



# BougeRV HC24 Series PWM 24V Solar Charge Controller User Manual

[Home](#) » [BougeRV](#) » BougeRV HC24 Series PWM 24V Solar Charge Controller User Manual

## Contents [ [hide](#) ]

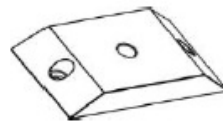
- [1 BougeRV HC24 Series PWM 24V Solar Charge Controller](#)
- [2 Unpack](#)
- [3 Installation Notices](#)
- [4 Connectors](#)
- [5 I/O Terminal Block Connection](#)
- [6 Connection diagram](#)
- [7 RS485 Control](#)
- [8 Complete HSG04 housing with accessories](#)
- [9 Complete HSG04 housing with accessories](#)
- [10 Optional Accessory – HSG04-Wall Mount](#)
- [11 Optional Accessory – HSG04-Pole Mount](#)
- [12 Optional Accessory – HSG04-Power Box](#)
- [13 Optional Accessory –Water Tank, WP10-10m-24Vac](#)
- [14 Documents / Resources](#)
- [15 Related Posts](#)



**BougeRV HC24 Series PWM 24V Solar Charge Controller**



## Unpack



Bracket adapter



Pan-head screw(x2)



HSG04



Nozzle kits(nozzle, bracket, screws x2, Ø8-4mm hose adapter x1, cable tie x4)



L-wrench



Quick Start Guide

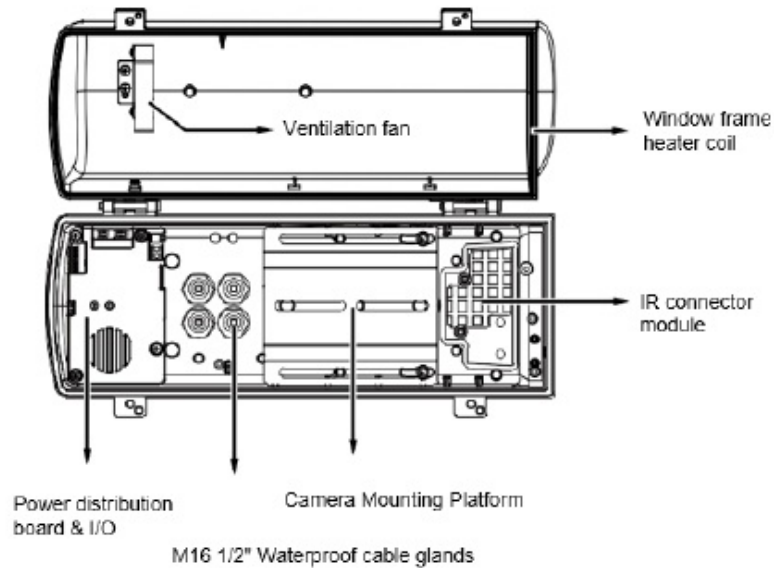
**Note 1:** Subject to modification. Actual products and accessories may differ in appearance.

## Installation Notices

### CAUTION:

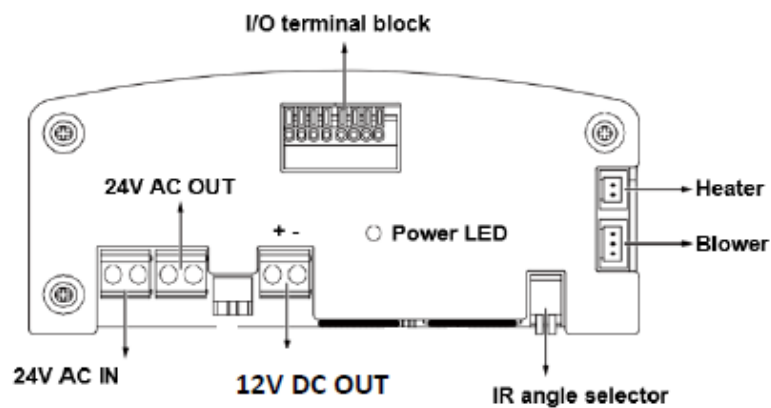
INSTALLATION SHALL BE PERFORMED BY QUALIFIED PERSONNEL ONLY. INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL PROCEDURES. IT'S NOT RECOMMENDED TO USE WIPER WITHOUT A WASHER TANK. IT WILL CAUSE AN UNREPAIRABLE SCRATCH ON THE GLASS. PLEASE APPLY APPROPRIATE PROTECTION TO THE EYES WHEN INSTALLING IR MODULE ON THE HOUSING.

