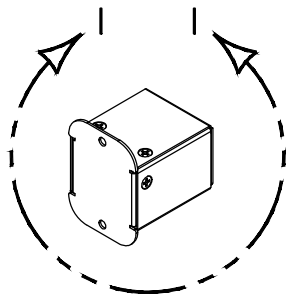
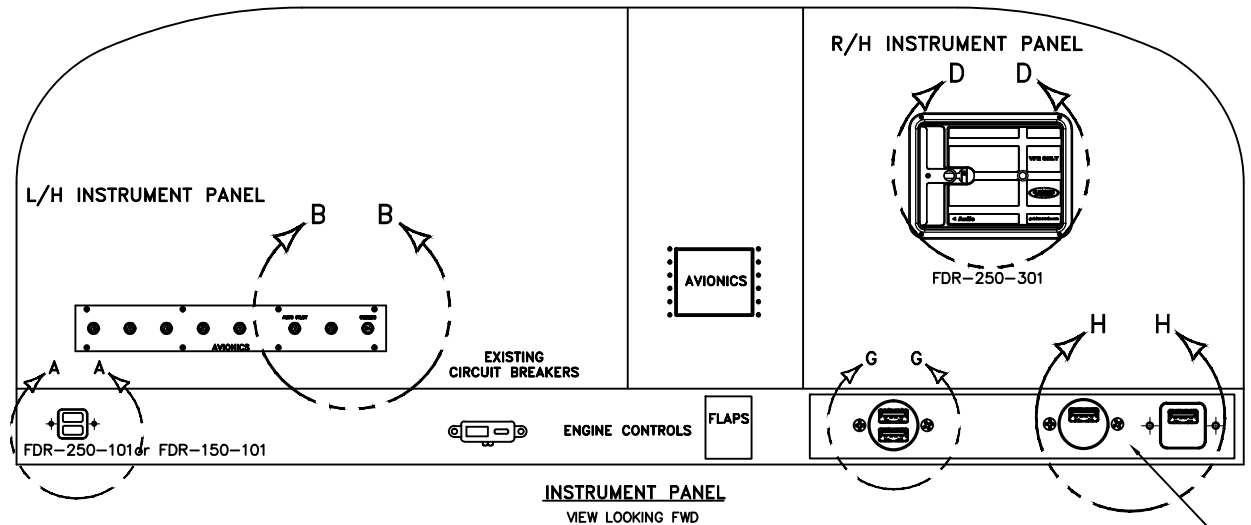


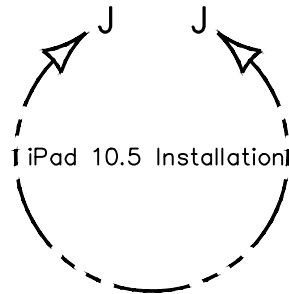
NOTES:

- △ EXISTING EQUIPMENT.
- 2. PERMISSIBLE TO TRIM PARTS CREATED BY THIS DRAWING ON INSTALLATION AS REQUIRED.
- 3. TOUCH UP ALL BARE ALUMINUM SURFACES WITH ALODINE PER MIL-C-5541 CLASS 3.
- 4. PARENTHETICAL ENTITIES, (), ARE FOR REFERENCE ONLY.
- △ LOCATE CIRCUIT BREAKER IN THE SAME GENERAL AREA WITH EXISTING CIRCUIT BREAKERS. LABEL AS SHOWN USING STANDARD ENGRAVING, SILKSCREEN, OR OTHER TECHNIQUES. LETTERING TO BE SAME HEIGHT AS EXISTING C/B LETTERING.
- 6. ALL GROUNDS GO TO NEAREST GROUND POINT ON AIRCRAFT.
- 7. TIE INTO EXISTING BUS BAR NEAR LOCATION OF NEW CIRCUIT BREAKER. IF A JUMPER WIRE IS REQUIRED, USE 20 GAUGE MIL-W-22759/XX TYPE.
- △ BEST COMMERCIAL EQUIVALENT MAY BE SUBSTITUTED FOR THIS PART.
- 9. THE INSTALLATION OF WIRING TO BE PERFORMED IN ACCORDANCE WITH AC 43.13-1B, 2A, ACCEPTABLE METHODS, TECHNIQUES, AND PRACTICES - AIRCRAFT ALTERATIONS, CHAPTER 11. ALL WIRE TO BE MIL-W-22759/16 OR EQUIVALENT.

