SiteSync IQ® Wireless System Controller Kits 5 and 10 watt

american time & signal company
The Clock Experts
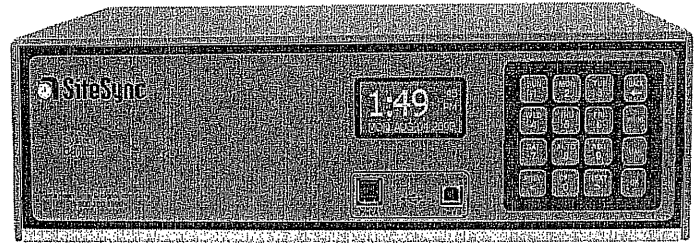
FEATURES
- **2 Year Warranty**
- **UL Listed**
- Internal clock accuracy of ±1 minute per year
- Guaranteed coverage with one transmitter
- Multiple sync options: GPS, CDMA, Ethernet
- Automatic Daylight Saving Time & Leap Year correction
- Control of up to 6 signal circuits
- 100% FCC compliant
- Available with 5 and 10 watt internal transmitters
- Time Zone clock support for up to 8 unique time zones
- Field upgrades via USB flash drive

SYSTEM CONTROLLER SPECIFICATIONS

Input voltage to power adapter: .... 100-240vac, 50/60 Hz

Output voltage from power sdapter: .... 12.0 ±0.6 vdc

Peak input power: .... 10 watts

Nominal power: .... 2.5 watts

Fuse: (input power) .... 8 amps, 250vac, Subminiature

Standby timekeeping: .... 10 years

Memory/Time backup: .... CR2032 lithium battery, 240 mAh capacity

Timekeeping accuracy: .... ±1 minute/year without correction from GPS or Ethernet time reference

Program retention: .... Unlimited

Programmable Events: .... 9,999 events total

Schedules: .... 99 maximum

Signal duration: .... Programmable 1-9 seconds or continuous On

UL Listed: .... File #E157522

Optional clock circuits (1): .... Dry contacts rated at 250vac, 8 amps resistive, 5 amps inductive

Clock circuit fuses (2): .... 8 amps, 250vac, Subminiature

Optional signal circuits (6): .... Dry contacts rated at 250vac, Continuous: 7.5 amps resistive, 5 amps inductive, 50% duty cycle*: 10 amps resistive

Physical dimensions: .... 5"h x 16$^7/_8$"w x 8"d

Temperature range: .... 32°-140°F (0°-60°C)

Mounting: .... Desktop or rack mount

Communication: .... Ethernet, RS-422 (GPS Plus), RS-232 (Std GPS), Contact Closure Sync (2-wire)

Shipping weight: .... 7$^1/_2$ ±$^1/_2$ lbs.

Display: .... 128 x 64 graphics LCD

Keypad: .... 16 button tactile feedback membrane switch

RF frequency range: .... 450-470 MHz

*50% duty cycle is defined as all signal relays on for one minute, off for one minute, repeating

ORDERING INFORMATION

The following table shows the options included with each model number. Change the **W** in the model number to indicate the power for the transmitter (00=none, 05=5 watts, 10=10 watts internal transmitter). The magnetic mount antenna is standard with 5 & 10 watt models. If your application requires the campus antenna, change the **N** in the model number to **C**. Change the **S** in the model number to indicate the number of clock and signal circuits (0, 2, 6 or 8) that are required.

Example 1: **SSQMSTR-05N0G has a 5 watt transmitter, 0 signal circuits and includes the Standard GPS sync option.**

Example 2: **SSQMSTR-10C2E has a 10 watt transmitter, a campus antenna, 1 clock circuit, 0 signal circuits and includes the Ethernet sync option.**

Example 3: **SSQMSTR-10N8C has a 10 watt transmitter, 1 clock circuit, 6 signal circuits and includes the CDMA sync option.**

Model No.	Standard GPS	GPS Plus	Ethernet	CDMA	Wireless Sync	2-Wire Sync
SSQMSTR-WNSB						X
SSQMSTR-WNSGE	X		X			
SSQMSTR-WNSG	X					X
SSQMSTR-WNSP		X				X
SSQMSTR-WNSPE		X	X			
SSQMSTR-WNSC				X		X
SSQMSTR-WNSCE			X	X		
SSQMSTR-WNSE			X			X
SSQMSTR-WNSW					X	X

Model # SSQMSTR-10N0E

SYNC OPTIONS

Standard GPS Option: This option provides time synchronization via the Global Positioning System (GPS). The 15 ft. GPS cable can be extended up to 100 ft. with extensions. See specifications on Page 3.

