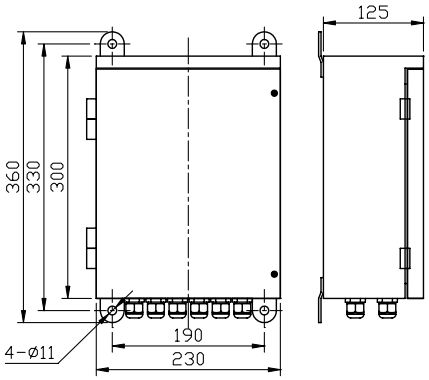
FR15 Synchronizing Control Box

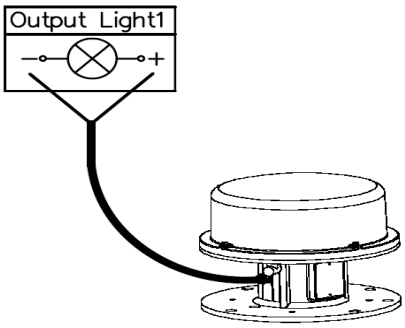
FR15-E3-V12

FR15 Series Outdoor

Installation (unit:mm)



Connection diagram



Aviation Light

Application

Design for the fault alarm output,ON/OFF and flash frequency control for aviatioon obstruction light.

Major functions&features

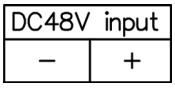
- Control the aviation lights flash synchronously.
- With fault alarm function. When any light fails, there will be with alarm indicator and fault signal output.
- Alarm signal is relay contactor output, no power source.
- With photocell/manual switchover device. If you do not need photocell function, it could change to manual control model by this device.
- Light-operated switch use PJ003 to realize its function. Fault alarm function about photocell can be customized.
- AC type control box can customize the GPS synchronization: Synchronize all aviation lights which are controlled by different control box.
- With disturbance switching function. When lead light fails, standby light will switch on automatically.(Customized).

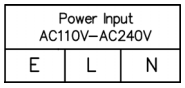
Specification

Voltage	DC48V AC110V~AC240V	Control method	Steady burning/flash
Control circuit branch	4 ways	Flash frequency	20~60 times/minute (adjustable)
Photocell sensitivity	70~100Lux(on/off)	Alarm output	dry connect(relay) output
Ambient temperature	-30˚C ~ +70˚C	IP code	IP65
Humidity	10% ~ 95% (no coagulation)		

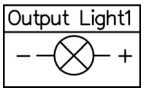
Wiring Connection

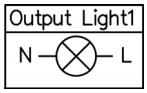
•Power connetion terminal. Product has AC and DC type. Please see the following diagram:





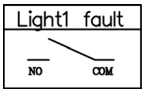
•Aviation light’ s connction terminal. Product has AC and DC type. Please see the following diagram:



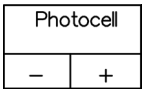


For control box with faulty switch over function, Light 1 is lead light’ s outputting, Light 2 is standby light’ s outputting. When Light 1 works, Light 2 is rest. In case Light 1 fails, Light 2 start to work automatically.

- Connection terminal of aviation light’ s faulty alarm. When light fails, this terminal will be closed. Following diagram is “Light1 fault” terminal.



- Please see following diagram for photocell connection terminal.



Operation:

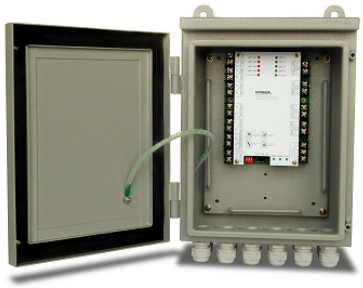
- Manual/Automatic switchover :

  Set the dial switch to the left side, the control panel is in auto status. In this case, control box will switch on/off the lights at nighttime/daytime automatically. Set the dial switch to the middle, control box is in manual status. In this case, the lights will work. Set the dial

Accessory：photocell

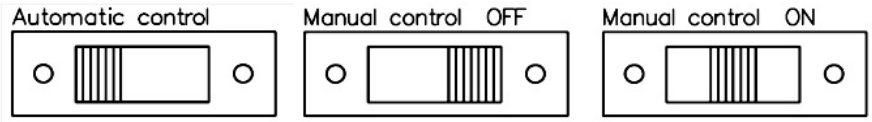
PJ003

Inside picture



Application

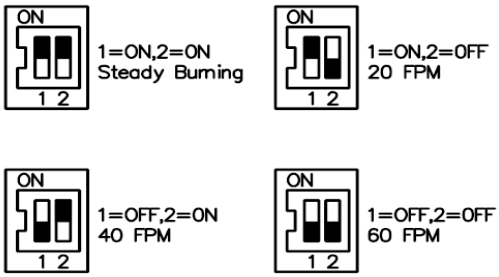
switch to the right side, control box is in manual status. In this case, the lights will be off.



- **Steady burning/flashing mode switchover, and flashing rate setting:**

DC type:

Set it by dial switch. When 2 dial switch is in "ON" status, aviation light is steady burning. Otherwise, aviation light is flashing. Flashing rate 20\40\60 FPM is optional. Please see following diagram: (FPM = FLASH PER MINUTE)

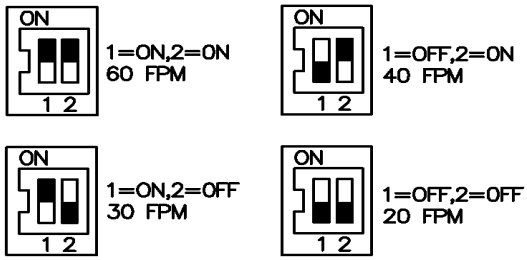


AC type:

The 4 dial switches on the left side control 1-4 aviation light separately.

When dial switch is in "ON" status, aviation light is flashing. When dial switch is in "OFF" status (digital), aviation light is steady burning.

Flashing rate could be 20/30/40/60 FPM, please see following diagram:



- GPS synchronization function(AC110V~AC240V optional):

GPS synchronization is against aviation lights under control box (flashing mode) managing. Meanwhile, all control boxes must be same flashing rate setting. It will receive signal successfully after 10 minutes operation.

GPS antenna must be installed in open environment.

- Installation：

DC type control box：

Single channel to control aviation light flashing/steady burning is not available.

Recommendation: when control box connect different types of aviation light under steady burning mode, the work mode should be controlled by aviation light. Or the steady burning lights are controlled by control box and make them flashing.

AC type control box:

Single channel to control aviation light flashing/steady burning is available.

We recommend using steady burning lights. Flashing/steady burning is controlled by control box.

We do not recommend using flashing lights. It my output alarm by mistake.

Light indicator instruction:

- Power：Power indicator
  Manual：Manual status indicator
  Auto：Automatic status indicator
- Light n Fault：Aviation light faulty indicator.
  Light n ok：Aviation light normal indicator.
- GPS_POWER：GPS power indicator
  1PPS：GPS receiving signal indicator. It will be flashing when it receive signal.
  GPS_WORK：GPS working indicator. It will be flashing too when synchronization is running.

Notice

- This product is voltage detecting type , when and if the power of aviation light completely fails, the control box will give an alarm. Suggest using for not high required test precision
- Don’ t open any part of the products when operation.

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