

# HSDJETS<sup>®</sup>

## FAC-1701 FLIGHT AUXILIARY CONTROLLER SYSTEM QUICK START GUIDE



S/N:

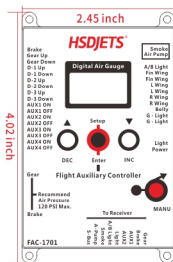
Want to learn more about the product video, pictures, and other matters of attention Please log in: [www.hsdr.com](http://www.hsdr.com)

## Features:

- 0.96 inch OLED display screen
- Dual digital air pressure value display
- Built in landing gear system failure insurance
- Built in 7 groups of navigation lights, programmable 5 lighting modes
- Built in rear light control, which can follow the linkage of throttle lever
- Program control of built-in smoke pulling system
- Selection of 3 air pressure units - psi / bar / kg cm<sup>2</sup>
- 17 pneumatic valve control, 3 programming modes
- Unique airborne air pump automatic control system
- Intuitive and simple programming operations
- Compatible with Futaba S-bus system, which can be freely defined by users

## Specification:

- Operating Voltage : 6.0 to 7.4 Volts for DC.
- Consume Current : 2 A Max.
- Operating Air Pressure Range : 0 to 150 psi Max.
- Air Pressure Accuracy :  $\pm 2\%$  for 150 psi.
- Temperature Range : -10 to +75 °C.
- Dimensions : L 4.02 × W 2.45 × H 0.62 inch.
- Weight : 93 g.



## Important Notice:

1. The air that please keep introduction is dry, the moist air will influence the value accuracy and life-span of the atmospheric pressure detecting sensor seriously.
2. After each flight, please release all air pressure in the tank, this makes sensor service life increase.
3. Please prevent introduction from being higher than the standard air pressure, this may cause the valve to be punctured, and air pressure sensor damage.
4. Recommend input air pressure not over 120 psi. This will be enough for most gear / door and brake to use.
5. The Afterburner Light and Navigation Light power needs offering independently.



You need an extra 7.4V 2S - Lithium Battery.

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## Special Notice:

### **Brake = Wheel Brake**

This takes care, that the pulse modulated brake function starts working at 10% and ends by 90% of the travel of the transmitter function. From 0 - 10% the valve is closed, from 90 - 100% travel the valve is fully open, which prevents air loss on full brake. Setting this mode air consuming is fast. user can via programming change mode



### **Proportional channel**

### **Air Pump = 120 psi Air Pump**

This gives the special channel of the air pump. Via system with pressure detecting devices and GSF link. If GSF reaches the preserving value, the air pump is inflated automatically. Reach 90 psi to close , 90 to 120 psi user via programming can adjustment.

### **D1~D3 = Gear Door 1~3**

Three Gear door and Landing gear system are linked, this can satisfy 95% plane need.

### **AUX1 = Air Brake or Other device**

Users can be wanton definition that device. Example : Air Brake or Bomb throwing device.... etc.

### **AUX2 = Cockpit**

**AUX3 = Cockpit Lock link.**  
AUX2 and AUX3 are linked, the controls cockpit on and off device. Lock the course to delay in 3 seconds.

### **AUX4 = Landing Gear Lock and Gear channel link.**

If your Landing gear have locked device , please open AUX4 function , lock the course to delay in 3 seconds. If has not locked device , please close it. users can via system programming.

### **A/B Light = Afterburner Light**

This Afterburner Light, users can link with the throttle lever or independent channel is controlled. The device outputs 7.4V voltage to supply, users are please be careful in using the course ! Any electric wire shorts out or touch, will damage the equipment. Users can via system programming.

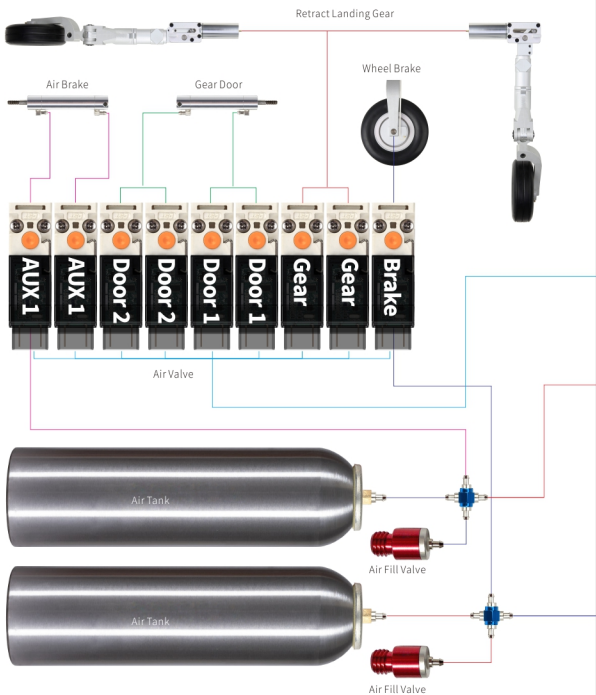
### **G-Light = Landing Gear Light and Gear channel link.**

This light device and Landing gear system are linked. When Landing gear is down , the light will be lighted automatically. Landing gear is up , the light is shut off. Users can via system programming. \* Each output power 2W.