GPS Plus Option: This option provides time synchronization via the Global Positioning System (GPS). The option includes weather-tight, non-corrosive connections for outdoor installation and can be extended further (up to 1500 ft.) than the Standard GPS option. See specifications on Page 3.

Ethernet Option: This option provides time synchronization via Simple Network Time Protocol (SNTP) or Daytime Protocol from Internet Time Servers or an internal Network Time Server. It eliminates the need to mount an outside receiving antenna.

The Ethernet option also includes the Remote Connect web server, which enables event programming, circuit selection and activation and other system features remotely accessed via web browser from a computer.

CDMA Option: This option provides time synchronization via Code Division Multiple Access (CDMA). This is often used in the mobile telephone industry. It eliminates the need to mount an outside antenna. There are no cell phone tower service fees for the CDMA time signal.

Wireless Sync Option: This option allows one SiteSync IQ System Controller to synchronize another, wirelessly. This option includes an attached wireless receiver on the receiving unit. A common application for this option is a wired bell or tone system in an area remote from the transmitting unit.

Contact Closure (2-wire) Sync Option: This option allows a SiteSync IQ System Controller to be synchronized with existing equipment with a contact closure. This type of synchronization can also be implemented between two SiteSync IQ System Controllers.

Standard GPS Option Receiver H003738X

For best results, mount the GPS antenna to an outside wall
or to a mast on the roof with a clear view of the sky. The location
should be unobstructed by trees, branches, power lines and other
buildings, etc.

SPECIFICATIONS

- Input voltage: ....4.0 -5.5vdc
- Input current: ....60mA @ 5vdc
- Baud rate: 4800
- Color: ....Black
- Size: ....750" thick x 2.375" diameter with
  15 ft. vw-1 Rated cord
- Weight: ....115.6 grams
- Connector plug-in: RJ45
- Operating temperature: .... -22°F to 176°F (-30°C to 80°C)
- Storage temperature: .... -40°F to 194°F (-40°C to 90°C)
- Cable extensions: ....Optional: 25 ft., H001840, CMX Rated
  50 ft., H001841, CMX Rated
  50 ft., H001841P, Plenum Rated
  75 ft., H001842, CMX Rated
  100 ft., H004340P, Plenum Rated
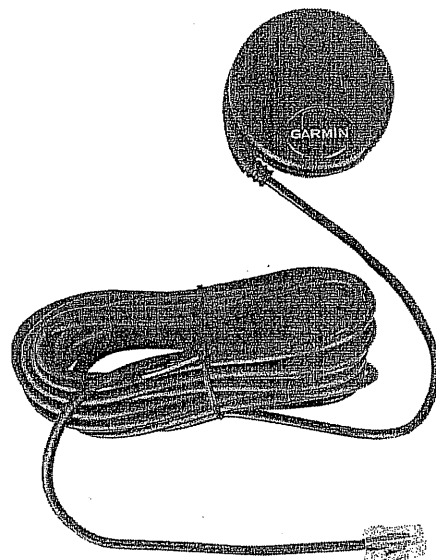
GPS Plus Option Receiver H000834

SPECIFICATIONS

- Input voltage: ....+8V - +36 volts DC unregulated
- Input current: ....70mA maximum
- Communication: RS422
- Baud rate: 9600
- Color: ....White
- Size: ....4 in. deep x 3 in. high (102mm x 76mm) with
  ....20 in. pigtail and 50 ft. extension
- Weight: ....14 oz. (0.4 kg)
- Housing material: ....Cycolac ABS Radome, Aluminum base
- Connector plug-in: .... Deutsch MMP21-2212S1 (12-pin Male)
- Operating temperature: .... -40°F to +167°F (-40°C to +75°C)
- Storage temperature: .... -40°F to +185°F (-40°C to 85°C)
- Relative humidity: ....85% non-condensing at -22°F to +140°F
  ....(-30°C to +60°C)
- Cable extensions: ....Optional 50 ft. extensions (H000818)
- Max. extension cable length:....1500 ft. (457m) total
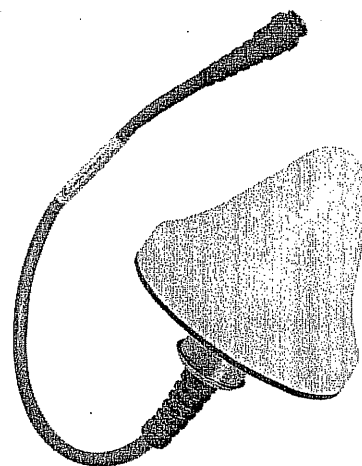
All external components are U/V stabilized for extended exposure to the sun and
the elements.

