# **Accessories Connection (Optional)**

There is connection wire Terminal on the PCB board in the control box. The function is as follows:

# (1) BAT(+) BAT(-) for back up battery

The user can connect backup battery (optional) by both BAT (+) and BAT (-) terminals.

By installing a 24V/5AH battery (optional), the SWING GATE OPENER will be possible to carry out approx. 50 emergency operations without power supply. The battery should be always connected to the terminal to keep it charged. Before using the system with only the battery it shall be first charged for at least 24 hours.

\* If more operation cycles are required during power failure, the user may choose battery of bigger capacity.

\* The user may use a solar panel (optional) to maintain charging the battery power even there is no power supply.

## (2) O/S/C for Push Button

The user can connect push button (optional) by both terminals. The push button can be installed at any safety place you prefer, so that the user may open/close the gate conveniently.

## (3) Alarm Lamp

This device is foreseen by all safety EEC norms, and it has to be installed in a visible position.

The device operates at LOW VOLTAGE and a 24V 10W Bulb.

Caution: Never exceed this power as there might be the risk of damaging circuits.

Operation: The intermittent signal comes from the control unit. The activation starts 2 seconds before each operation.

The blinking is slow when the gate opens or closes and faster when gate stop/reverse in case of obstruction.

#### (4) Solar Panel

The solar panel is not allowed to use before the back up battery is installed. With the solar panel, the back up battery can be charged both by the control box from AC power and directly by solar panel.

The 30W solar panel consists of three 10W panels by parallel connection.

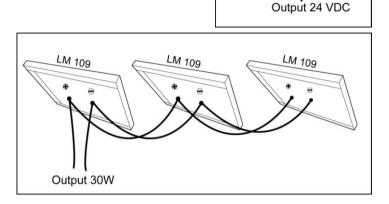
The 5AH battery (LM125/5) is standby power source, which is recommended for use where power failure is rare. When equipped, please use the 5AH battery adaptor (LM135). The 5AH battery with 10W solar panel (LM109) is also standby power source, which is recommended for use where power failure is frequent. When equipped, please do use the 5AH battery adaptor (LM135/5).

The 12AH battery (LM125/12) with 30W solar panel (LM109) can be used as main power source, which is recommended for use where AC power is not available. When equipped, please do use the 12AH battery adaptor (LM135/12).

The provided battery is 12 volt each unit. The user is required to connect two 12V battery cells in series to function as a 24V standby power source.

Directly connecting the wires from the actuator (motor) to other power source is forbidden.

Connect the 24V battery directly with the PCB. Refer to Page 16 Connecting Opener Power Cables.



12 VDC

12 VDC

#### NOTE:

The greater capacity of the batteries, the longer the system will operate in cloudy days. The solar energy conversion efficiency may vary with installation places and weather conditions.

Install the solar panel in open area clear of obstructions such as tall trees and buildings which probably block the sunlight.

The solar panel should be installed with its surface facing with the most sunshine, south-facing in northern hemisphere and north-facing in southern hemisphere.