

## ANALOG CLOCKS

### FEATURES AND BENEFITS:

- Microprocessor based movement
- Two (2) or Three (3) wire correction
- Automatic communications protocol identification for
  - Valcom 2 wire digital protocol
  - Synch-wire 59<sup>th</sup> minute correction
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  - Synch-wire National Time and Rauland
- Diagnostic LEDs for ease of maintenance
- Fully automatic plug and play – no settings required
- Built-in self-test function
- Automatic polarity detection
- Quick correction (Valcom 2-wire)



- Energy efficient
- UTP connectivity (24V only)
- Plug in Molex connectors
- Low profile
- Metal case with polycarbonate crystal
- Available in 110 VAC or 24 VDC
- Made in U.S.A
- UL, cUL, and FCC approved

### DESCRIPTION:

Valcom's state-of-the-art analog clocks incorporate multi-function software, which allows the customer to select communication protocols in the field. This feature provides significant flexibility. The microprocessor-based movement allows you to select anything from a basic sync-wire protocol to a technologically advanced 2-wire digital communication protocol. The clocks incorporate our Valcom 2-wire digital communication protocol, which transmits a stream of data, which constantly checks and corrects every clock in the system, thus guaranteeing that the clocks will never deviate from each other. This data streaming technique makes it possible to mix power and communication signals on the same two wires, thus providing for immediate time correction without replacing existing wiring. The low wire count makes Valcom clocks ideal for renovation projects as well as new installations. Valcom slave clocks are compact, energy efficient and reliable. Valcom clocks save up to 85% of the energy used by other clock models on the market. The clocks are available in 12" and 16" round cases. The low profile, shallow metal cases eliminate the need for custom back boxes. By using electronic components and eliminating moving parts, Valcom analog clock lines have much less chance of mechanical failure.

### SPECIFICATIONS:

**Time Base:**

Internal

**Voltage Input:**

12 – 24 VDC  
85 -135vac/60 Hz

**Average Current Consumption:**

20 mA @ 110Vac  
15 mA @ 24VDC/Vac

**Correction Current:**

10 mA

**Color:**

Black

**Dimensions:**

12-inch clock: 12.81" diameter/ 1.2 " depth  
16-inch clock: 16.81 " diameter/ 1.6" depth

**Dial:**

Durable polystyrene

**Case:**

Black metal

**Crystal:**

Shatterproof, side-molded polycarbonate

**Hand Tolerance:**

Hour and Minute Hand +/- ¼ second  
Second Hand +/- ½ second

**Operating Temperature:**

32° to 130° F (0° to 45° C)

**Shipping Weight:**

12" – 4 lbs    16" – 6 lbs

**Compliance:**

UL, cUL, and FCC approved

# ARCHITECT & ENGINEERS SPECIFICATIONS VALCOM ANALOG CLOCKS

## Field Selectable Analog Slave Clock

The secondary clock shall be a Valcom analog clock with field-selectable correction protocols. The clock shall have plug and play features with no settings required. The clock shall feature automatic polarity detection, automatic protocol detection and self-diagnostics. It shall be designed for use with either a 2-wire or 3-wire system using the Valcom V-D11025 or the V-D11040 series digital clocks, and/or the Valcom MultiPath, Class Connection or V-2924 Communications System. The Valcom Communications System can regulate the clocks by Valcom 2-wire digital communication protocol or via 2-wire/3-wire protocols. Upon receipt of digital signal, the clock shall immediately self-correct. The secondary clock shall also accept sync-wire communication protocols with hourly and daily correction. The secondary clock shall have a microprocessor-based movement. The clock shall have a low-profile/semi-flush smooth surface metal case. The crystal shall be shatterproof polycarbonate with no visible molding marks. Glass is unacceptable. The clock shall have black hour and minute hands and a red second hand. The clock shall have U.L., c.U.L. and F.C.C. compliance's.

## Limited Warranty

Valcom, Inc. warrants its products to be free from defects in materials and workmanship under conditions of normal use and service for a period of one year from the date of shipment. The obligation under this warranty shall be limited to the replacement, repair or refund of any such defective device within the warranty period, provided that:

1. inspection by Valcom, Inc. indicates the validity of the claim,
2. the defect is not the result of damage, misuse, or negligence after the original shipment,
3. the product has not been in any way repaired by others and that factory sealed units are unopened.  
(A service charge plus parts and labor will be applied to units defaced or physically damaged).
4. freight charges for the return of products to Valcom, Inc. are prepaid,
5. all units "out of warranty" are subject to a service charge. The service charge will cover minor repairs  
(major repairs will be subject to additional charges for parts and labor).

**This warranty is in lieu of and excludes all other warranties expressed or implied, and in no event shall Valcom, Inc. be liable for any anticipated profits, consequential damages, loss of time or other losses incurred by the buyer in connection with the purchase, operation or use of the product.**

This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with the F.O.B. point.