All cables include shrink tubing for sealing connections.

WIRELESS CAMPUS KIT H002978T

This option provides time synchronization via the Global Positioning System (GPS). The option includes weather-tight, non-corrosive connections for outdoor installation and can be extended further (up to 1500 ft.) than the Standard GPS option.

Antenna Specifications

- Frequency range: .... 450-470 MHz
- VSWR: .... <1.5:1
- Nominal gain: .... 0 dBd
- Nominal impedance: .... 50 Ohms
- Polarization: .... Vertical
- Pattern: .... Omni-Directional
- Antenna lighting protection: .... DC ground
- Termination: .... N-Female connector
- Height: .... 25"
- Width: .... $1^{3}/_{8}$"
- Weight: .... 0.85 lbs.
- Rated wind velocity: .... 125 mph
- Rated wind velocity w/0.5" radial ice: ..... 85 mph

Lightning Arrester Specifications

- Breakdown voltage: 350vac
- Protection: .... 5000 Amps
- Maximum power: .... 1000 watts
  (0-1000 MHz)
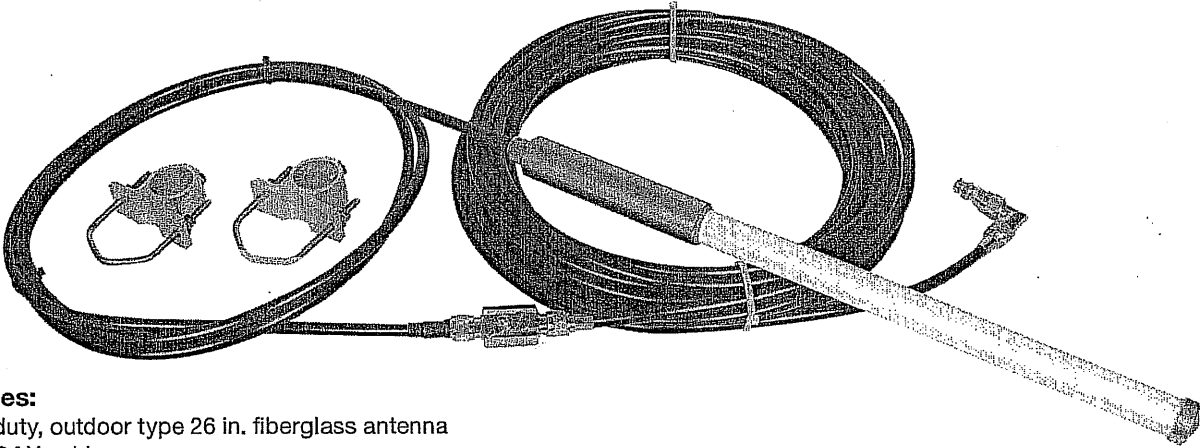
Kit Includes:

A. Heavy-duty, outdoor type 26 in. fiberglass antenna
B. 10 ft. COAX cable
C. Lightning Arrester
D. 50 ft. COAX cable (plenum rated option available-H002978TP)
E. N female to N male right angle adapter
F. N female to BNC male adapter (only for direct connection to IQ system controller
G. Mounting kit
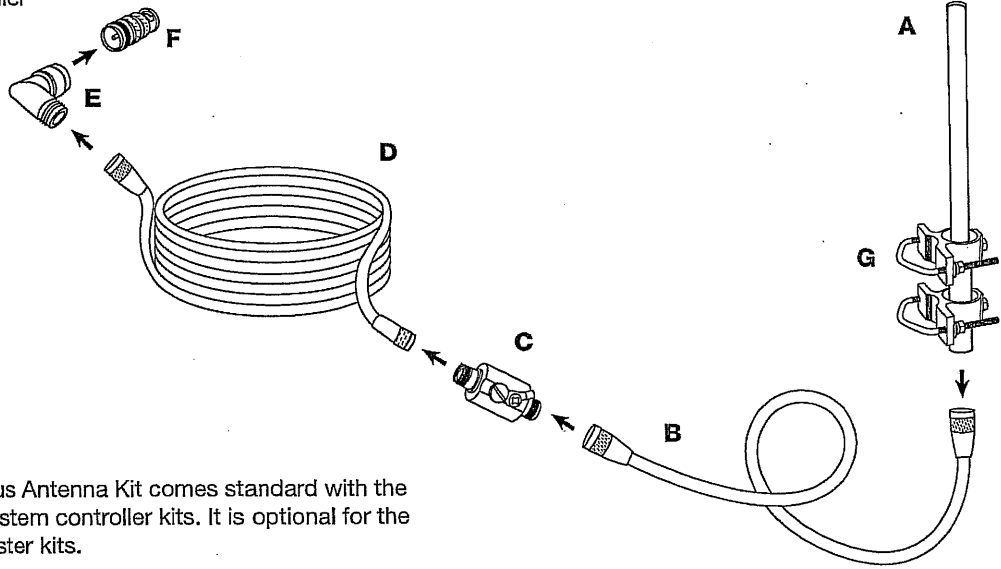
Note: This Campus Antenna Kit comes standard with the 25 and 45 watt system controller kits. It is optional for the 5 and 10 watt master kits.

Battery Backup
Unit with Surge Protection

american
time&signal
company
The Clock Experts

Part # H002717A

It is recommended that a Battery Backup Unit with surge protection be used to prevent signal disruption and/or damage to the SiteSync IQ® system controller. American Time and Signal offers this Battery Backup Unit with Surge Protection.

Note: Connecting additional equipment to the Battery Backup outlets will reduce battery backup time for the SiteSync IQ® system controller and optional transmitter if applicable.

GENERAL INFORMATION

- Battery load capacity: 550VA (330W)

- Outlets: ....4 with battery backup and surge protection
  4 with surge protection only

- Output voltage on battery: ....115vac ± 8%

- Lead through voltage 365J

- Total Output Current..12 amps

- UL 1778 listed: ....Yes

- EMI/RFI noise filter: ....FCC Class B

- Typical battery recharge time: ....18-24 hours

- Typical battery life: ....3-5 years

- Frequency: 60Hz

- Estimated backup time: ....5 & 10 watt systems—1 hour
  25 watt systems—45 minutes
  45 watt systems—18 minutes

- Dimensions:..11.2" x 7.1" x 3.4"d

- Weight: ....12.4 lbs

- Power cord:...5' long with 3 prong polarized plug

SiteSync IQ® System Controller
Remote Connect Web Interface
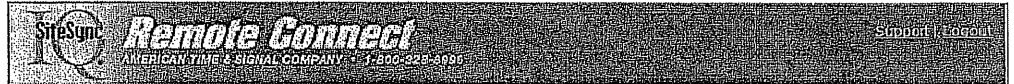
GENERAL FEATURES
- Set Time Zone & DST configuration
- Change system passwords
- Update Firmware
- Assign custom durations
- Manage programming of up to 6 circuits
- Trigger wired and wireless devices remotely

MINIMUM SYSTEM REQUIREMENTS (computer)
- Internet Explorer 6.0 or Firefox 1.0 or Higher
- Windows 2000, XP, Vista or Windows 7
- Java Runtime Environment (JRE) 6 Update 15 or Higher
- Network Adapter or Wireless Network Adapter

GENERAL TAB FEATURES
- View and change clock code
- View and change device name
- Manually adjust wired clocks
- View important information about your device
  - ➢ Software version
  - ➢ Model & Serial Number
  - ➢ Unit Configuration
  - ➢ Transmitter Call Sign

EVENT TAB FEATURES
- Enter schedules remotely
- Backup schedules
- Print Schedules
- Import and Export Schedules to and from PC's
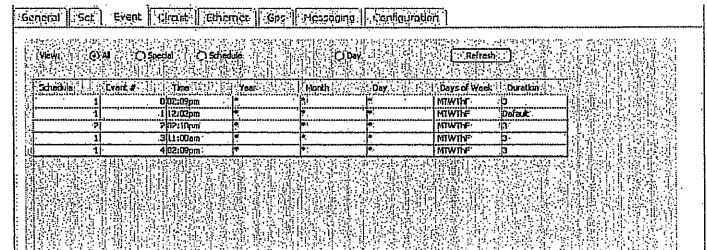
CIRCUIT TAB FEATURES - SCHEDULE
- Assign schedules to circuits
- Schedule circuit assignment changes
- Set default circuit durations
- Name circuits

DESCRIPTION
The Remote Connect Web Interface allows remote access to your SiteSync IQ system controller via a web browser. This includes Event and Circuit programming, manual circuit activation, time/date settings and other system configurations.

