



**Pyramid**  
Time Keeping Made Simple

# Wireless Digital Clocks

USER GUIDE



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### OVERVIEW

This Product is part of a centrally controlled messaging system.

A typical system consists of one or more servers that transmit time and other information in wired or wireless format. The servers can synchronize to various time standards. The servers can get their time from other Pyramid servers, NTP via the Internet, your Intranet, and GPS.

The servers transmit data wired or wirelessly to various devices including, but not limited to:

DEVICE	RECEIVES DATA WIRED OR WIRELESSLY
Analog Clocks	Time
Digital Clocks	Time, Date, Fire, Code Blue
Message Boards	Time, Date, Informational and Emergency Messages
Time Recorders	Time, Date, Setup Information
Bell Systems	Bell Signaling

*(NOTE: In some installations, receivers with a transmitter option may be enabled to become low power repeaters.)*

### INSTALLATION

1. Choose a location for the Clock (always indoors in a dry location).
2. If line is powered, it should be hardwired into a standard 1 or 2 gang electrical back box by a qualified electrician.
3. The optional mounting brackets have holes that align with the back box to facilitate direct attachment.
  - There are several mounting bracket options:
    - Tamperproof Surface Wall Mount Bracket Part #42247
    - Tamperproof Back-to-Back Ceiling Mount Bracket Part #42322
    - Tamperproof Back-to-Back Wall Mount Bracket Part #42320 or Part #42321

*(NOTE: Instructions for these brackets are included in the bracket kit. See the printed mounting template for details. If no bracket is used, the clock can be surface mounted with 2 #8 screws inserted into the keyhole slots in back.)*

### SPECIFICATIONS

**RECEIVER:**

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Frequency Range	902MHz to 928MHz
Channels	128 channel Pseudorandom Frequency hopping, follows Transmitter
Channel Spacing	~200KHz

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**OPTIONAL TRANSMITTER:**

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Power	15mw maximum
Frequency Range	902MHz to 928MHz
Channels	128 channel Pseudorandom Frequency hopping
Channel Spacing	~200KHz
Modulation	Raised Cosine 2FSK Modulation, 10KHz Maximum Deviation
Data	encrypted 2400BPS
Frequency Stability	10ppm

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**DATA RECEIVED AND OPTIONAL TRANSMITTED:**

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Time/Date	
Standard and Emergency Messaging Message Boards, FirE	
Clock Dimming	
Lighting Control	On/Off/Dimming
HVAC Control	
Sound Control	School Bells, Shift/Break Bells, FirE, Alarm
Code Blue by Zone	

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**ANTENNA:**

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Vertical Dipole	integrated on the circuit board
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**OPTIONAL AUXILIARY PORT: (RJ45 COMPATIBLE FEMALE CONNECTOR)**

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BCD out	Sends BCD signals to Pyramid and Simplex compatible wired clock systems
Extended BCD out	Sends Extended format BCD signals to Pyramid Bell systems
BCD in	Can use legacy system as the time master
Code Blue in	Start Hospital Code Blue count up
Timer inputs	Control count up/down/reset

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## PYRAMID WIRELESS DIGITAL CLOCKS USER GUIDE

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### ENVIRONMENTAL: INDOOR USE ONLY

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Operating temp range: 0°C to 70°C, -32°F to 158°F

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Storage temp range: -40°C to 100°C, -40°F to 212°F

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95% RH non-condensing

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### OPTIONAL SWITCH FUNCTIONS:

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BCD In/Out      Select if clock sends or receives BCD

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Time Zone Offset      Shift the time zone on an individual clock

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### OPTIONAL SWITCH FUNCTIONS:

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Force AM/PM Display      Normally follows transmitted format

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#### Force 24-Hour Format

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BCD in/out      Select if clock sends or receives BCD

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Allow Dimming      Dimming level sent from Transmitter

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Code Blue Zone      On Code Blue, all clocks in the same zone response

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Time Zone Offset      Shift the time zone on an individual clock

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### DISPLAY:

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4 or 6 Digit High Visibility 7 Segment LED – Red, Blue, or Green

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Showing:      Time, Date, Optional alternating Date with Time

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### POWER:

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Internal Universal Input 90-265VAC 50/60Hz 15W Maximum

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### EQUIPMENT PRECAUTIONS:

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- There are no serviceable or adjustable parts inside the case of this clock.
- Opening the clock voids all warranties.
- Any modifications to the clock may be detrimental to health, safety, or violate FCC regulations.