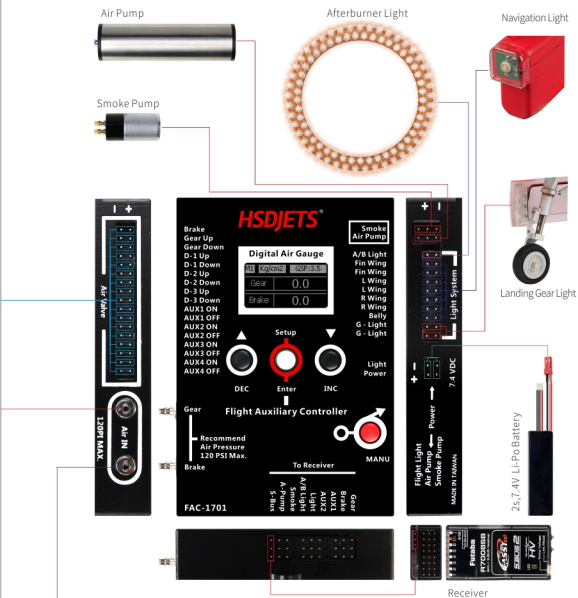
### **Navigation Light**

Our system offers 7 sets of navigation lights . Each output power 2W, user can expand the quantity of the light , and not need any outer driver , only need the light to insert.

## Installation diagram:



## Installation diagram:



## System accessories:

- FAC-1701 Flight Auxiliary Controller × 1
- M3 Air Nipples × 2
- 22 AWG 9" Extended line × 9
- DuPont Connector × 3
- Fixed Screw × 4
- User's Guide × 1

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## Setup Step:

### Landing Gear & Door Mode Setting Step /

#### Factory value : 3.0 sec

↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".

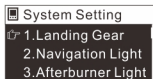
└ Press INC or DEC button select Mode (1.Landing Gear).

└ Press "Setup ● Enter " button, Next select item (1. Work Mode).

└ Press "Setup ● Enter " button, Next " Set Gear Work Mode ".

└ Press INC or DEC button select Mode (M1 / M2 / M3).

└ Press "Setup ● Enter " button completion setting.



↓ Press INC or DEC button select Mode (2.Delay).

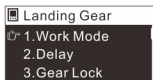
└ Press "Setup ● Enter " button, Next " Gear Work Delay " select item.

└ Press INC or DEC button select item. (M1 Delay / M2 Delay / M3 Delay).

└ Press "Setup ● Enter " button, Next " Delay Time " setting.

└ Press INC or DEC button adjustment Time (0.5 to 8.0 sec) .

└ Press "Setup ● Enter " button completion setting.

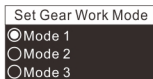


↓ Press INC or DEC button select Mode (3. Gear Lock).

└ Press "Setup ● Enter " button, Next " Set Gear Lock " select item.

└ Press INC or DEC button select (Enable or Disable).

└ Press "Setup ● Enter " button completion setting.



↓ Press INC or DEC button select Mode (4. Gear Light).

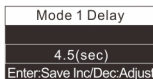
└ Press "Setup ● Enter " button, Next " Set Gear Light " select item.

└ Press INC or DEC button select (Enable or Disable).

└ Press "Setup ● Enter " button completion setting.

└ Press " MANU " button, Return " System Setting ".

└ Press " MANU " button x2, Leave " System Setting ".



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## Setup Step:

### Navigation Light Mode Setting Step / Factory value : Always and S1

↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".

└ Press INC or DEC button select Mode (2. Navigation Light).

└ Press "Setup ● Enter " button, Next select item (1. Work Mode).

└ Press "Setup ● Enter " button, Next " Light Work Mode ".

└ Press INC or DEC button select (Always On or User Control).

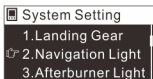
└ Press "Setup ● Enter " button completion setting.

↓ Press INC or DEC button select Mode (2.Left Wing Light).

