

GR 1400™

Control Panel



Blue Box™

Description: The **Blue Box** system is the 100% digital replacement for traditional time clocks, twist timers and contactor packages. Panels and switches daisy-chain together using Cat. 5 patch cable with RJ45 connectors in any sequence. A photosensor input supporting the **Blue Box** outdoor photosensor is provided for controlling exterior lights. Ideal applications include small stand-alone systems such as: tenant improvement, specialty retailers and site lighting. Also used as a slave panel with the **GR 2400™** system.

- Features:**
- 32-channel, 365-day/astronomical time clock. Large display (21 x 8 characters) acts as programming interface for the entire system. Non-volatile memory holds all programming indefinitely. Ten-year battery back-up for time-of-day
 - Modem includes free lifetime factory programming
 - Manual override of individual relays, zones or entire panel. 30 A Latching Relay allows default to NC (normally closed) or NO (normally open) on power failure. UL listed for 18,000 amp SCCR at 277V
 - Will operate with all **GR 2400** accessories
 - Available with 14 option contact closure inputs
 - Link up to 16 digital devices via Cat. 5 patch cable with RJ45 connectors

Specifications:

Enclosure dimensions

Surface: 12" w x 18" h x 6" d (8 or 16 relays)

Enclosure type: Surface mount, hinged cover enclosure with friction catch, NEMA 1

Optional enclosures: Surface mount NEMA 4, NEMA 4X, NEMA 12

Relay: Normally Closed (NCL)

30A @ 277VAC Ballast
20A @ 120VAC Tungsten
20A @ 347VAC Ballast
SCCR 18kA @ 277VAC
Rated 250,000 Cycles

Optional relays: Normally Open, (NOL) Spec same as NCL;
Two Pole - NO or NC (480V); Double Throw
20A 277VAC

Power for occ. sensor: 24V/200mA (with DI option)

Max. devices per bus: 16 with Blue Box Master Panel

Addresses used: 2 addresses

Listings: UL and cUL 916 listed, ETL listed to UL 924 (for emergency circuit use)