## Connectors

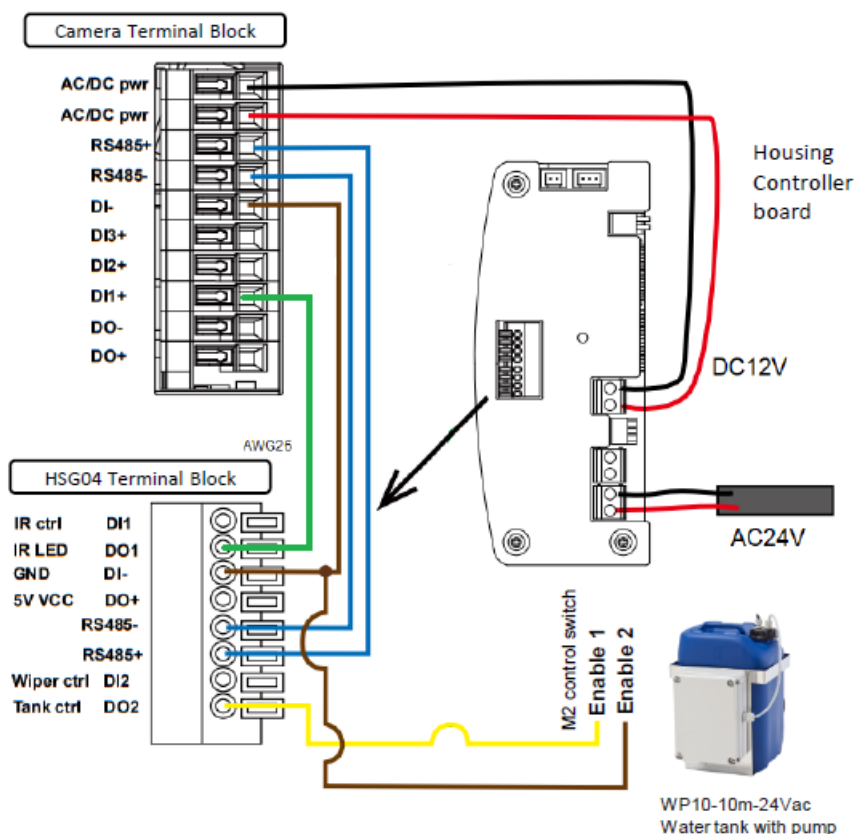


## I/O Terminal Block Connection

I/O	Description
DO2	Connect to tank water pump.
DI2	Wiper control, connects to IP camera's DO for manually triggering washer.
RS485+	Serial port to control IR, wiper and washer.
RS485-	
DO+	+5V VCC
DI-	GND
DO1	IR LED status, connect with camera input to control IR cut filter(default)
DI1	IR control by camera