140 3rd St. S, PO Box 707, Dassel, MN 55325
800-328-8996 • www.atsclock.com

PS03120 Rev B
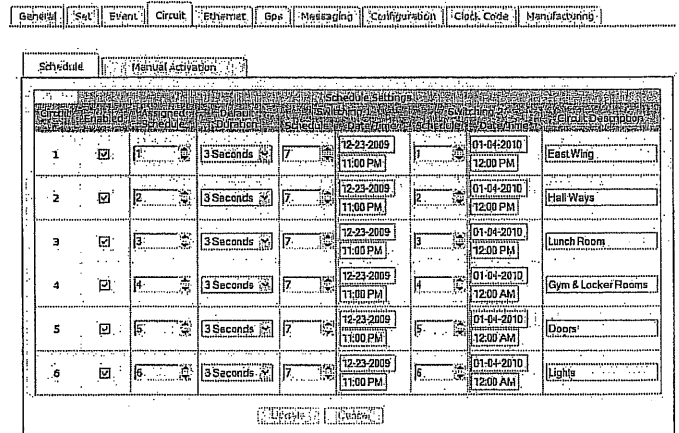
CIRCUIT TAB FEATURES - MANUAL ACTIVATION

- Control wired and/or wireless circuits manually

ETHERNET TAB FEATURES

- Enable/Disable Server/Client Functionality
- Set Time Server IP Address
- View Received/Sent Packets

GPS TAB FEATURES

- Enable/Disable GPS time updates
- View number of tracked satellites
- View last signal Received by GPS

CDMA TAB FEATURES
- Enable/Disable CDMA time updates
- View signal strength of CDMA
- View last signal received by CDMA
- Set CDMA Bias

MESSAGE TAB FEATURES
- Manually send POCSAG messages

CONFIGURATION TAB FEATURES
- Set Auto DST dates and times
- Set Remote Connect User/Service passwords
- Set Banner Text
- Select Time Sync Priority
- Select Time Display Format (12hr/24hr)
- Set Keypad User/Service Locks
- Select LCD display size
- Enable/Disable Setup Wizard
- Enable/Disable Quiet Mode
- Update Firmware

APPLICATION EXAMPLE

Wired   Circuit 1

120vac

Bell 1

System Controller Wiring Compartment Diagram

Rear of System Controller
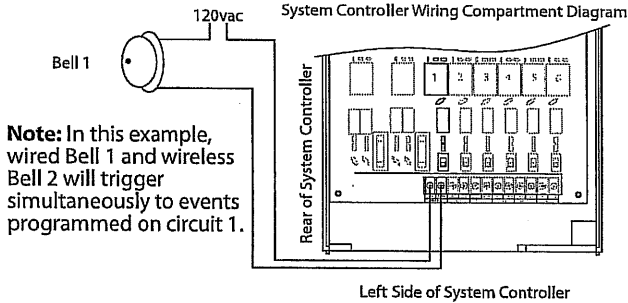
Note: In this example, wired Bell 1 and wireless Bell 2 will trigger simultaneously to events programmed on circuit 1.

Left Side of System Controller

Wireless   Event Group 1

LED Relay Active Indicator   LED Signal Received Indicator

120vac wall outlet

120vac to 9vdc wall adapter

H004296 Relay Output 60 watt max relay limit

Bell 2

Power Supply

Low wattage bell <60 watt

SiteSync IQ System Controller

Ethernet Link

Remote Connect Web Interface

Scheduling:

Here is an example of 9 events on schedule 1. This will trigger wired Bell 1 and wireless Bell 2, Monday-Friday, simultaneously for 3 seconds at the specified times.

Notice the bells are wired to Circuit 1. Therefore, we will assign Schedule 1 to Circuit 1.