└ Press "Setup ● Enter " button, Next " Set Left Wing Light " select item.

└ Press INC or DEC button select item. (S1 to S5)

└ Press "Setup ● Enter " button completion setting.

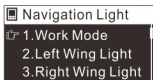


↓ Press INC or DEC button select Mode (3.Right Wing Light).

└ Press "Setup ● Enter " button, Next " Set Right Wing Light " select item.

└ Press INC or DEC button select item. (S1 to S5)

└ Press "Setup ● Enter " button completion setting.



↓ Press INC or DEC button select Mode (4.Fin Wing Light).

└ Press "Setup ● Enter " button, Next " Set Fin Wing Light " select item.

└ Press INC or DEC button select item. (S1 to S5)

└ Press "Setup ● Enter " button completion setting.



↓ Press INC or DEC button select Mode (5.Belly Wing Light).

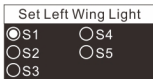
└ Press "Setup ● Enter " button, Next " Set Belly Wing Light " select item.

└ Press INC or DEC button select item. (S1 to S5)

└ Press "Setup ● Enter " button completion setting.

└ Press " MANU " button, Return " System Setting ".

└ Press " MANU " button x2, Leave " System Setting ".



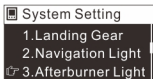
★ Notes : This Navigation Light, users can system open or independent channel is controlled.

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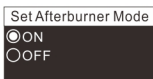
## Setup Step:

### Afterburner Light Mode Setting Step / Factory value : OFF

- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- └ Press INC or DEC button select Mode (3.Afterburner Light).
- └ Press "Setup ● Enter " button, Next " Set Afterburner Light Mode ".
- └ Press INC or DEC button select (ON or OFF).
- └ Press "Setup ● Enter " button completion setting.
- └ Press " MANU " button, Return " System Setting ".
- └ Press " MANU " button x2, Leave " System Setting ".

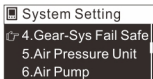


★ Notes : This Afterburner Light, users can link with the throttle lever or independent channel is controlled.



### Gear-Sys Fail Safe Mode Setting Step / Factory value : 50 PSI

- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- └ Press INC or DEC button select Mode (4. Gear-Sys Fail Safe).
- └ Press "Setup ● Enter " button, Next " Set GSF Value ".
- └ Press INC or DEC button adjustment (0 to 95 PSI).
- └ Press "Setup ● Enter " button completion setting.
- ↓ Press " MANU " button, Return " System Setting ".
- ↓ Press " MANU " button x2, Leave " System Setting ".



★ Notes : If Setting 0 PSI, GSF function Close. The new gear fail safe function will help prevent a belly landing due to an air leak on all airplane models with an air retract system. This function has a digital sensor that monitors air pressure. In the event of an air leak, the Fail safe system will put the gear down at preset pressure before the system loses all the air.



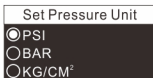
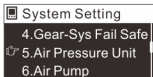
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## Setup Step:

### Air Pressure Unit Mode Setting Step /

#### Factory value : PSI

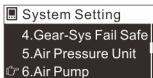
- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- ┆ Press INC or DEC button select Mode (5. Air Pressure Unit).
- ┆ Press "Setup ● Enter " button, Next " Set Pressure Unit ".
- ┆ Press INC or DEC button select (PSI / BAR / Kg-cm<sup>2</sup>).
- ┆ Press "Setup ● Enter " button completion setting.
- ┆ Press "MANU " button, Return " System Setting ".
- ┆ Press "MANU " button x2, Leave " System Setting ".



★ Notes : The unit converting 1 psi = 0.06895 bar /  
1 psi = 0.07031 kg/cm<sup>2</sup>.

### Air Pump Mode Setting Step / Factory value : OFF

- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- ┆ Press INC or DEC button select Mode (6. Air Pump).
- ┆ Press "Setup ● Enter " button, Next " Set Air Pump Mode ".
- ┆ Press INC or DEC button select (ON or OFF).
- ┆ Press "Setup ● Enter " button, Next " Target Pressure ".
- ┆ Press INC or DEC button adjustment (95 to 120 PSI).
- ┆ Press "Setup ● Enter " button completion setting.
- ┆ Press "MANU " button, Return " System Setting ".



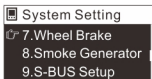
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## Setup Step:

### Wheel Brake Mode Setting Step /

#### Factory value : Normal

- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- ↳ Press INC or DEC button select Mode (7. Wheel Brake).
- ↳ Press "Setup ● Enter " button, Next " Set Brake Mode ".
- ↳ Press INC or DEC button select (Normal or Pulse).
- ↳ Press "Setup ● Enter " button completion setting.
- ↳ Press " MANU " button, Return " System Setting ".
- ↳ Press " MANU " button x2, Leave " System Setting ".

