

## General System Information

The Protocol dimming and control systems offer microprocessor based control stations, load drivers, input and output interface modules, with distributed intelligence (no central controller) over the 4-wire (2 twisted pairs) network bus, increasing the reliability and versatility of the system.

## DC-TIMER Information

The DC-TIMER is a 5-channel time clock manufactured by the WATT STOPPER Corporation (model SC-100) integrated with a DIGITAL LIGHTING SYSTEMS DCI -16 dry-contact input interface and DB44 data & power hub, mounted inside a 12" x 10" x 4" NEMA enclosure.

The SC-100 is a simple to program yet extremely versatile 365-day calendar timer clock that may control up to 5 channels on the DCI -16. Relay input device has an additional 11 dry-contact inputs for interface with other external devices.

A relay closure from the SC-100 or other external device is interpreted by the DCI -16 in the same way as a button press on a control station. Switch input functions and control channel assignment are programmed and loaded into the DCI -16, as if it were a control station, by means of Protocol programming software. These can be assigned at the factory and easily reprogrammed in the field whenever necessary to accommodate the changing needs of the application. Normally, the inputs of the DCI -16 are programmed as "Preset" functions. The SC-100 is then able to recall up to 5 system presets by momentarily closing and releasing relays connected to the inputs. Relay closures must be maintained for a period of (0.5 +/- 20%) second.

Since the DC-TIMER contains its own DB44, the DC-TIMER may become the data and power hub for any system it is installed in. An external transformer feeds the DC-TIMER. The DB44 will distribute power to the SC-100, the DCI -16 and out of the DC-TIMER to other input devices on the PROTOCOL system (PS Series stations, RAU-96, other DCI -16's etc.).

Please see DCI -16 and DB44 Specifications for detailed information on

## TIMER FEATURES

- \*365-day calendar time clock
- \*4-line, 16 character display
- \*Controls up to 5 Channels
- \*Up to 120 event-based schedules

- \*Astronomic control
- \*Automatic Leap Year and Daylight Savings adjustment
- \*Comprehensive holiday/exception scheduling

- \*FCC compliant, CE certified
- \*Non-Volatile memory
- \*Manual Override from keypad
- \*Many other functions...

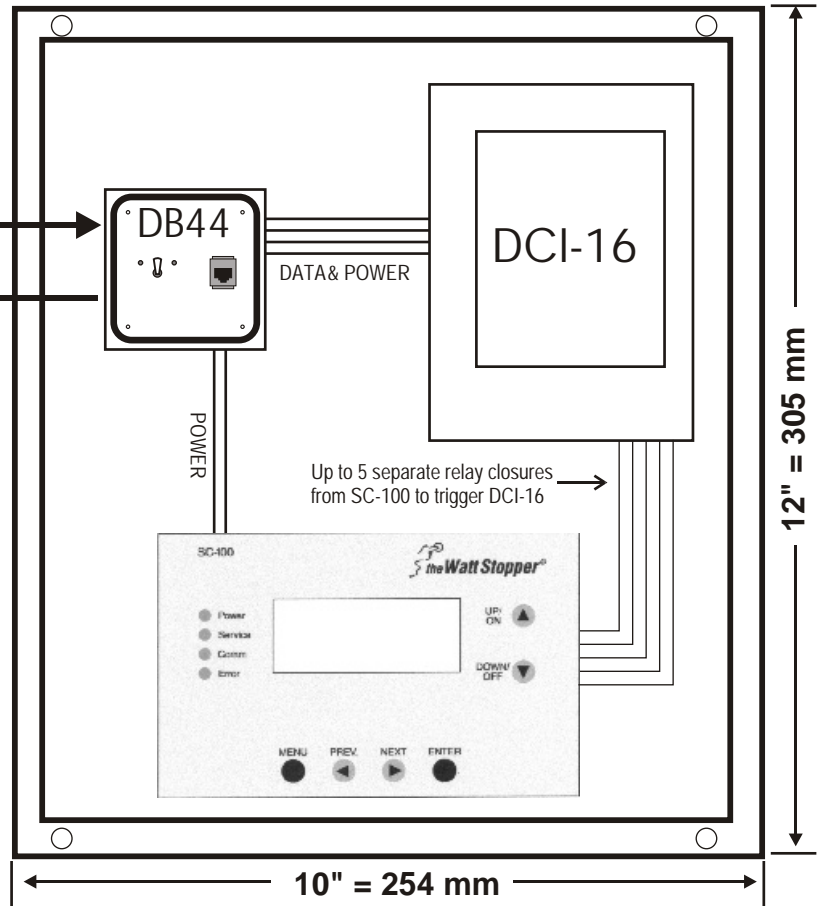
## DC-TIMER - Front View w/ front panel removed

Power feed from External transformer WT10 or WT30 or other as required.

Data or Data and Power as required to rest of system.

### NOTES

- o The **DC-TIMER** is connected to the system network bus through its own **DB44** data and power hub.
- o A system with a **DC-TIMER** may not need any further **DB44**'s.
- o **DC-TIMER** is powered by an external transformer which feeds the system through the **DB44**.
- o See specifications of **DB44** and **DCI-16** for more detailed information of connections to those two units.
- o See diagram at bottom of page for typical wiring of system with a **DC-TIMER**.
- o **NEMA enclosure Dimensions 12"L x 10"W x 4"D**



12" = 305 mm

10" = 254 mm

### Mounting requirements

- The DC-TIMER comes inside an 12" x 10" x 4" NEMA enclosure.
- Use Grounded metal enclosures only.
- Refer to the Protocol Hardware Installation Manual or consult factory for more details.

### Ordering Information

- o DC-TIMER Astronomic timer clock and dry-contact input module installed inside a 12" x 10" x 4" NEMA enclosure.

### Wiring Notes

- 1 All wiring between the control stations, load drivers, and other system accessories (network bus) is low voltage (NEMA Class 2) and may be run with two twisted pair # 18 AWG wire. Refer to Protocol Installation Manual, Appendix E, for maximum wire length. Network Bus may be Carol Cable #C3362 unless otherwise required.
- 2 Do not run Network Bus cable in the same conduit with non-class 2 circuits.
- 3 Network Bus wire may be run in any combination of daisy chain (T-tap), home run, star, and/or branch.
- 4 Power for all stations of a system must be on the same power phase.
- 5 Installation must conform to local and/or NEC code requirements.

### Typical Wiring Of Systems with DC-TIMER Panel