Manual Activation:

The bells do not have to operate on a set schedule. They can also be triggered manually in the Manual Activation Tab which is a sub-tab of the Circuit Tab. In the example at left, Circuit 1 is enabled with a duration of 3 seconds. If the Wired button is pressed, Circuit 1 will be triggered for 3 seconds. If the wireless button is pressed, wireless relays that are associated with Circuit 1 will be triggered for 3 seconds. If the Both button is pressed, the wireless relays associated with Circuit 1 and Circuit 1 will be triggered for 3 seconds.

Wireless
Analog Steel Case Clocks
Battery

american time&signal company
The Clock Experts
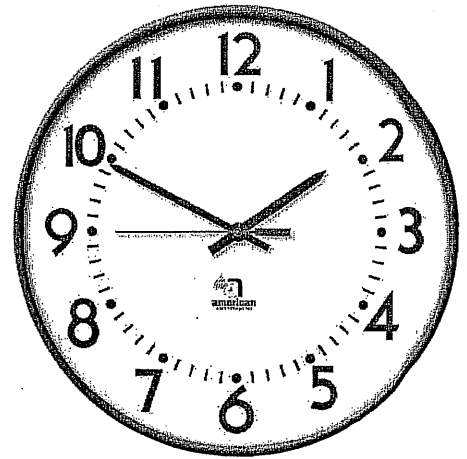
GENERAL INFORMATION

- Case: .... Heavy-duty steel
- Clock hour & minute hands: ..... Black
- Clock second hand: .... Red
- Power: .... 1 (1.5V) AA Lithium battery (included)
  Battery life approx. 1 year
- Battery Booster Plus®: .... Option for up to 5 years maintenance free,
  uses 4 AA Lithium batteries (included)
- Rear panel indicator: .... Red LED indicates receiver wake-up and time sync
- Receiver sensitivity: .... 10uV per meter
- Antenna type: .... Internal
- Time to synchronize: .... Average time to sync is 3 to 5 minutes (syncs automatically 4 times per day)
- Time accuracy: .... ±1 second to SiteSync IQ® System Controller
- Warranty: .... Two Years

PHYSICAL / ENVIRONMENTAL SPECIFICATIONS

- Weight: .... 12" - 4.0 lbs.; 15" - 4.7 lbs.; 12" Double Dial - 11.25 lbs.
- Operating temperature: .... 41°F to 131°F
- Storage temperature: .... 41°F to 131°F
- Relative humidity: .... 0% - 95% Non-condensing

ORDERING INFORMATION

Part #	Description	Part # with Battery Booster Plus®
SQ44BHDD904	10" Round, surface mount	SQ44BHDD904BP
SQ45BHDD?04	10" Round, flush mount	SQ45BHDD?04BP
SQ54??DD904	12" Round, surface mount	SQ54??DD904BP ✓ w/ BH BEZEL
SQ55??DD?04	12" Round, flush mount	SQ55??DD?04BP
SQ57??DD904	12" Square, surface mount	SQ57??DD904BP
SQ58??DD?04	12" Square, flush mount	SQ58??DD?04BP
SQ53??DD204	12" Round, double dial wall	SQ53??DD204BP
SQ52??DD204	12" Round, double dial ceiling	SQ52??DD204BP
SQ64??DD904	15" Round, surface mount	SQ64??DD904BP
SQ65BHDD?04	15" Round, flush mount	SQ65BHDD?04BP
SQ63??DD204	15" Round, double dial wall	SQ63??DD204BP
SQ62??DD204	15" Round, double dial ceiling	SQ62??DD204BP

Note: Replace the ?? in the part # with the 2 letter code for the bezel finish. See colors below.
BH=Black Sand   GH=Steel Gray   All 10" (all) & 15" flush available in Black Sand only.

Note: If flush mounting in an existing backbox, change the ? in the Part # to specify correct hanger type from the list below:
1=National Time   5=Simplex®, Dukane, Lathem   6=Cincinnati, Edwards, Faraday, Honeywell   8=Standard™ Electric
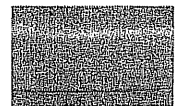
Other dial styles available.

