



Installation and Operation Manual

FDFILT-28

28V Filter





FDFILT-28
28V FILTER

© 2008 Flight Display Systems. All Rights Reserved.

Flight Display Systems

6435 Shiloh Road

Alpharetta, GA 30005

470-239-7400 Phone

678-867-6742 Fax

sales@FlightDisplay.com

www.FlightDisplay.com

For the most current copy of all product manuals, please visit our website at
www.FlightDisplay.com





Table of Contents

General Information	4
Front View.....	4
Specifications	5
Installation Instructions	5
Power	5
Power/Video	6
Technical Drawing	7
Technical Support	8
Instructions for Continued Airworthiness	8
Warranty	9
Log of Revisions	10



General Information

The FDFILT-28 is a LC Circuit consisting of an inductor and a capacitor. The circuit functions as low-pass filter blocking any frequencies higher than DC from reaching the equipment that is connected at the filter's output. The FDFILT-28 can be connected right at the monitor's power input insuring a clean DC power is entering, thus reducing visual noise that is typically generated on the screen due to "dirty" power source.

The FDFILT-28 also includes a 20 Amp ATC fuse and a protection diode to prevent the connected equipment from damage by short circuit or over-current.

Front View



Specifications

Power	28VDC
Maximum Amperage	15 AMPS
Dimensions	2.62" (W) x 2.54" (H) x 1.43" (D)
Weight	4.6 oz
Connector	DB-9
Operating Temperature	0-50° C (32-122° F)

Installation Instructions

All cabin entertainment equipment, such as the FDFILT-28, should be installed on a non-essential bus and have a dedicated circuit breaker. It is necessary that a switch be installed in the cockpit so that the pilot can de-energize the entertainment system should it become necessary.

Power

This is a **28VDC** filter that can handle up to 15 Amps of power. (15 Amps is the recommended maximum, as nearing 20 Amps may cause the fuse to blow.)

The rated current of the equipment should be taken into consideration when selecting wire gauge. For large current draws use thicker wires. The thicker the wire, the less voltage is lost across the length of the wire. Some connector pins are only compatible with the smaller gauge wires. If multiple power pins are available then all pins should be used. To minimize internal voltage spikes, use short, thick gauge wire for ground connections.

It is the installer's responsibility to understand the product's requirements and to install the product in compliance with industry standards and safety.

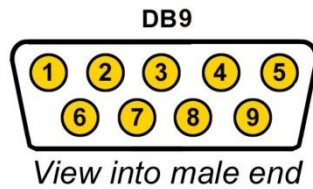
Power/Video

Pin out for DB-9

Part numbers for DB-9 connectors, manufactured by Amp:

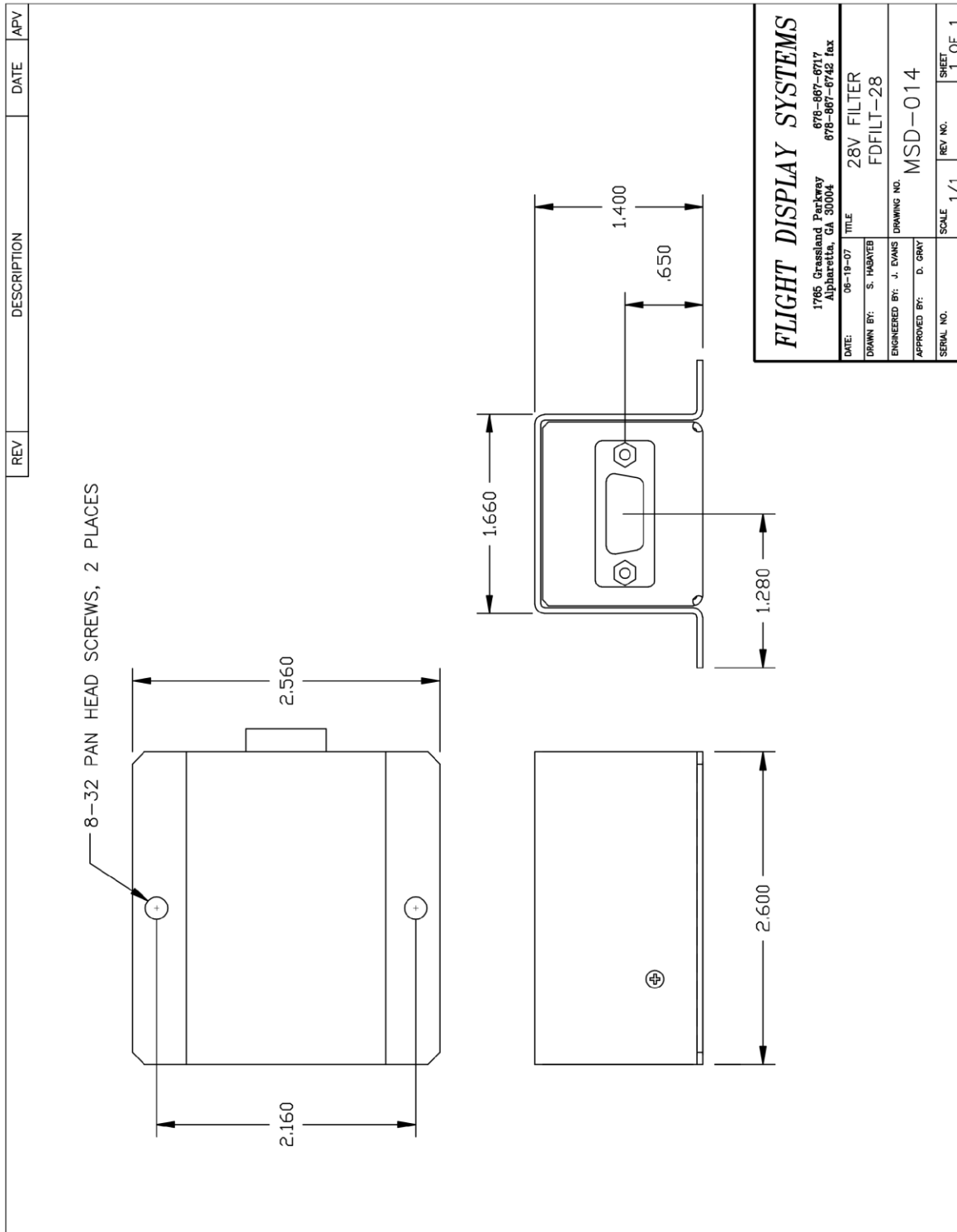
D-sub, 9 contact receptacle (female)
 9F pins

P/N 747905-2
 P/N 205439-1



Pin Number	Description
1	28VDC Power Input
2	28VDC Ground Input
3	N/C
4	28VDC Power Output
5	28VDC Ground Output
6	28VDC Power Input
7	28VDC Ground Input
8	28VDC Power Output
9	28VDC Ground Output

Technical Drawing





Technical Support

Should you have any questions concerning this product or other Flight Display Systems products, please contact our Product Support representatives at (470) 239-7421.

Flight Display Systems

6435 Shiloh Road

Alpharetta, GA 30005

Phone: 470-239-7400

Fax: 678-867-6742

Email: sales@FlightDisplay.com

For further product information, technical data and sample wiring diagrams, please click on the **Dealers** section of our web site at www.FlightDisplay.com

Instructions for Continued Airworthiness

The FDFILT-28 is designed not to require regular general maintenance.



Limited Warranty

All Flight Display Systems (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.

Flight Display Systems 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.



Log of Revisions

Rev	Date	Page	Description
A	06/27/2007		Initial Release
B	10/17/2008	2,4	Updated power information, wiring diagram and assembly drawing
C	04/14/2009	1,3	Updated specifications, warranty info
D	07/21/2010		Revised Title on front cover, Format Change
E	10/14/2011	5	Added Operating Temperature

