

Installation and Operation Manual

FDSDI-COMP

HDSDI to Composite Converter



| | |
|------------------------------|--------------------------------|
| Dimensions | 6.75"(L) x 1.15"(H) x 4.00"(W) |
| Weight | 12.64 oz. |
| Power | 28VDC @ 250mA |
| Operating Temperature | 0° to 40° C |
| Storage Temperature | -20° to 45° C |
| Relative Humidity | 0% to 90% non-condensing |
| Video Input | SDI, HD-SDI, 3G SDI |
| Video Output | Composite Video (NTSC or PAL) |



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General Information

The HDSDI to Composite Converter receives a single (SDI, HDSDI, or 3G SDI) input and converts it to either one of the two SDI LOOP through outputs or to a single VGA/composite output. This converter also provides the added functionality of digital audio output. To ensure compatibility across the globe an PAL/NTSC switch is another added feature for standard video.

The FDSDI-COMP converter provides the ability to interface video from DVD players, TV receivers, or iPad/iPods to Composite switches or displays.

Front View



Wiring Suggestions

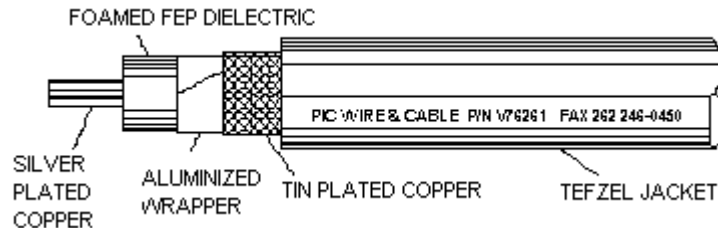
Video Wiring

Avoid routing video wiring parallel to:

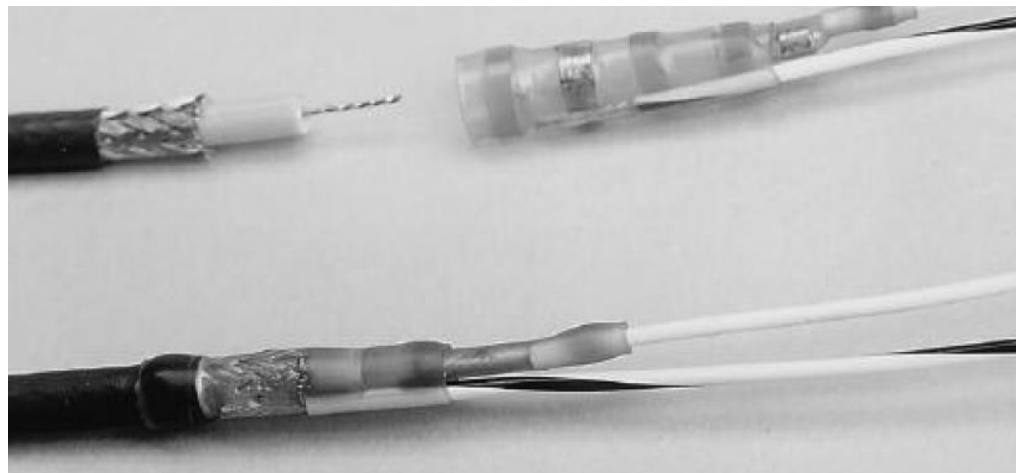
- AC wiring
- Strobe wiring
- DC motor supply cables
- Inverter cabling
- Or any other potential noise source.

S-Video/Composite

Recommended cable for s-video/composite and audio purposes is PIC 75 Ohm Coax, P/N V76261. This is a lightweight, flexible, and low signal loss cable which meets FAA flammability requirements of FAR 23.1359(d), FAR 25.853(a) and FAR 25.869(a)(4).



Similar aviation coaxial cable can be used from other vendors, as well. Some aircraft are prone to AC noise. If noise is observed on Composite Video signals that use standard Coax Cabling, then we recommend adding to the composite source a 75 Ohm video isolation transformer such as Deerfield Laboratory, Inc. Part No. 162-1 (www.deerfieldlab.com, (650) 632-4090). In most cases this should be added to the video output of the source. Coax cables should be terminated using solder sleeve coaxial cable terminators, Raychem P/N: CWT-4174-W122-5/9.



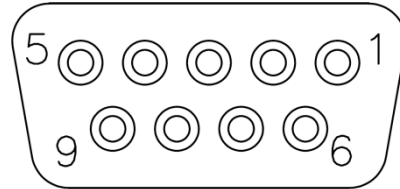
Power

This is a **28VDC** device that requires 250mA of power to operate, a minimum of 22 AWG wire is recommended for Power and Ground applications.