Note: Add L to the end of the Part # for personalized dial option
Add RT to the end of Part # for the 25' remote receiver option
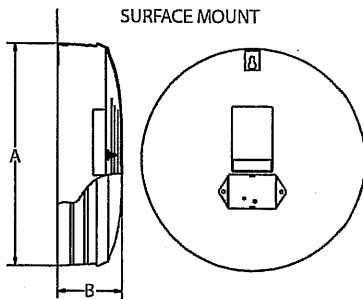Add RF to the end of Part # for the 50' remote receiver option

BEZEL FINISHES

Black Sand=BH   Steel Gray=GH

SURFACE MOUNT

OUTSIDE DIMENSIONS
"A" Dimensions:
Round
$11^{1}/_{4}$" for 10" clocks
$13^{1}/_{4}$" for 12"clocks
$16^{1}/_{4}$" for 15" clocks

"B" Dimensions: Surface
$2^{1}/_{4}$" for all clocks

"B" Dimensions: Flush
$1^{5}/_{8}$" for all clocks

FLUSH MOUNT

SURFACE MOUNT
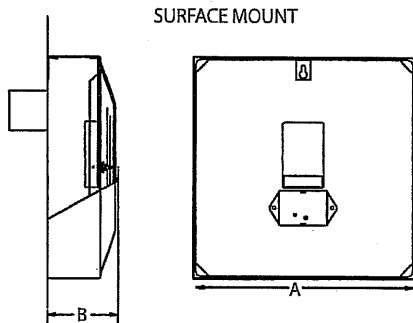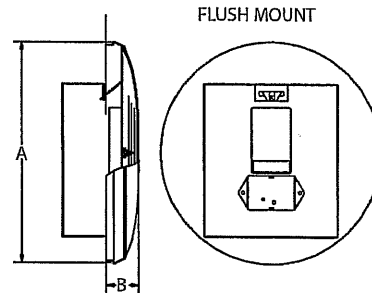
OUTSIDE DIMENSIONS
"A" Dimensions:
Square (12" only)
$12^{5}/_{8}$"
"B" Dimensions: Surface
$3^{1}/_{8}$"

"B" Dimensions: Flush
$1^{1}/_{4}$"
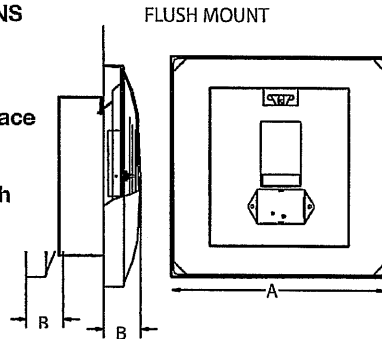
FLUSH MOUNT
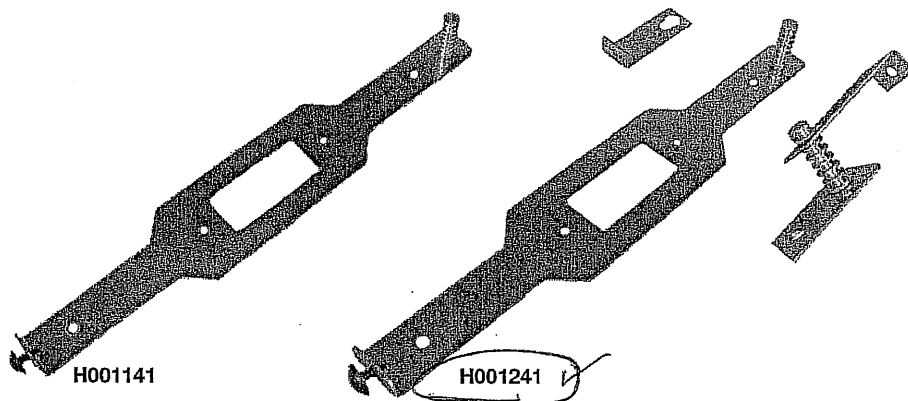
Tamper-Resistant Security Bracket

FEATURES

- Protects clocks from accidents and vandalism
- Indoor or outdoor use
- Heavy-duty 18 gauge galvanized steel construction
- Kits include mounting hardware

H001141

H001241

ORDERING INFORMATION

Part #	Description
H001141	Fits ATS 12" plastic case clocks
H001241	Fits ATS 12" steel case clocks (instructions included)

SPECIFICATIONS

H001141 Dimensions: 11.725"h x 2.125"w x 1.15"d   .210 lbs.
H001241 Dimensions: 13.5"h (with hanger extension) x 2.125"w x 1.15"d .240 lbs.