Programming: Via DTC

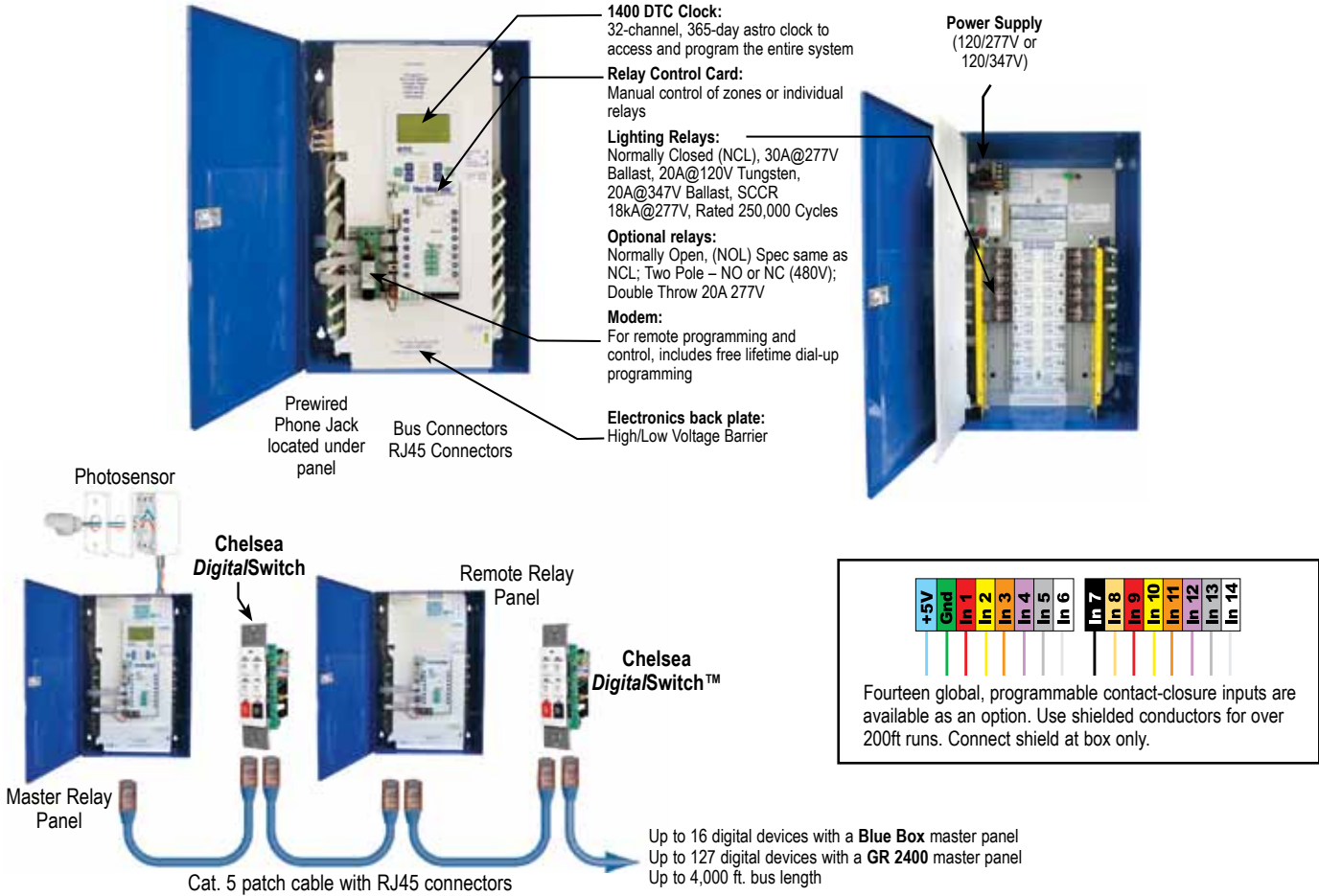
Max humidity: 10% – 90% non-condensing

Ambient temperature: 32–105° F (0–41° C)

Power supply voltage: Dual voltage 120/277VAC or Canadian dual voltage 120/347VAC

Bus protocol: RS485 (GR 2400 bus)

Bus connector: RJ45 connectors



ORDERING INFORMATION

GR 1400 Blue Box Enclosure				
GR1416 ENC				
Relay Panel Enclosure 16 relays maximum	Enclosure Mounting, NEMA Rating			
	SM NE1 = Surface Mount, NEMA 1 SM NE4 = Surface Mount, NEMA 4 SM NE4X = Surface Mount, NEMA 4X SM NE12 = Surface Mount, NEMA 12			
<i>Example:</i> GR1416 ENC SM NE1 GR1416 INT 16NCL DTCMOD CNDV DTCDI GR 1416 Blue Box master panel with a modem, in a surface mounted, NEMA 1 enclosure, with 16 normally closed relays, 120/347V Canadian dual voltage transformer and 14 dry contact inputs. GR1416 ENC SM NE4 GR1408 INT 4NCL 2DPNC REMOTE CNDV REMDI GR 1408 Blue Box remote panel, in a surface mounted, NEMA 4 enclosure, with 4 normally closed relays and 2 2-pole normally closed relays, 120/347V Canadian dual voltage transformer and 14 dry contact inputs.				
GR 1400 Blue Box Interior				
Relay Panel Interior GR1416 INT = 16 Relay Interior GR1408 INT = 8 Relay Interior	Relays [qty]NCL = Normally Closed Latching [qty]NOL = Normally Open Latching [qty]DPNC = Double Pole Normally Closed [qty]DPNO = Double Pole Normally Open [qty]RRP = Reed Relay (pair) [qty]SPDT = Single Pole Double Throw [qty]SPDTC = Single Pole Double Throw Contactor	Clock Option DTCMOD = Digital time clock with modem DTC = Digital time clock without modem REMOTE = Remote panel, no clock	Transformer DV = Dual voltage 120/277V CNDV = Canadian dual voltage 120/347V	Dry Contact Inputs (optional) DTCDI = 14 inputs for DTC panel REMDI = 14 inputs for Remote panel
Total quantity of relays specified must equal the number designated for that panel. The GR1416 may only have 16 relays, the GR1408 may only have 8 (example: GR1416 INT 16NCL = a quantity of 16 normally closed, latching relays for the GR1416 interior). 2-pole relays, reed relay pairs, and contactor relays all count as two relay spaces (example: a GR1416 INT may not have more than 8 2-pole relays).				