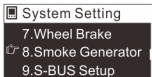


★ Notes : This takes care, that the pulse modulated brake function starts working at 10% and ends by 90% of the travel of the transmitter function. From 0 - 10% the valve is closed, from 90 - 100% travel the valve is fully open, which prevents air loss on full brake. Setting this mode air consuming is fast.

### Smoke Generator Mode Setting Step /

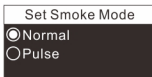
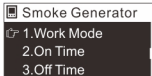
#### Factory value : 1.0 sec

- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting ".
- ↳ Press INC or DEC button select Mode (8. Smoke Generator).
- ↳ Press "Setup ● Enter " button, Next select item (1. Work Mode).
- ↳ Press "Setup ● Enter " button, Next " Set Smoke Mode ".
- ↳ Press INC or DEC button select (Normal or Pulse).
- ↳ Press "Setup ● Enter " button completion setting.



#### ↓ If you select " Pulse", you can Setting on and off Time.

- ↳ Press "Setup ● Enter " button, Next select item (2. ON Time).
- ↳ Press "Setup ● Enter " button, Next " Set Pulse On Time ".
- ↳ Press INC or DEC button adjustment Time (0.1 to 1.0 sec).
- ↳ Press "Setup ● Enter " button completion setting.
- ↳ Press "Setup ● Enter " button, Next select item (3. OFF Time).
- ↳ Press "Setup ● Enter " button, Next " Set Pulse Off Time ".
- ↳ Press INC or DEC button adjustment Time (0.1 to 1.0 sec).
- ↳ Press "Setup ● Enter " button completion setting.
- ↳ Press " MANU " button, Return " System Setting ".
- ↳ Press " MANU " button x2, Leave " System Setting ".



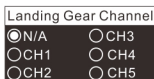
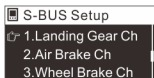
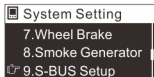
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## Setup Step:

### S-BUS Mode Setting Step

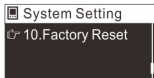
- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting".
- └ Press INC or DEC button select Mode (9. S-BUS Setup).
- └ Press "Setup ● Enter " button, Next "S-BUS Channel Setup".
- └ Press INC or DEC button select item (1 to 8).
- └ Press "Setup ● Enter " button, Next Channel Setup.
- └ Press INC or DEC button select (CH1 to Dg2), 18CH.
- └ Press "Setup ● Enter " button completion setting.

★ Notes : If you select use S-Bus, you can setup the channel and link of all functions wantonly. 18 channel can be all used, this depends on your receiver and transmitter.



### Factory Reset Mode Setting Step

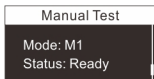
- ↓ Press "Setup ● Enter " button for 2 second, Screen display " System Setting".
- └ Press INC or DEC button select Mode (10. Factory Reset).
- └ Press "Setup ● Enter " button, Next " Factory Reset".
- └ Press INC or DEC button select (YES or NO).
- └ Completion setting.



### MANU - Function Test / Check / Factory value : Gear Down

- ↓ Press " MANU " button for 2 second, Screen display " Manual Test".
- └ Press MANU button, Gear Up Function Test and Blue LED light steady on.
- └ Once again press MANU button, Gear Down Test and Blue LED steady on.
- └ Press "Setup ● Enter " button, Leave " Manual Test "

★ Notes : We recommend use this MANU mode Test /  
Check you function Setting.



## Products Guarantee Conditions:

HSDJETS Inc. during the production process each Flight Auxiliary Controller undergoes a series of test. We take the maintenance of the highest quality standards very seriously, and that is why we are able to grant a 12 month guarantee on all our Flight Auxiliary Controller Products, valid from the initial date of purchase. The guarantee covers proven material faults, which will be corrected by us at no charge to you. We wish to emphasise expressly that we reserve the right to replace the unit if a repair is impossible for economic reasons. Proof of the commencement and progress of this guarantee period is the purchase receipt. Repairs which our Service Department carries out for you do not extend the guarantee period. Misuse and maltreatment, such as reversed polarity, excessive voltage and the effects of damp, invalidate the guarantee. The same applies to faults due to server wear or excessive vibration. The guarantee does not cover any additional claims, such as consequent damage. We expressly deny liability for damages which are caused by the device, or arise through the use of the device.



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