



## Installation and Operation Manual

### FD90AID-LG Advisory Information Display





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## General Information

The FD90AID-LG is a 5” Advisory Information Display, which creates panel space where none previously existed, this display provides an excellent opportunity to bring EVS video, satellite weather, or any other Composite source into the cockpit with a low-profile, stowable display. It is available in two different configurations: FD90AID-LG (shown below) and the FD90AID-LG-B.

## Front View

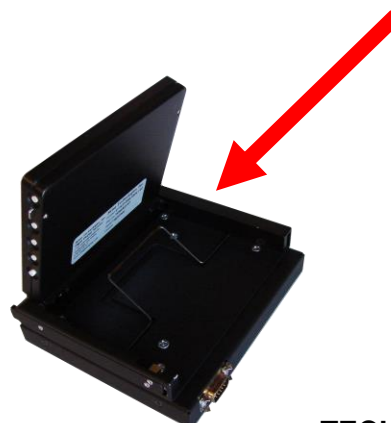


## Additional Information

The FD90AID-LG features a “face-out” display designed to mount on top or underneath the glare shield, which the pilot would open 90° to be viewed.

The FD90AID-LG uses a torsion spring, which deploys the unit up from the stowed position. It also has an extended power button which enables the unit to automatically power off upon closing. (Note: The unit does not automatically power on, and should be on when closed in order to power off automatically.)

**Torsion Spring**



## Specifications

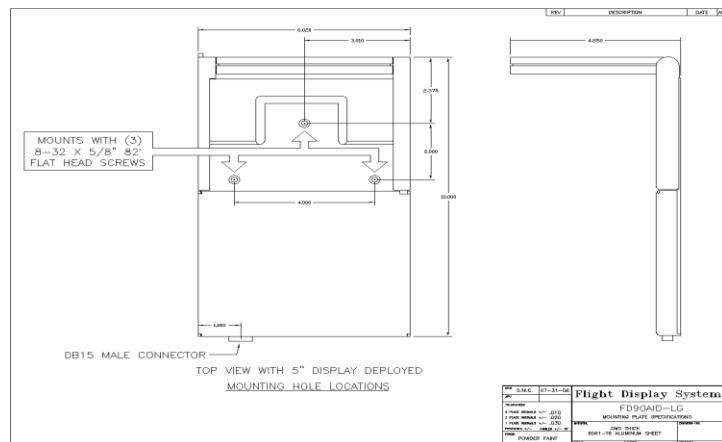
<b>Display Type</b>	5.0487" TFT Color LCD
<b>Screen Resolution</b>	640x480
<b>Brightness</b>	600 cd/m <sup>2</sup>
<b>Dimensions (Display Enclosure)</b>	6.1"(W) x .70"(H) x 10.00"(D)
<b>Power</b>	12VDC @ .5 AMPS 28VDC @ .3 AMPS
<b>Video Inputs Supported</b>	Analog RGB, 2 Composite Video
<b>Video Types Supported</b>	VGA, NTSC/PAL
<b>Screen Control</b>	On Screen Display Menu
<b>Weight</b>	2.4 lbs.
<b>Certification</b>	FAA/PMA Approved

\*Other input options are available for an additional cost, please contact FDS Avionics Corp. for more information.

## Installation Instructions

All cockpit accessory equipment, such as the FD90AID-LG, should be installed on a non-essential bus and have a dedicated circuit breaker. It is a requirement that a switch be installed so that the pilot can de-energize the system should it become necessary. The FD90AID-LG offers excellent versatility for installation in different aircraft. Four mounting holes are located on the mounting plate. The mounting plate should first be mounted using the following installation tools: hardware, plus instructions. However, it is at the discretion of the installer to mount the unit according to the specific aircraft. **NOTE: Ensure that the mounting plate is oriented properly. The standoffs closest to the edge of the mounting plate should face aft. The mounting bracket is not symmetrical. Please refer to drawing for proper orientation.**

1. With a #2 (.221") drill bit, drill (4) holes into the metal or plastic support on top of the glare shield using the dimensions from the drawing below.
2. Fasten (4) 8-32 rivet nuts into the (4) holes under the glare shield with a Rivet Nut Gun.
3. Attach the mounting plate to the glare shield using (4) 8-32x5/8", 82° flat head screws.
4. Obtain the 5" display and open the display to the 90° position. Locate the 4 empty countersunk holes at each corner and align with the standoffs on the mounting plate.
5. Position the 5" display over the standoffs and lower until the unit is seated on the mounting plate.
6. Attach the 5" display to the mounting plate using four 6-32x3/8", 100° flat head screws.
7. Finally, complete the wiring and attach to the DB15 male connector on the back of the unit.



