

## SPECIFICATIONS

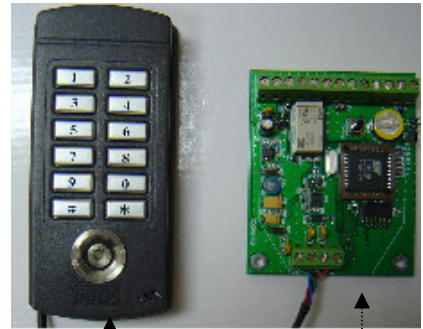
**Power Supply:** 12V, 3A

**Main Relay:** 12V, 5A

**Operating Temp:** -18°C to +70°C (0°F to +158°F)

**Power Consumption:** 15 mA unloaded, 1.5A Maximum

**Enclosure Size:** Steel enclosure with hinged lid, 12"×12"×4" (Optional)



Keypad / iButton Reader

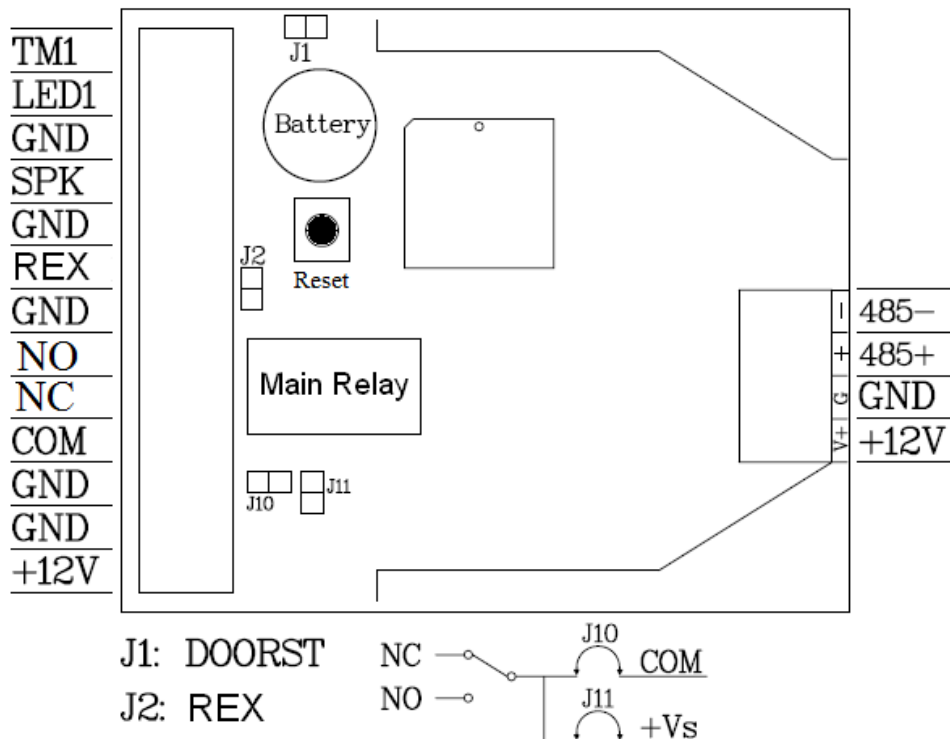
Controller Board

## COMPONENTS

- Keypad / iButton Reader
- Controller System Board
- Power Supply
- Dual Relay Module
- Locking Device (See list below)
- Exit button

(Depending on the application specific requirement, the components used may vary.)

## CONTROLLER DIAGRAM



**J3: Reset Switch**

1. Press and hold for 30 seconds. It will reset to manufacture default setting and delete current settings include user keys and pass codes.
2. Press once, system goes into programming mode. Use for new lock setup mission.