## Connection diagram



## RS485 Control

protocol	Baud rate	data bits	parity	stop bit
Pelco-D	2400	8	None	1

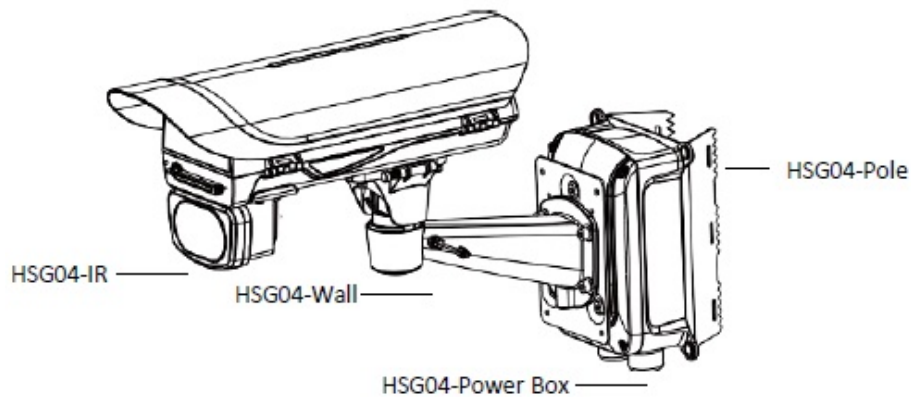
### Pelco-D command

Control	Pelco-D Command
Wiper On	Aux 1 On
Wiper Off	Aux 1 Off
Wiper and Washer On	Aux 2 On
Wiper and Washer Off	Aux 2 Off
IR Led Force On	Aux 3 On
IR Led Force Off	Aux 3 Off
HSG04-IR Wide	Zoom Wide
HSG04-IR Tele	Zoom Tele
HSG04-IR Stop	Zoom Stop

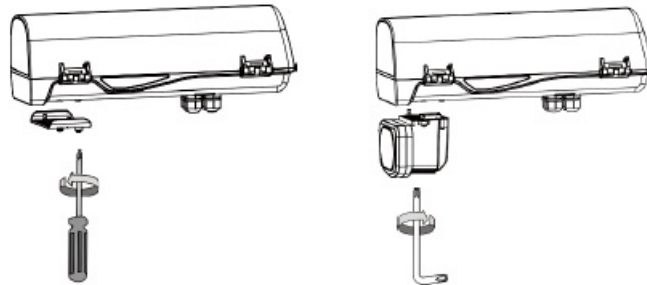
**Note 2:** Once RS485 controls the IR Led, the IR mode will be in RS485 control. Please switch to “Light Sensor

mode” by “FF 01 00 18 02 02 1D” Pelco-D command. The Light sensor at lamp will control the lamp by the lighting condition.

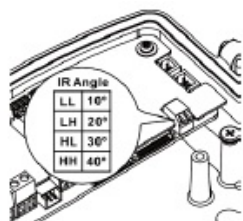
## Complete HSG04 housing with accessories



## Complete HSG04 housing with accessories



1. Remove the metal cover from underneath the housing.
2. Install the HSG04-IR module and ensure the rubber gasket is in place.
3. Adjust the IR distance by DIP switch.



DIP Switch :

LL

LH

HL

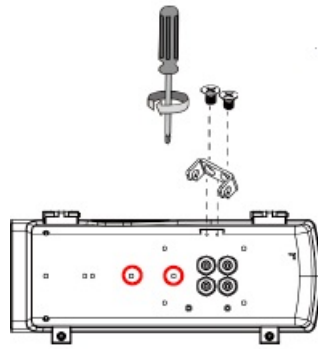
HH



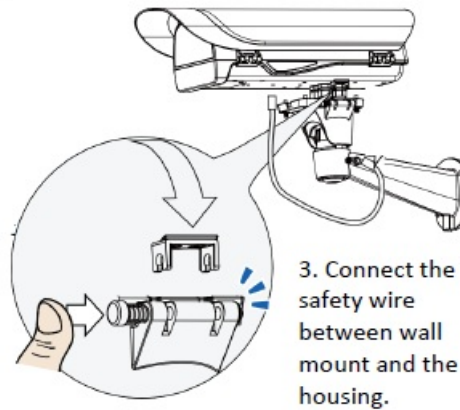
DIP Switch	LL	LH	HL	HH
Beam angle	10°	20°	30°	40°
Distance (meter)	140m	110m	80m	50m