## Power

This is a **12VDC – 28VDC** monitor that requires 0.5 - 0.3 Amps of power to operate.

## Wiring Suggestions

All shields should be grounded to the connector at the source, and floating at the display.

Avoid routing video wiring parallel to:

- AC wiring
- Strobe wiring
- DC motor supply cables
- Inverter cabling
- Or any other potential noise source.

## Power and Ground Wiring

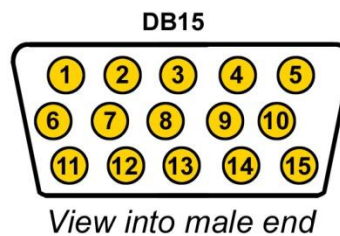
22 AWG wire is recommended for Power and Ground applications.

## Pinout for High Density DB-15

Part Numbers for the mating DB-15 connectors, manufactured by Positronics.

High density, D-sub, 15 contact receptacle (female) P/N ODD15F10JVLO

HD15F pins P/N M39029/57-354



Pin Number	Description
1	28VDC Power
2	28VDC Ground
3	N/C
4	Composite Video 1 HI
5	Composite Video 1 LO
6	N/C
7	N/C*
8	N/C*
9	N/C*
10	N/C*
11	N/C*
12	N/C*
13	N/C*
14	N/C*
15	N/C*

\*Other input options are available for an additional cost, please contact FDS Avionics for more information.

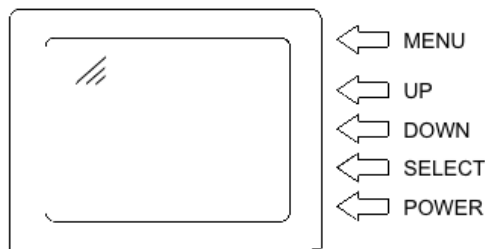
## Operation Instructions

When the FD90AID-LG is powered up, it will search for a video input on the last known source. If no video input is found, the display will go into standby mode. The FD90AID-LG is a single source video display and as a result the source selection button labelled (SEL) has been disabled.

## Button Controls

Located on the face of the display and on the edge of the monitor, are the following buttons, from bottom edge to hinge:

BUTTON	DESCRIPTION
MENU	Opens the monitor setup menu. Enter sub-list. Return to main list.
UP	Increases the adjustment of the selected function.
DOWN	Decreases the adjustment of the selected function.
SEL	Disabled
PWR	Turn monitor ON and OFF.





## Frequently Asked Questions

### My video was working fine, but now I don't have any display.

If the pilot lowers the backlight all the way down to the lowest setting (No illumination), the unit will remember this setting and appear to be inoperative. Simply raise the level of backlighting to view the display.

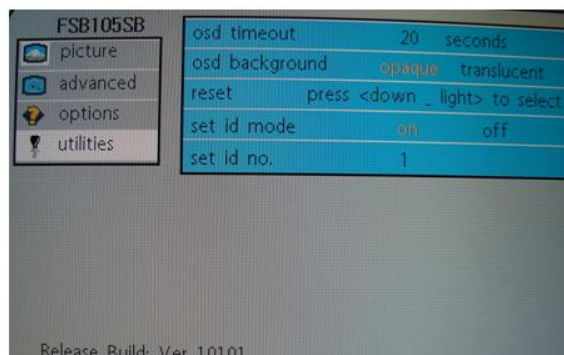
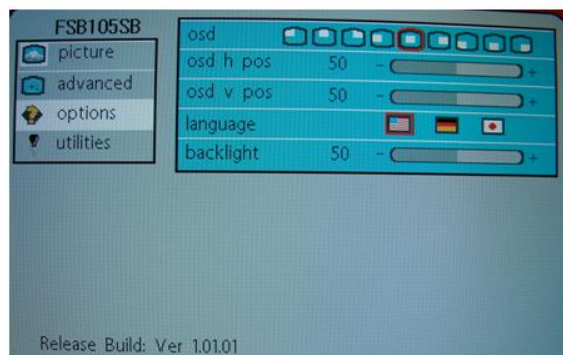
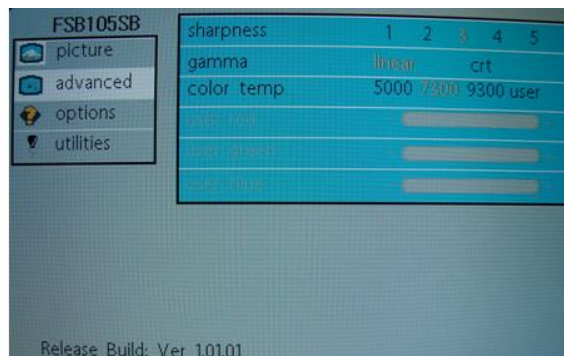
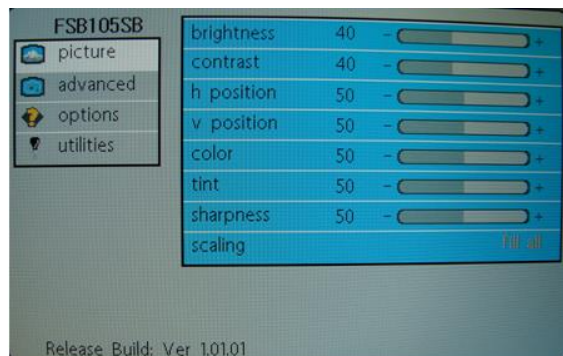
### Is there a locking mechanism to keep the FD90AID-LG open?

