National Time & Signal

The SPECTRUM series analog clock operates on a wide range of wired clock system types. From historical 3-wire synchronous systems to 2-wire midnight resets to 2-wire On-Demand reset systems, from 24V to 120V -- the SPECTRUM Series has it covered. The energy efficient design uses less power than previous systems allowing longer wire distances with less power supplies. An on-board microprocessor monitors the hand position to ensure accurate time display and does not require any user intervention to re-calibrate the hand location like clocks by others.

3-Wire Synchronous Operation. This microprocessor based time piece can automatically discern the reset protocol transmitted from the master clock (by National Time or others) and synchronize with the existing clocks on the system. Reset schemes from popular manufacturers such as IBM, Simplex, Lathem, Rauland, Cincinnati, Honeywell, Standard Electric Time, Faraday, Stromberg, and others are supported. Refer to the compatibility list in bulletin C-430 for details. When used with master clock by others, the SPECTRUM series clock can coexist with the existing clocks and operate similarly. However with a National Time master clock, the clocks can coexist on the same circuit but the SPECTRUM clocks can reset immediately after a power outage without the 12 hour reset cycle required by historical clocks using National's exclusive On-Demand reset transmission on the existing motor wiring. This provides a means to upgrade your clock system to a higher level of operation incrementally as older clocks fail or funds become available.
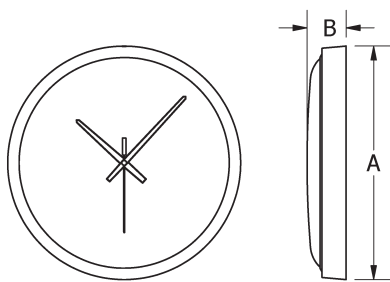
2-Wire Operation. With a master clock by others, a simple 0.25 second pulse at midnight can synchronize the clocks. With a National Time master clock, the On-Demand reset protocol transmits power and time information using two wires to send the clocks to the correct time at any time. This eliminates the waiting period for errant clocks following a power interruption.

Each clock case is composed of grey or black durable ABS plastic with a shatter-proof Polycarbonate lens. The dial is white polystyrene with black markings and hands. A sway-proof hanger plate is furnished that securely holds clock to wall. A steel case version is available, refer to Bulletin C-572.
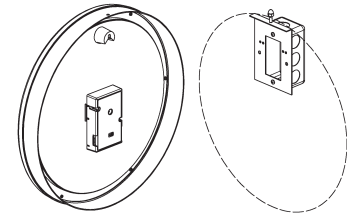
Benefits:

• Easily synchronize to existing clocks

• Low current consumption saves energy, reduces power supply requirements and allows longer wire distances

• Microprocessor controlled hand position for unsurpassed accuracy

• Instant correction reduces down time and occupant confusion

• Long, wide hands increase visibility over competition
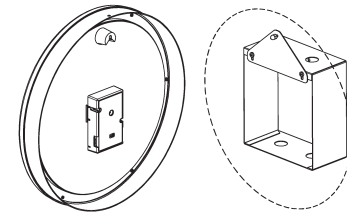
• Made in USA

ABS Plastic Case with Polycarbonate Lens

Dial Size	A	B
12" Round Plastic - Surface	13.35"	2.28"

Mounting to Single Gang or Handy Box with 1504-LT bracket. (24V or 120V)

Mounting to National Time 143 Flush Mount Clock box with optional SRP-12ADAPT-NF bracket.
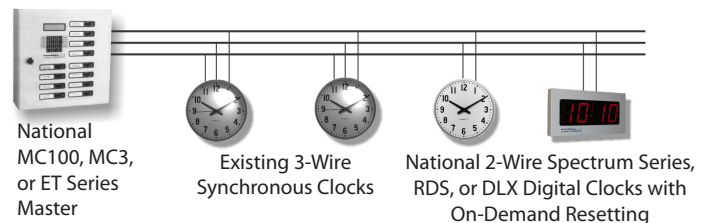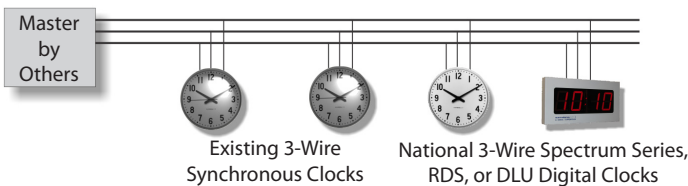
Optional Accessories:

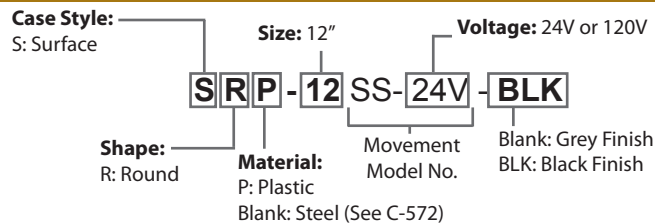| Part No.	Description
1504-LT	Surface Mounting Bracket Less Terminal Block
SRP-12ADAPT-NF	Hanger Bracket for National 143 Wall Box
12WGS	Wire Guard for 12" Round Clocks
SS-MOLEX HARNESS	Wiring Adapter common to other manufacturers

Clock Type	Run	Reset
2-Wire 120VAC	15mA	n/a
3-Wire 120VAC	15mA	1mA
2-Wire 24VAC	20mA	n/a
2-Wire 24VDC	9mA	n/a
3-Wire 24VAC	20mA	1mA

Typical System Layouts

Existing Systems

Master by Others

Existing 3-Wire Synchronous Clocks

National 3-Wire Spectrum Series, RDS, or DLU Digital Clocks

National MC100, MC3, or ET Series Master

Existing 3-Wire Synchronous Clocks

National 2-Wire Spectrum Series, RDS, or DLX Digital Clocks with On-Demand Resetting

Ordering Information

Case Style: S: Surface

Size: 12"

Voltage: 24V or 120V

S R P - 12 SS - 24V - BLK

Shape: R: Round

Material: P: Plastic Blank: Steel (See C-572)

Movement Model No.

Blank: Grey Finish BLK: Black Finish

Part number examples:

Model Number	Description
SRP-12SS-120V	12" Surface Round Plastic; 120V SPECTRUM Series Universal or On-Demand Reset Clock; Grey
SRP-12SS-120V-BLK	12" Surface Round Plastic; 120V SPECTRUM Series Universal or On-Demand Reset Clock; Black
SRP-12SS-24V	12" Surface Round Plastic; 24V SPECTRUM Series Universal or On-Demand Reset Clock; Grey
SRP-12SS-24V-BLK	12" Surface Round Plastic; 24V SPECTRUM Series Universal or On-Demand Reset Clock; Black