**HIGHLIGHTS**

- Can act as a transmitter or repeater for Valcom Wireless Systems
- TCP/IP network connection
- Frequency tuning circuit to allow for time correction with changes in temperature
- Field–enabled Daylight Savings Time (when used as a primary master clock)
- Can act as an interface between existing systems to Valcom Wireless systems
- Can be used as a wired or wireless transceiver/repeater to Valcom Wireless systems
- Transmits the Valcom wireless signal to the Valcom Wireless analog clocks and Valcom Wireless digital clocks
- 915–928 MHz frequency–hopping technology
- Microprocessor based
- Can transmit up to 2000 meters in open space
- Loaded, half wave antenna
- Input sensitivity: –103 dbm
- Power output: 30 dbm (1 watt)
- Programmable relay output
- Input for interfacing with other systems such as 59 minute correction, 58 minute correction, National Time and Rauland, Dukane, etc.
- LED display for a clear, accurate readout
- Self testing mode allows the user to test the real time clock, output relay, LED segments, and inputs
- Simple interactive menu system
- Slim design makes the V-WMC versatile for mounting
- Analog and digital Valcom wireless clocks can be mixed on the same system
- Valcom digital input and output
- LEDs for indication of transmission or receipt of the Valcom digital signal
- 85—265 VAC input voltage making it accessible for American or European use
- Transmits wireless signal every minute
- Compact design makes the V-WMC ideal for mounting in hallways
- FCC Approved, part 15 Section 15.247
- Made in the U.S.A.

**DESCRIPTION**

Valcom’s innovative multi–functional transceiver is designed to wirelessly transmit data to the Valcom analog wireless clock and the Valcom digital wireless clock while receiving the time signal from an atomic clock web site via the Internet. Upon connection of the LAN cable, the atomic clock web site will start up automatically. The transceiver is also capable of receiving signals from all of the Valcom Master Clocks, as well as 59 minute correction, 58 minute correction, National Time and Rauland and Dukane. By utilizing one of the above mentioned inputs, the V-WMC can transform a wired system to a wireless system. The V-WMC comes equipped with a programmable auxiliary relay that can be programmed anywhere from 1—99 seconds. By utilizing this relay, interfacing with other systems via once a day closure and interfacing with intercom systems becomes effortless. In addition to the aforementioned features, the transceiver can act as a repeater while receiving a signal wired or wirelessly from the main transmitter. The V-WMC has a temperature controlled time base allowing calibration of the time base during variants in temperature. The V-WMC is very user friendly and easy to operate via two (2) switches. The V-WMC has diagnostic capabilities which makes it easy to maintain. The V-WMC can also interface with the Valcom Analog clocks via the V-VCU, as well as the Valcom digital clocks. The V-WMC works on 915 - 928 MHz frequency–hopping technology that allows for a better and clearer signal even if there is interference in one of the frequencies. The V-WMC is powered using 110 volts / 60 Hz and 220 volts/50 Hz. The V-WMC is FCC approved, part 15 Section 15.247.
**SPECIFICATIONS**

- **Time Base:** Quartz crystal
- **Frequency Aging:** 5 ppm/year
- **Frequency Stability:** 5 ppm/year
- **Input voltage:** 85 - 265 VAC, 50/60 Hz
- **Power Input:** 35 watts
- **Input frequency:** 47 - 440 Hz
- **Input sensitivity:** -103 dbm
- **RF signal output:** 30 dbm (1 watt)
- **Display:** 0.56” seven segment LEDs
- **Display format:** 24 hour
- **Battery backup:** Ten (10) years
- **Temperature range:**
  - Operating: 0°C - 50°C
  - Storage: -15°C - 70°C
- **Signal input:** 59 minute, 58 minute, National Time and Rauland sync wire, once a day
- **Signal output:** Valcom Digital and Wireless Communication
- **Internet connection:** TCP/IP LAN port
- **Output relay closures:**
  - Duration: 1 - 99 seconds
  - Programmable time: HH:MM:SS format
  - Contact rating: 8 amps, 0 - 220 Volts
- **Transmission frequency:** 915 - 928 MHz
- **Calendar:** Built-in calendar with leap years and daylight savings
- **Programmable operation:** Via two (2) switches
- **Mounting:** Wall mount
- **Color:** Gray
- **Housing:** Smooth surface metal enclosure
- **Enclosure size:** (LxWxH) 2.75” x 6.75” x 7.5”
- **Shipping weight:** 3.5 lbs.
- **Shipping box dimensions:** 15.25” x 10.13” x 5”
- **Antenna length:** 7”
- **Compliance:** FCC Compliant. FCC part 15 Section 15.247

**ARCHITECTURAL AND ENGINEERING SPECIFICATIONS**

The Master Clock / Transmitter shall be the V-WMC. The V-WMC shall be capable of transmitting data to the Valcom wireless analog clocks and the Valcom wireless digital clocks. The V-WMC shall be capable of receiving a signal from an atomic clock web site via the Internet. The V-WMC will be capable of receiving signals from all Valcom Master Clocks via Valcom digital, as well as 59 minute correction, 58 minute correction, National Time and Rauland, and Dukane. The V-WMC shall have the capability of transferring a wired system into a wireless system. The V-WMC shall have a programmable auxiliary relay and shall be programmed anywhere from 1—99 seconds. Upon utilization of the relay, the V-WMC will be capable of interfacing with a once a day closure or interfacing with intercom systems. The V-WMC shall be capable of acting as a repeater while receiving a signal wired or wirelessly from the main transmitter. The time base shall be temperature controlled allowing calibration of the time base during temperature changes. The V-WMC will have two (2) switches for operation of the menu system. The V-WMC shall be capable of interfacing with the Valcom analog clocks via the V-VCU and the Valcom digital clocks via two (2) wire digital communication. The V-WMC shall utilize 915–928 MHz frequency-hopping technology. The V-WMC shall be FCC compliant, part 15 Section 15.247.