**J10: Dry Contact**

**J11: Wet Contact**

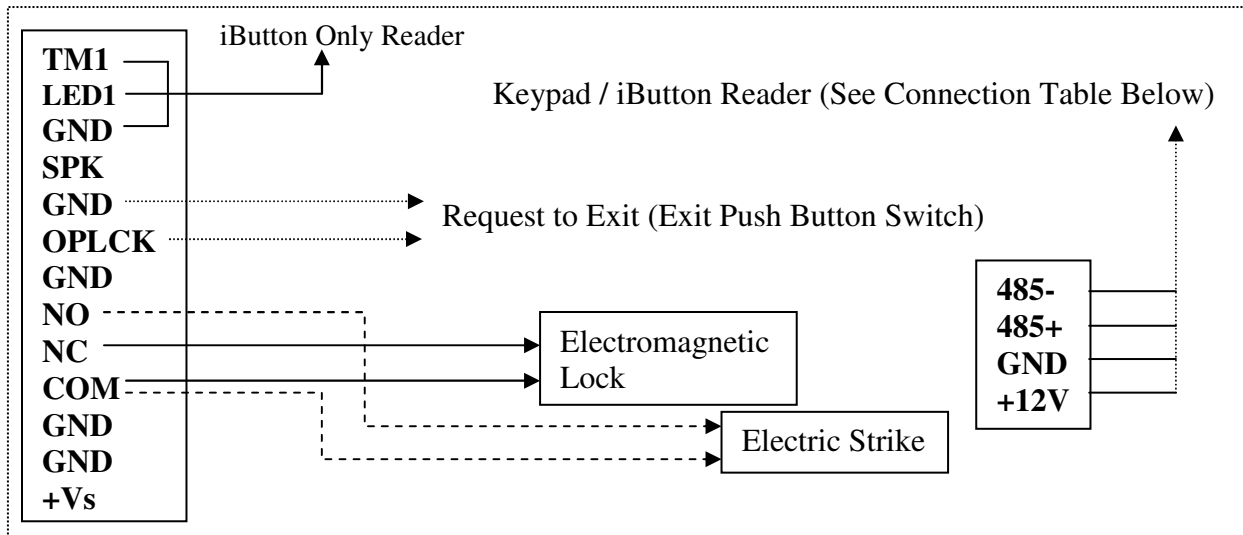
**WIRING INSTRUCTION**

There are many ways to connect the exit device to the controller, for your reference, we provide you the most common methods:

- Jump J10 for Dry Contact. Use NC/NO terminals for door locking device that has a separated power supply other than the one used by controller.
- Jump J11 to connect the Normal Close (NC) or Normal Open (NO) to the positive side of the exit device, negative side to the Ground (GND). NC/NO terminals will have +12V DC power.

Keypad / iButton Reader:

With the RS-485 communication method, the connection between reader and controller module can be narrow down to 4 wires (see diagram below), also the distance can be extended up to 1000 ft without any additional devices.



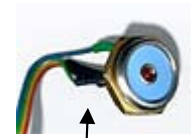
Keypad / iButton Reader Connection Table

| Terminal | Keypad / iButton Reader Lead Wire |
|----------|-----------------------------------|
| 485-     | Brown                             |
| 485+     | Orange                            |
| GND      | Green                             |
| +12V     | Red                               |

## SECOND TM (iButton) READER (Option)

The controller system can install a second iButton reader for applications that require access validation from the outside as well as the inside.

The second reader can only be iButton only reader as shown in the picture on the right. It can only be connected to TM1 and LED1 terminals on the front of the system board (See diagram above).



iButton Only Reader

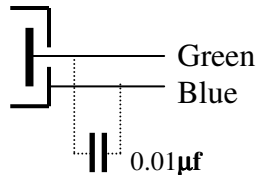
### iButton Only Reader Connection Table

| Terminal | iButton Reader Lead Wire |
|----------|--------------------------|
| TM1      | Green                    |
| LED1     | Orange                   |
| GND      | Blue and Yellow          |

## Extending the Distance between iButton Reader and System Board

The normal distance between the iButton reader and controller PCB is up to 30 feet. You can also use a small capacitor (Ceramic, 0.005-0.01 $\mu$ f, 50 WVDC) to boost the range up to 300 feet.

Note: The capacitor must be connected to the iButton reader probe's end, and the distance from the reader has to be less than 2 feet.



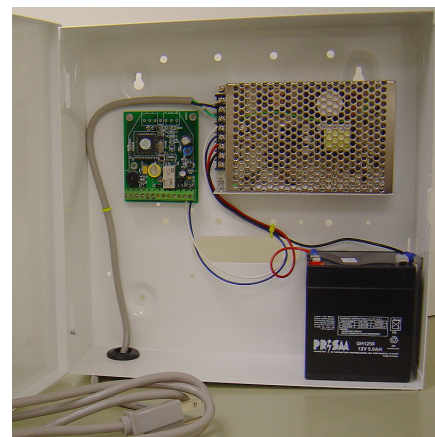
## The Complete Controller System

Door Controller System (EDCTRL) Includes:

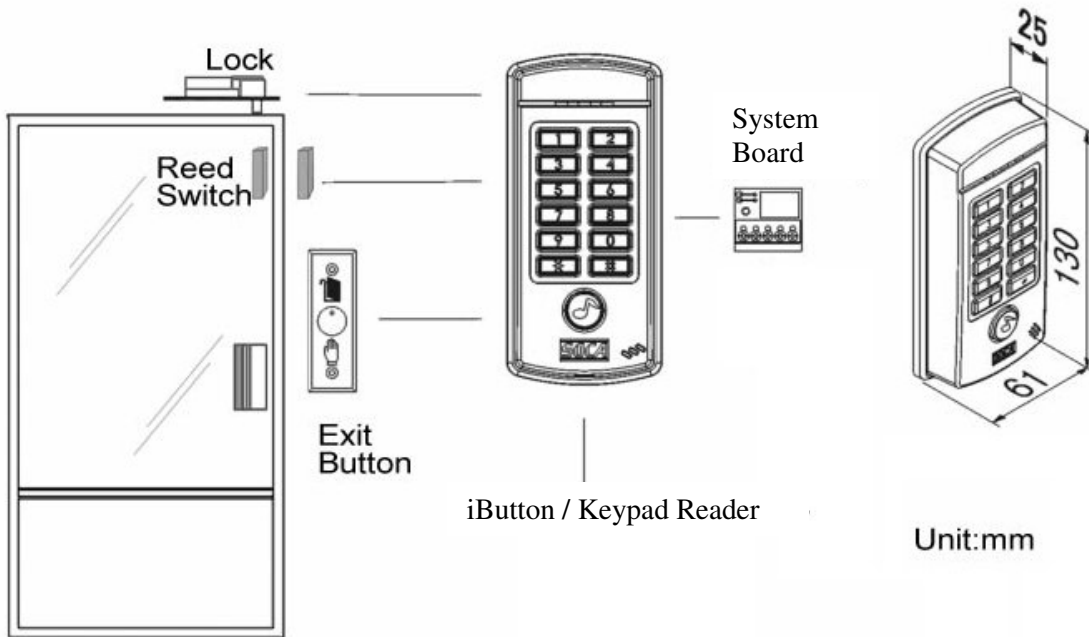
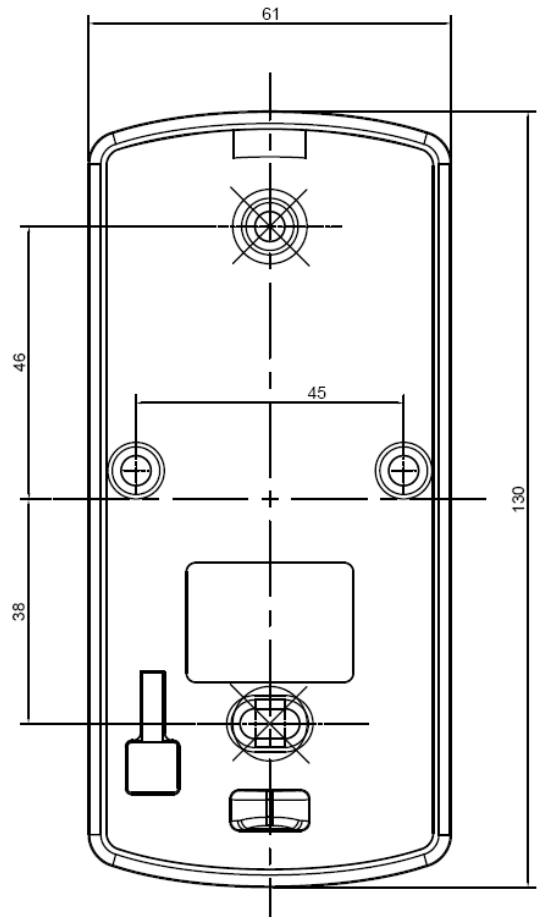
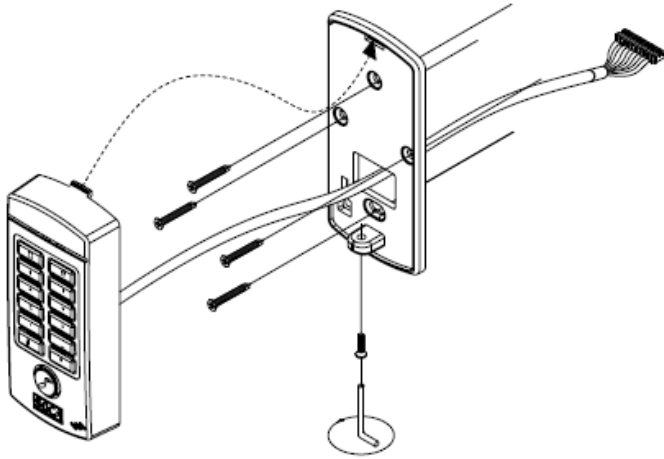
- 1 - EDC700MB / Eternity Door Controller System Board
- 1 - EDC710RD / Eternity Door Controller TM-Keypad Reader
- 1 - BTY12V5A / Door Controller Backup Battery (12V/5A)
- 1 - DCCASE / Door Access Controller System Case
- 1 - DCTLPS / Door Controller Power Supply 12V/3.5A