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### SAFETY:

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- Install transmitter indoors in a dry area.
- If line is powered, installation is to be performed only by a qualified electrician.

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### REGULATORY

#### FCC (FEDERAL COMMUNICATION COMMISSION) INTERFERENCE STATEMENT:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

1. Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.
2. Connect the equipment into an outlet on a different circuit from which the receiver is connected.
3. Consult the dealer or an experienced radio/TV technician for help.

#### FCC CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

#### RF EXPOSURE INFORMATION:

The radio module has been evaluated under FCC Bulletin OET 65C (01-01) and found to be compliant to the requirements as set forth in CFR 47 Sections, 2.1093, and 15.247 (b) (4) addressing RF Exposure from radio frequency devices. This model meets the applicable government requirements for exposure to radio frequency waves.

## ACCESSORIES

Pyramid's components are designed to work directly with our equipment and grow as your needs grow. We offer a wide range of wall or ceiling brackets, security mounts, batteries, surge protectors, and more.

Here is a list of available items to complete your 915MHz Wireless Synchronized Clock System:



PART #	DESCRIPTION
42328	GPS Signal Receiver
41269	50' GPS Signal Receiver Extension Cable
41314	100' GPS Signal Receiver Extension Cable
41313	GPS Signal Receiver In-line Cable Coupler
42313	200' Plenum Rated Cable Extension
42337	915MHz 1-Watt RF Signal Repeater and Extender
42314	13" Analog Clock Wire Guard Kit
42315	17" Analog Clock Wire Guard Kit
42316	Digital Wire Guard Kit
42317	915MHz RF Transmitter Wall Rack (Black)
42318	13" Analog Dual Clock Wall Bracket Kit (Black)*
42319	13" Analog Dual Clock Ceiling Bracket Kit (Black)*
42320	Digital Dual Clock Wall Bracket Kit (Black) (4" 6-digit only)*
42321	Digital Dual Clock Wall Bracket Kit (Black) (3" 4-digit, 2.5" 6-digit, 4" 4-digit only)*
42322	Digital Dual Clock Ceiling Bracket Kit (Black)*
42026	Analog Clock Theft-proof Security Mount
42247	Digital Clock Theft-proof Security Mount
42281	Theft-proof Security Mount Replacement Key
42323	Simplex System Clock Mounting Bracket
42324	"C" size Lithium Clock Battery
42325	Power Surge Protector

*\*Purchase 2 Clocks to make a double-sided dual mount kit*



### TECHNICAL SUPPORT: CONTACT US

Should you need to speak live to one of our representatives, please call Toll-free (US/Canada): 800.336.3592 during regular business hours: 8:00AM-6:00PM EST, Monday-Friday.

### WARRANTY/RETURN INFORMATION

#### PYRAMID'S 5-YEAR WARRANTY

In a time when most manufacturers offer just a standard 1 to 2 year warranty, Pyramid warrants its Wireless Clock Systems to the original user against defective material or workmanship for a period of **5 YEARS** from the date of purchase.

The manufacturer's responsibility under this Warranty is limited to the repair or replacement of the defective part or parts. Pyramid reserves the right to determine whether the parts failed because of defective material, workmanship, or other causes. Failure caused by accident, alteration, misuse or improper packaging of returned unit is not covered by this Warranty. Any repair to the equipment other than by Pyramid voids the Warranty. Users in countries other than the USA should contact the Dealer from whom the unit was purchased. The rights under this Warranty are limited to the original user and may not be transferred to subsequent users.

If Customer Support cannot troubleshoot your problem over the phone, we will replace your unit free of charge. Extended service/support and warranties are available. Please contact Customer Support at 800.336.3592 for details.

#### RETURN WITHIN 30 DAYS FOR FULL REFUND

Returns on non-defective equipment can be made within 30-days of purchase for a full refund after inspection. Returns on non-defective equipment made after 30-days, but within 60 days of shipping will be accepted after inspection and are subject to a 15% restocking fee. Returns after 60 days will not be accepted.

Visit Pyramid online at: [www.pyramidwireless.com](http://www.pyramidwireless.com)

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Pyramid Technologies, LLC  
45 Gracey Avenue, Meriden, CT 06451  
Toll Free: 800.336.3592 Fax: 203.237.9597

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