- Clock correction for virtually any brand clocks and mode of correction
- Back-lit easy to read LCD display with simple membrane keypad
- Programmable from browser, front membrane keypad, or 102B Windows® based tool
- Access code to prevent unauthorized log-in
- Programmable options for 24 different types of clock correction synchronizations
- Easily replaces old or non-functioning master clocks
- IP retrofit applications utilizing existing synchronous correction clocks
- Provides precise Time zone-adjusted clock time-correction outputs
- Provides precise Time zone-adjusted relay correction outputs
- Provides precise UTC date and time as an NTP server to NTP client devices
- Provides precise UTC date and time, as a daytime server, to daytime client devices
- Provides 2-wire BCD output for BCD corrected clock types
- Programmable relay activates if NTP fails to get update
- Relay outputs can be controlled from the VE6025, VE6030-1, VE6090-1, and VEIP6K-1
- Two programmable switch inputs (Set system time to 2:00 a.m. or manual mode)
- Supports SSH, SCP, and HTTP
- Programmable options to transmit real time diagnostic syslog event messages for maintenance reports
- Programmable options to send device presence messages for 3rd party monitoring systems
- Each relay may be scheduled for up to 100 events per day to activate external equipment.

Description:

The Valcom VIP-MC IP Master Clock is designed to provide clock synchronization signals to Valcom and many other manufacturers' clocks. Signaling for IP network devices include Network Time Protocol (NTP) and Daytime protocol. Analog (wired) correction signals include 2-wire Digital Correction, 2-wire BCD Correction and many Relay controlled corrections. Relays not used for clock correction may be programmed to activate on a schedule. Up to 100 entries may be entered, for such things as triggering external tone generators, opening doors, etc.

Technical Specifications

SPECIFICATIONS

NOMINAL SPECIFICATIONS
Relay Current: 10 Amps @ 24Vdc or 250Vac

NOMINAL POWER REQUIREMENTS
Voltage: 24Vdc
Current: 300mA
PoE Ethernet Switch: 802.3af, Class 3

RELAY OUTPUT SPECIFICATIONS
10 AMPS / 4 (four) relays (Normally Open, Normally Closed, Common)

DIGITAL OUT SPECIFICATIONS
RS485I

TIME BASE
Highly accurate real time clock circuit, maintains time to +/- 2ppm

ENVIRONMENT
Temperature: 32 to 104 °F (0 to +40 °C)
Humidity: 0 to 85% non-precipitating

HOUSING AND FINISH
Smooth surface metal case with black finish

MOUNTING
Rack or shelf mount

DIMENSIONS AND WEIGHT
1.75in H x 19.00in W x 12.00in D
(4.45cm x 48.26cm x 30.48cm)
Weight: 3.70 lbs (1.67kg)
Shipping Weight: 9.00 (4.05kg)

ARCHITECTS AND ENGINEERS

The IP Master Clock, model VIP-MC, shall provide clock correction for up to 24 different types of clock correction synchronizations. The VIP-MC shall be PoE or local 24Vdc powered and support DHCP and Static IP addressing. The VIP-MC shall provide Connect and Go technology correcting the 4 (four) most utilized clock corrections upon power up without any additional programming changes. The VIP-MC shall provide simple wiring connectors that support multiple wire gauge sizes including 16 gauge. The VIP-MC shall provide clock control corrections for multiple type clocks simultaneously including 58th minute, 59th minute, BCD, and 2-wire digital.

Relays not used for clock correction may be programmed to activate on a schedule. Up to 100 entries may be entered, for such things as triggering external tone generators, opening doors, etc.

The VIP-MC shall provide browser access for set-up, clock sync types, and real-time control functions. The VIP-MC shall provide 2-wire digital correction output for Valcom wired clocks utilizing 2-wire protocols. The VIP-MC shall provide automatic daylight savings time clock correction twice yearly. The VIP-MC shall provide a back-lit easy to read LCD display with a simple membrane keypad and shall isplay the current time in hours, minute, and seconds (Example 10:35:57) AM/PM, day of the week (Example Tue), and date (Example 09/15/21). The VIP-MC shall provide 4 (four) form C isolated high voltage relay outputs with synchronized clock correction and support both DC and AC powered clocks.

The VIP-MC shall replace old or non-functioning existing master clocks and utilize existing or new clock power supplies and existing or new clocks.

The VIP-MC shall provide access codes to prevent unauthorized log-in and programming. The VIP-MC shall provide precise time-zone adjusted clock time correction outputs, precise time-zone adjusted relay correction outputs, precise UTC date and time as an NTP server to NTP client devices, and precise UTC date and time as a daytime server to daytime client devices.

The VIP-MC shall provide multiple options for programming including browser access, front membrane keypad, or the 102B Windows® based tool. The VIP-MC shall provide relay outputs which can be controlled manually, scheduled, or automated from the VE6025, VE6030-1, VE6090-1, and VEIP6K-1. The VIP-MC shall provide two programmable switch inputs with programmable options including set system time to 2:00 a.m. or manual mode.

The VIP-MC shall provide programmable options to transmit real time diagnostic syslog event messages for maintenance/operational reports and programmable options to send device presence messages for 3rd party monitoring systems. The VIP-MC shall support SSH, SCP, and HTTP.

Maximum dimensions shall be 1.75in H x 19.00in W x 12.00in D ((4.45cm x 48.26cm x 30.48cm). Weight shall be approximately: 3.7lbs (1.67kg).

Warranty information may be found on our website at www.valcom.com/warranty