Procedure for installation of the CM-1:

#### **Receiving Procedure:**

- Remove CM-1 from packaging.
- Inspect CM-1 for damage from shipping.
- Notify IES ASAP if damage has occurred during shipping.

Locate the CM-1 within 25 ft. of the computer that will be running the EZ-Time Software and within 6 ft. of a single duplex 120 VAC Outlet.

## **Field Wiring Procedure:**

The CM-1 is a computer controlled serial data converter. Its job is to convert low level serial data (that is sent from any computer com port having an RS-232 COM port or USB to RS-232 COM port converter) to high level data. The high level data that the CM-1 will output is to be connected to all DC-Digital peripherals that require EZ-Time data.

Before supplying power to the CM-1, connect the field wiring.

### **Connect the Data input line:**

Connect the CM-1 to the Computer that will be operating the EZ-Time Software. The CM-1 comes with a 25ft RS-232, Male to Female (DB-9) Data Cable. If connecting to a computer using a USB COM port a USB to RS-232 (BD-9) converter will be needed. Call DC-Digital to order a converter cable, 800-977-6872.

Connect the 25 ft. RS-232 (DB-9) cable to the Computer COM port and to the back of the CM-1 RS-232 COM input Port.

Make sure all connections are secure at both ends.

# **Connect the Data output line:**

Use 22 Ga. Low voltage cabling to connect to the CM-1 output.

Make sure to follow the polarity of the CM-1 data output when connecting to DC-Digital peripherals:

```
+ to +, - to -.
```

- **Data** + = Data Output to the + of all data receiving peripherals. (DC-Digital Color is **White**)
- **Data -** = Data Output to the of all data receiving peripherals. (DC-Digital Color is **Green**)

## See typical wiring Diagram below.

# **Connect the Power**:

Make sure that the CM-1 will be receiving 120 VAC @ 5 amps of clean dedicated power. Do not connect the CM-1 to power lines that share AC Motors, Heaters, or Inductive loads. This will cause sporadic data transmission and undesirable results in correct data transmission and reception.

- Use the provided <u>24VDC at 1 Amp</u> wall transformer to power the CM-1. Note: The use of any other wall transformer other than what is required by DC-Digital will void warranty.

#### Observe:

- The RED 5 volt LED will light. See Picture.....
- The Data RED LED will flash every time the EZ-time Software sends data out of the designated computer COM Port either manually or automatically. See Picture for location of the RED Data LED.

NOTE: The GREEN LED must stay on steady and RED LED must flash to indicate correct CM-1 operation.



<u>Rear view of the CM-1</u>. Note: Left to Right Data (out to the peripherals), Power Input (24 VDC at 1Amp), Data In (from Computer COM Port).