No, however the tension can be adjusted by tightening the two 6-32x5/16" socket head cap screws next to the latch bar.



### How do I navigate through the menus?

Use the Menu button to open the menu. Use the Select button to chose the applicable menu page, and press Up to enter the selected menu page. Use the Select button to scroll through the options, and then use the Up and Down buttons to increase or decrease the options' values.





## Technical Support

Should you have any questions concerning this product or other FDS Avionics Corp. products, please contact our Product Support representatives at (407) 239-7421.

### **FDS Avionics Corp.**

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Alpharetta, GA 30005

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Fax: 470-239-7439

Email: [sales@FDSAvionics.com](mailto:sales@FDSAvionics.com)

For further product information, technical data and sample wiring diagrams, please click on the **Dealers** section of our web site at [www.FDSAvionics.com](http://www.FDSAvionics.com)

## Instructions for Continued Airworthiness

The FD90AID-LG is designed not to require regular general maintenance.





## Limited Warranty

All FDS Avionics Corp. (FDS) products are warranted to be free from material or manufacturing defects for a period of 24 months from the date of shipment for General Aviation customers or 12 months from the date of shipment for Government/Special Mission customers. Any material or repair workmanship for in warranty repair service will be specifically warranted for 90 days or the remainder of the original warranty period, whichever is longer. If the original warranty period has expired, the 90 day repair warranty is limited to the material and workmanship specific to the repair activity completed.

The following conditions are exclusions to warranty coverage:

1. Labor costs associated with installation, removal or reinstallation of any product.
2. Damage to or malfunction caused by any unauthorized alteration made to the product.
3. Resolving signal quality issues caused by externally generated noise introduced by aircraft electrical systems or other components connected to any FDS product.
4. Any malfunction caused by improper installation or connection to aircraft wiring, industry standard cabin management/ inflight entertainment systems, or third party commercial equipment not specifically identified as compatible with FDS products.
5. Any malfunction caused by installation that does not conform to precautions associated with operating environments listed in the operating manual or consistent with industry best practices such as; high temperature, adequate ventilation, high humidity, high dust, or power surges.
6. Cosmetic damage or damage to internal components caused by installation or removal, failure to follow installation or operating instructions, or any neglect or misuse of the product.
7. Any product that is returned for service with a broken tamper evident seal, indicating tampering or improper handling of the product by an unauthorized person. Violation of product tamper evident seals or modification of factory installed serial and PMA labels voids any warranty, either expressed or implied.

The FDS technical support team is available to provide distance troubleshooting support during business hours (8:00am to 5:00pm EST) Monday through Friday at (470) 239-7421.

Many repair requests can be resolved through distance support and may not require return of merchandise to the factory. If a product must be returned to the factory for repair, an RMA number will be issued as directed by the technical support team and communicated by the repair coordinator.

Upon request by the customer, FDS may send a service technician onsite to repair any non-PMA products. The travel expenses incurred to include transportation, lodging and meals along with the technician's hourly rate shall be payable by the customer in accordance with FDS' applicable rates and procedures.

FDS Avionics Corp. will, upon receipt of returned merchandise, remanufacture or replace the unit at our discretion and return the product by Ground Return Shipping. Express return shipment will be the responsibility of the sender.