Optional:

- 1 - DCIBRD / DS Door Controller iButton Reader (DS9092L+)



# Installation Diagram



Ordering Information:

Door Controller System

| PART Number | DESCRIPTION                             | PART Number | DESCRIPTION                                    |
|-------------|---|-------------|--|
| BTY12V5A    | Door Controller Backup Battery (12V/5A) | EDC710MB    | Eternity Door Controller Main Board for EDC710 |
| DCCASE      | Door Access Controller System Case      | EDC710RD    | Eternity Door Controller TM-Keypad Reader      |
| DCTLPS      | Door Controller Power Supply 12V/3.5A   | FTUK        | Eternity First Time User Package               |

Electronic Lock Device

| PART Number | DESCRIPTION                              | FUNCTION  |
|-------------|--|---|
| EBOLTLOCK   | Electric Bolt Lock-SL-100A               | <ol style="list-style-type: none"> <li>1. Door sensor (SL-100A: N.C/ SL-100B: N.C&amp;N.O.)</li> <li>2. Power Supply: DC 12V</li> <li>3. Operation current : 900mA, Holding current: 330mA</li> <li>4. Fail- safe type (Power to lock)</li> <li>5. Operation delay time: 0 sec., 2.5sec., 5sec., 9sec.</li> <li>6. Built-in delayed egress control point</li> <li>7. Weight: 860g</li> </ol>  |
| EMAGLOCK    | Electromagnetic Lock-SL-200/220          | <ol style="list-style-type: none"> <li>1. Power supply: DC 12V or DC 24V (Optional)</li> <li>2. Operation current: 500mA@12V or 250mA@24V</li> <li>3. Holding Force: 600LBS</li> <li>4. Fail-safe type (Power to lock).</li> <li>5. SL-200 Built-in lock status LED's indication / SL-200S No lock status LED's indication</li> <li>6. SL-200T Built-in delayed egress control point.SL-200D Double lock</li> <li>7. Weight: 2000g</li> </ol> |
| MLBRKT01    | L&Z Bracket for magnetic lock            | <ol style="list-style-type: none"> <li>1. To used with SL-200 magnetic lock.</li> <li>2. Suitable for in-swing door</li> <li>3. Dimensions: small L bracket: 220x63.5x63.5(mm)</li> <li>4. Dimensions: F bracket: 220x61x89.5(mm)</li> <li>5. Dimensions: Large L bracket:265x38x76(mm)</li> <li>6. Weight:1200g</li> </ol>   |
| MLBRKT02    | Armature plate housing                   | <ol style="list-style-type: none"> <li>1. Specially for the use of SL-200 armature</li> <li>2. Suitable for 90° out-swing door</li> <li>3. Sturdy built for durability</li> <li>4. Simple and easy installation, With screw position adjustable function</li> <li>5. Dimensions: 193 x 45 x 12.7 (mm)</li> <li>6. Weight:153g</li> <li>7. Dimensions: 195x72x19(mm)</li> <li>8. Weight: 260g</li> </ol>                                       |
| BLBRKT01    | Surface Mount Bracket for Dead Bolt Lock | <ol style="list-style-type: none"> <li>1. To be used with SL-100 Dead Bolt Lock</li> <li>2. Suitable for all types of 90° or 180° door</li> <li>3. Sturdy built for durability</li> <li>4. Simple installation without knocking any holes out</li> <li>5. Able to integrate with UB-100 glass holder</li> <li>6. Dimensions: 230 x 45 x 46(mm).</li> <li>7. Weight: 590g</li> <li>8. Optional of BR-100C Bracket available.</li> </ol>        |
| ESTRIKE     | Electric Strike Lock                     | <ol style="list-style-type: none"> <li>1. Power supply: DC 12V</li> <li>2. Operation Current: 360mA</li> <li>3. SL-320F:Fail-safe type (Power to lock)</li> <li>4. Suitable for wooden, aluminum and hollow metal doors</li> <li>5. To be used with auxiliary lock</li> </ol>   |