## Optional Accessory – HSG04-Wall Mount

1. Fasten 2 screws to secure the intersection bracket at the bottom of the housing.



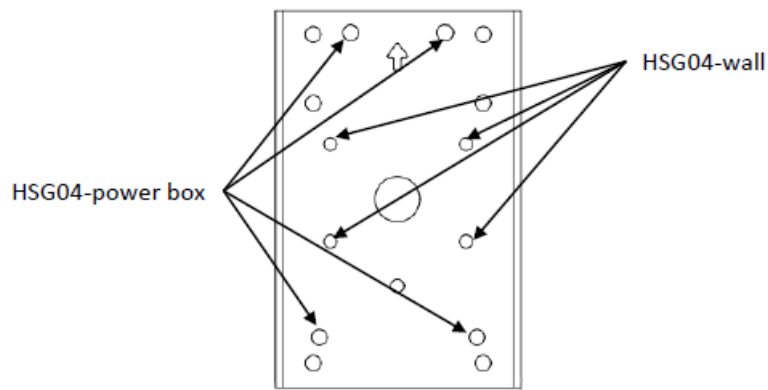
2. Install the housing by pressing the spring mortise and hooking the bracket onto the groove in the spring mortise. Fasten the screws on the side.



3. Connect the safety wire between wall mount and the housing.
4. Fasten the wall mount to the mounting holes as indicated above.

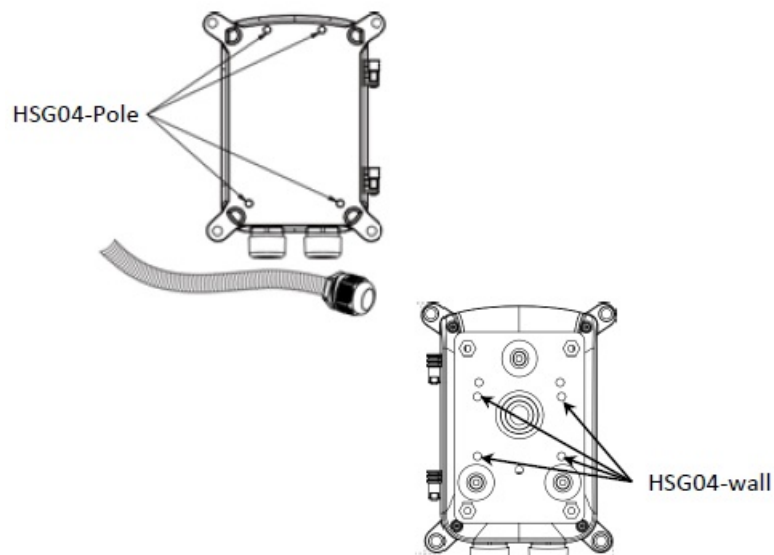
### Optional Accessory – HSG04-Pole Mount

HSG04-pole mount can be used with HSG04-wall as well as HSG04-power box. The different mounting holes are indicated below.



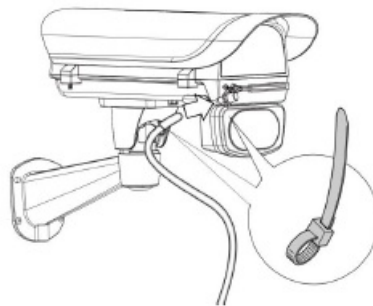
### Optional Accessory – HSG04-Power Box

HSG04-Power box can be installed with HSG04-Wall as well as HSG04-Pole. The different mounting holes are indicated below.



### Optional Accessory –Water Tank, WP10-10m-24Vac

Install the washer nozzle with a bracket to the side of the HSG04. Connect a piece of Ø8mm hose to the nozzle and use an Ø8-4 hose adapter as the bridge to the hose included in WP10-10m-24Vac. Secure each connections with a cable tie.



### Documents / Resources



[BougeRV HC24 Series PWM 24V Solar Charge Controller](#) [pdf] User Manual  
 HC24 Series, PWM 24V Solar Charge Controller, HC24 Series PWM 24V Solar Charge Control  
 ler, Charge Controller, Controller