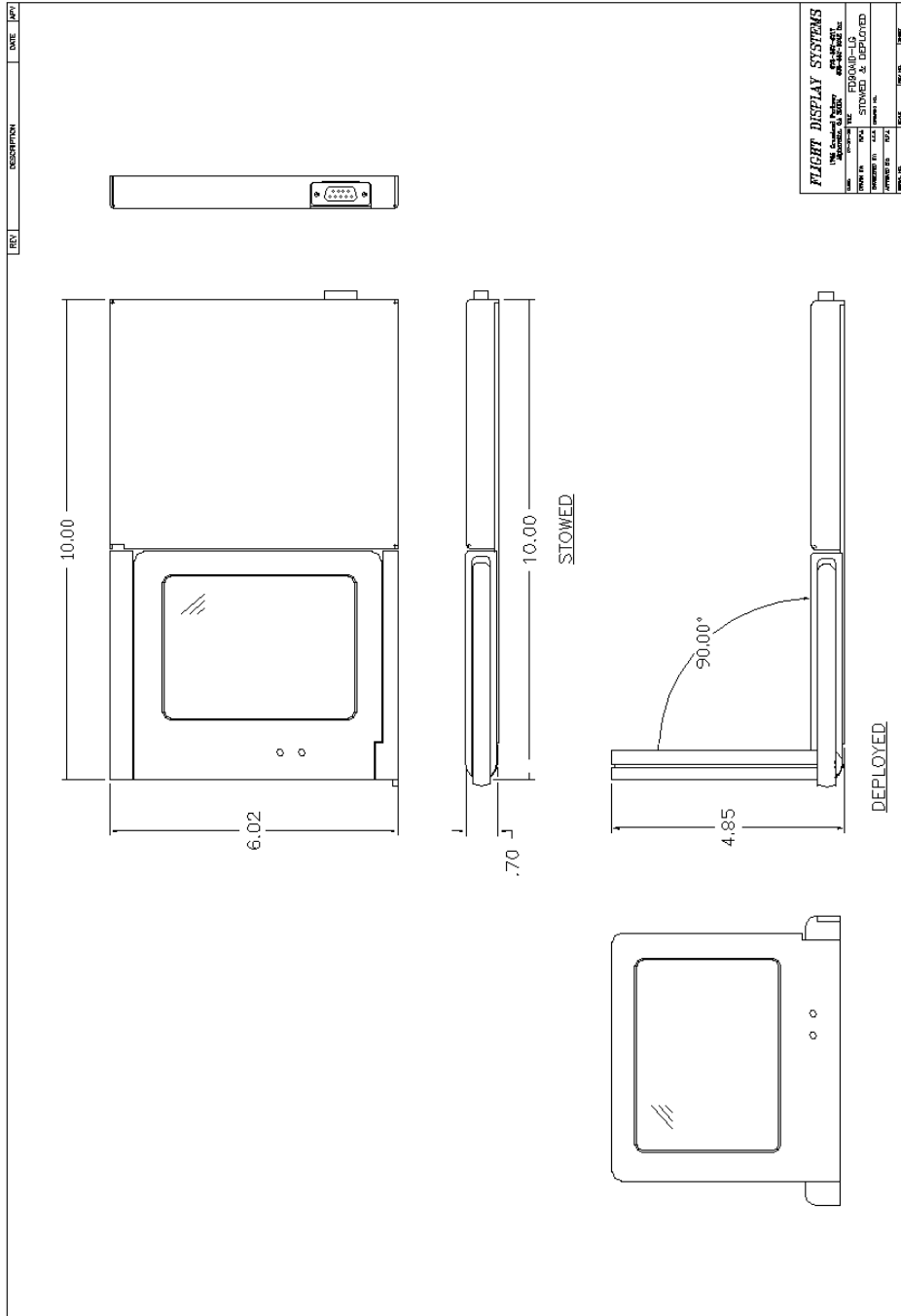
This warranty is not transferable.

Any implied warranties expire at the express limited warranty expiration date. FDS shall not be held liable for any indirect, special, punitive, incidental or consequential damages.

Some states do not allow limitation on the length of an implied warranty. In such states, the exclusions or limitations of this limited warranty may not apply.



# Technical Drawing





## Log of Revisions

Rev	Date	Page	Description
A	08/01/2008	---	Initial Release
B	08/25/2008	3,5,6,10	Video information modified
C	01/26/2009	3,4,11	Updated power, specifications and warranty info
D	08/06/2009	3	Updated Testing Information
E	7/28/2017	All	New Format, New Company, New Name