Pin out for DB-9 Receptacle

Connector
 Crimp Contacts

P/N: M24308/2-281 or Equivalent
 P/N: M39029/63-368 or Equivalent



MATING FACE

| PIN NUMBER | DESCRIPTION |
|------------|--------------|
| 1 | 28VDC Power |
| 2 | 28VDC Ground |
| 3 | N/C |
| 4 | N/C |
| 5 | N/C |
| 6 | N/C |
| 7 | N/C |
| 8 | N/C |
| 9 | N/C |

SDI/ HD-SDI/ 3G SDI Input (X1)

Standard 75Ω BNC Plug (RG179 connector supplied)

| PIN NUMBER | DESCRIPTION |
|------------|--------------|
| CENTER | Video Signal |
| SHELL | Video Return |

SDI/ HD-SDI/ 3G SDI Output (X2)

Standard 75Ω BNC Plug (RG179 connector supplied)

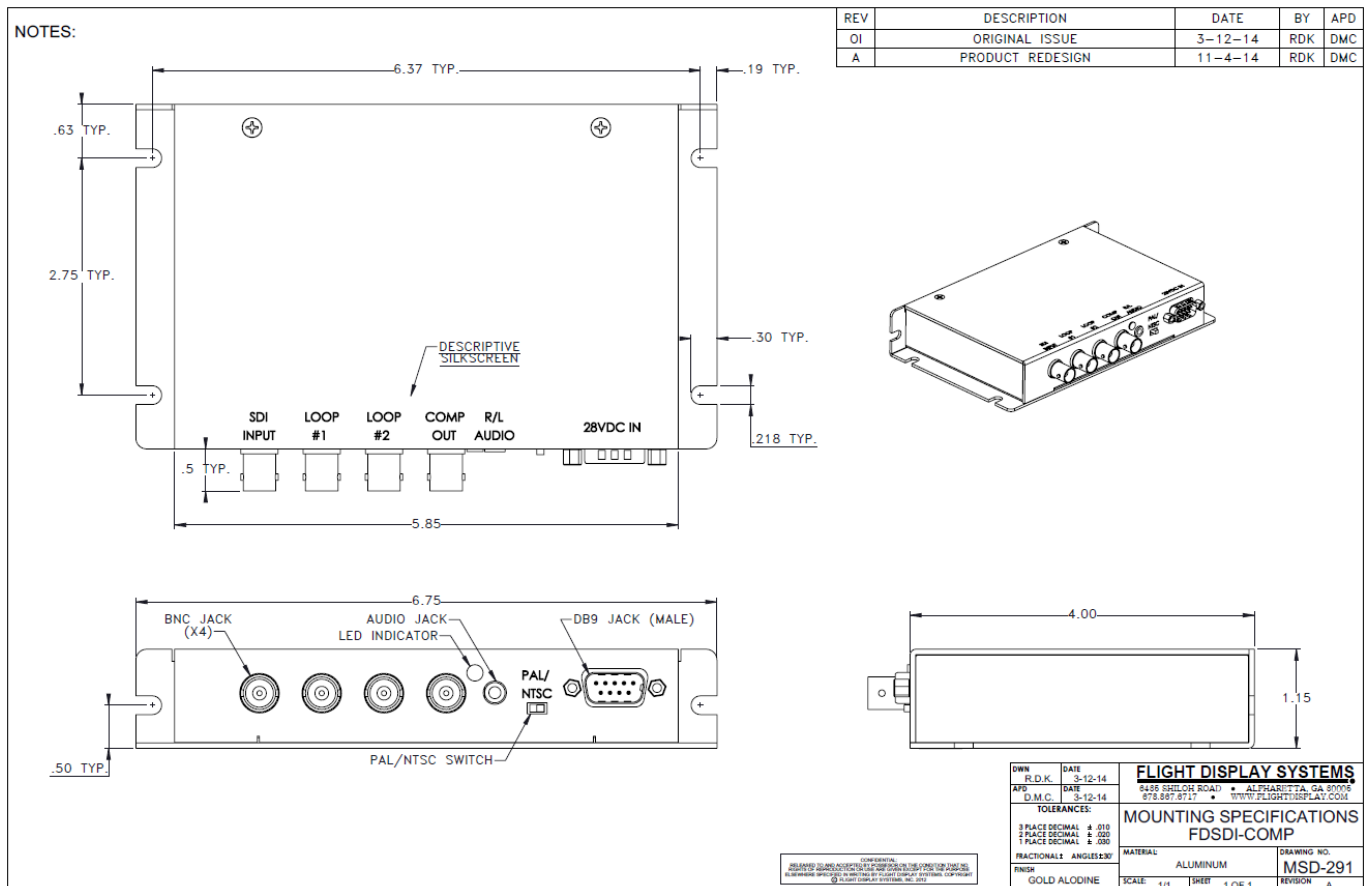
| PIN NUMBER | DESCRIPTION |
|------------|--------------|
| CENTER | Video Signal |
| SHELL | Video Return |

Composite (PAL/NTSC) Output (X1)

Standard 75Ω BNC Plug (RG179 connector supplied)

| PIN NUMBER | DESCRIPTION |
|------------|--------------|
| CENTER | Video Signal |
| SHELL | Video Return |

Technical Drawing





Technical Support

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

FDS Avionics Corp.
6435 Shiloh Road
Alpharetta, GA 30005
Phone: 470-239-7400
Fax: 470-239-7439
Email: 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

Instructions for Continued Airworthiness

The FDSDI-COMP converter 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.





Log of Revisions

| Rev | Date | Page | Description |
|-----|------------|------|---------------------------------------|
| A | 05/02/2014 | All | Initial Release |
| B | 11/26/2014 | All | Product Enhancement |
| C | 5/05/2017 | All | New Format, Warranty and Company Name |

