

# NetClock® WiSync™

## Wireless Clock System

Distributed by  
**TELNET**  
**NETWORKS**  
**Managing Network Performance**  
**800.561 4019**  
**www.telnetnetworks.ca**



### Features

- Synchronize clocks to computer networks, voice and video systems, telephony, security systems, building automation, access control, fire alarms, electronic record systems, etc.
- Wireless, battery-powered analog (24/110 VAC also available)
- 2.5" and 4", 4- and 6-digit clocks
- Each clock acts as a transmitter and a repeater for a robust wireless mesh network
- Proven 915 – 928 MHz frequency-hopping technology for clear signal and to eliminate any interference issues
- No FCC license required in North America (contact local regulatory authorities for other regions)
- Made in the USA

### Applications

- Hospital
- Higher Education campuses
- Manufacturing/Industrial complexes
- Government buildings
- Transportation centers

Spectracom's wireless clock system offers a unique time display option for organizations with time-sensitive operations. The system uses the security and reliability-leading NetClock®/GPS network time server as its master clock for traceability to UTC (Coordinated Universal Time). Legally Traceable Time® from the NetClock is broadcast by a transmitter, synchronizing the displays to all other network systems and devices throughout the facility.

This innovative system offers an easy, cost-effective solution by providing accurate, synchronized time displays without expensive, disruptive installation procedures. Because there are no wiring requirements, install times are drastically reduced, and it is ideal for renovation projects – no need to worry about asbestos issues or messy, in-wall electrical installation work – as well as new construction.

The system uses a rack-mount network-based transmitter with a remote antenna that works much like an IEEE-802.11 wireless router. It receives its time from a network time server via NTP (or from RS-485 from a NetClock® via a twisted pair). It transmits a time signal every minute. Once a Spectracom clock receives and synchronizes to the signal, it becomes a transmitter, creating a robust and efficient wireless mesh network. Such a system provides significant advantages by improving signal strength and coverage territory as more clocks are added.

The system is easily scalable as additional needs develop in the future. In applications across a large campus, Spectracom offers an optional repeater to maintain the signal. Spectracom's wireless clocks transmit a stream of data every minute from powered versions and every two hours in normal mode (5 year life) or every four hours in economy mode (8 year life) from battery powered units.

New features include greater clock sensitivity for longer transmission range, enhanced clock diagnostics, and network-manageable transmitter. All new system components are backwards compatible with previous generations.

**Performance**

**Operating Frequency**

915 – 928 MHz frequency-hopping technology.  
No FCC license required.

**RF Power Output**

**Transmitter:** 30 dBm  
**Repeater:** 30 dBm  
**Clock:** 8 dBm

**Input Sensitivity**

-103 dBm

**Transmitter and Repeater Specifications**

**Antenna**

remote (transmitter), integral (repeater)

**Range**

6,500 ft. in open space

**Power**

**Transmitter:** 85 – 265 VAC, 50 – 60 Hz (power cord supplied)  
**Repeater:** 85 – 230 VAC, 50 – 60 Hz, hardwired (power cord not supplied)

**Size/Weight**

**Transmitter:** 11" L x 17.5" W x 1.75" D/6.5 lbs.  
**Repeater and remote Antenna:** 11" L x 8" W x 1.7" D/4 lbs.

**Display (transmitter only):** .56" 6-digit LED

**Temperature Range:**

Operating: 0° C to +45° C  
Storage: -15° C to +70° C

**Warranty**

Two-Year Limited

**Clock Specifications**

**Analog**

- 12" or 16" diameter clock face
- Dial: Arabic numerals, 12- or 24-hour format, durable polystyrene
- Housing: black smooth surface ABS
- Crystal: shatterproof, side-molded, polycarbonate
- Hands: red second hand; black hour and minute hands
- Time to synchronize hands: 5-minute maximum
- Quiet operation
- Diagnostics: rear panel test buttons and LED indicates last sync, signal strength, mechanical test, battery level
- Battery versions: 2 "D" cell (included), 5-yr normal mode, 8-yr economy mode, provided good reception
- AC versions: hardwired (power cord not supplied)

**Digital**

- 4 or 6 red digits, 2.5" or 4.0"
- 100 ft. visibility (2.5")
- 250 ft. visibility (4.0")
- 12- or 24-hour mode
- 2 brightness settings
- Loss of communications alert
- Time offset in each clock for "zone clocks" (6-digit clocks only)
- Hardwired (power cord not supplied)

**Analog Clock Size (Housing Dimensions)**

**12" Analog:**  
12.65" Ø x 2.18" D

**16" Analog:**  
16.65" Ø x 2.18" D

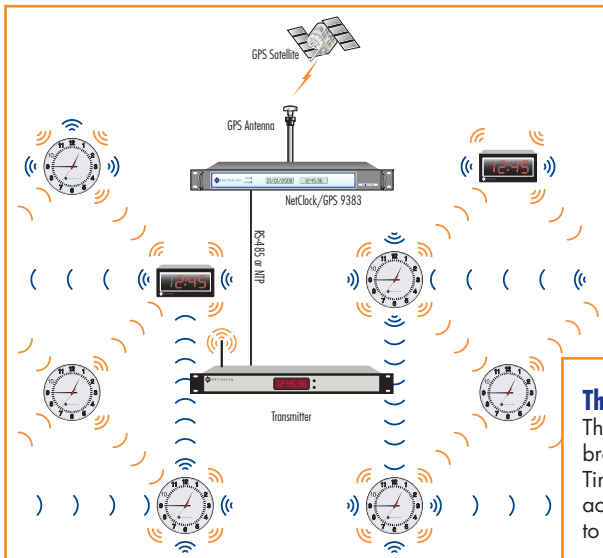
**Digital Clock Size (Housing Dimensions)**

**2.5", 4 Digit:**  
11.06" L x 5.35" W x 3.90" D

**2.5", 6 Digit:**  
14.41" L x 5.35" W x 3.90" D

**4.0", 4 Digit:**  
14.10" L x 7.56" W x 3.86" D

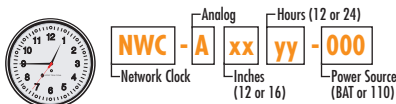
**4.0", 6 Digit:**  
19.26" L x 7.56" W x 3.86" D



**The Wireless Mesh Time Network**

The Transmitter wirelessly broadcasts Legally Traceable Time® to the clocks. Each clock acts as a repeater and transmitter to the other clocks in the network.

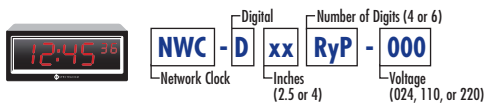
**Ordering Information**



Example:

NWC-A1224-BAT = Battery-operated, 12-Inch, 24-Hour Analog Clock

NWC-A1612-110 = 110V, 16-Inch, 12-Hour Analog Clock



Example:

NWC-D25R6P-024 = 2.5-Inch, 6-Digit, 24V Digital Clock

NWC-D40R4P-220 = 4.0-Inch, 4-Digit, 220V Digital Clock

**Transmitter:** TCVR-NTP-2000

**Repeater:** RPTR-RS-2000

**Master Clock:**

NetClock network time server:  
consult factory for options



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