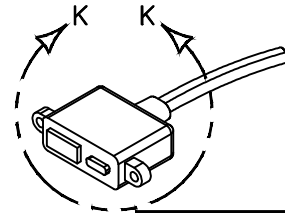
REVISIONS			
REV	DESCRIPTION	DATE	APVD
A	Initial release	06/2/2016	
B	circuit breakers changed to 2Amp	08/18/2016	
C	add round replacement page 3,5	12/17/2016	
D	add page 6 and updated H-H	03/25/2017	
E	add cooling fan options to page 4 and 7	01/06/2018	
F	added sheet 7 with pin 1 location	01/05/2019	
G	combine two master. add KK info, pages	03/24/2019	



Remote USB Power Supply

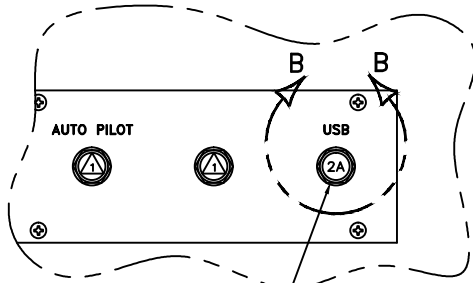


iPad 10.5 Installation



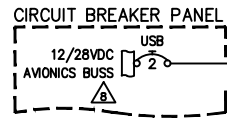
FILENAME: USBInst.dwg

① 1		USB-200-101	USB Port	GUARDIAN AVIONICS																																				
ITEM	QTY	PART NUMBER	DESCRIPTION	VENDOR																																				
PROPRIETARY NOTICE		<table border="1"> <thead> <tr> <th colspan="2">APPROVALS</th> <th>DATE</th> <th>UNLESS OTHERWISE NOTED ALL DIM ARE IN INCHES</th> </tr> </thead> <tbody> <tr> <td>DESIGN</td> <td></td> <td></td> <td>TOLERANCES</td> </tr> <tr> <td>DRAWN</td> <td>Ahmed Hassan</td> <td>03/24/2019</td> <td>XXX ±.010 ANGLES</td> </tr> <tr> <td>CHECK</td> <td></td> <td></td> <td>XX ±.03 ±1/2°</td> </tr> <tr> <td>INSP.</td> <td></td> <td></td> <td>X ±.1</td> </tr> <tr> <td>PROL.</td> <td></td> <td></td> <td>FINISH NONE</td> </tr> <tr> <td>DASH</td> <td></td> <td></td> <td>SCALE NONE</td> </tr> <tr> <td>NEXT ASSY</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REL.</td> <td>ASH VIJ</td> <td>03/24/2019</td> <td></td> </tr> </tbody> </table>			APPROVALS		DATE	UNLESS OTHERWISE NOTED ALL DIM ARE IN INCHES	DESIGN			TOLERANCES	DRAWN	Ahmed Hassan	03/24/2019	XXX ±.010 ANGLES	CHECK			XX ±.03 ±1/2°	INSP.			X ±.1	PROL.			FINISH NONE	DASH			SCALE NONE	NEXT ASSY				REL.	ASH VIJ	03/24/2019	
APPROVALS		DATE	UNLESS OTHERWISE NOTED ALL DIM ARE IN INCHES																																					
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INSP.			X ±.1																																					
PROL.			FINISH NONE																																					
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REL.	ASH VIJ	03/24/2019																																						
<small> This drawing contains specifications and/or data, technical material, proprietary designs and information that are the sole property of C. O. Guardian, LLC, and treated by its recipient as a confidential trade, and is not to be shown or disclosed to any unauthorized organization or person. </small>		<table border="1"> <thead> <tr> <th colspan="2">TITLE</th> <th>DRAWING NO.</th> <th>SH</th> <th>REV</th> </tr> </thead> <tbody> <tr> <td colspan="2">USB INSTALLATION</td> <td>USB-250</td> <td>1</td> <td>11</td> </tr> <tr> <td colspan="2"></td> <td></td> <td>OF</td> <td>G</td> </tr> </tbody> </table>			TITLE		DRAWING NO.	SH	REV	USB INSTALLATION		USB-250	1	11				OF	G																					
TITLE		DRAWING NO.	SH	REV																																				
USB INSTALLATION		USB-250	1	11																																				
			OF	G																																				



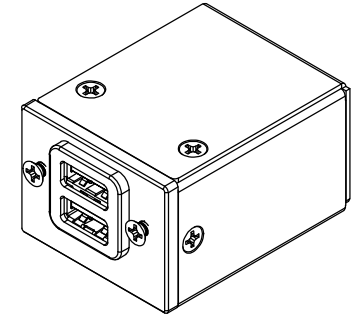
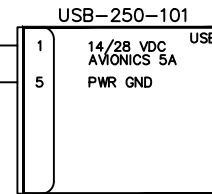
△ (P/N 7277-2-2) CIRCUIT BREAKER

SECTION B-B



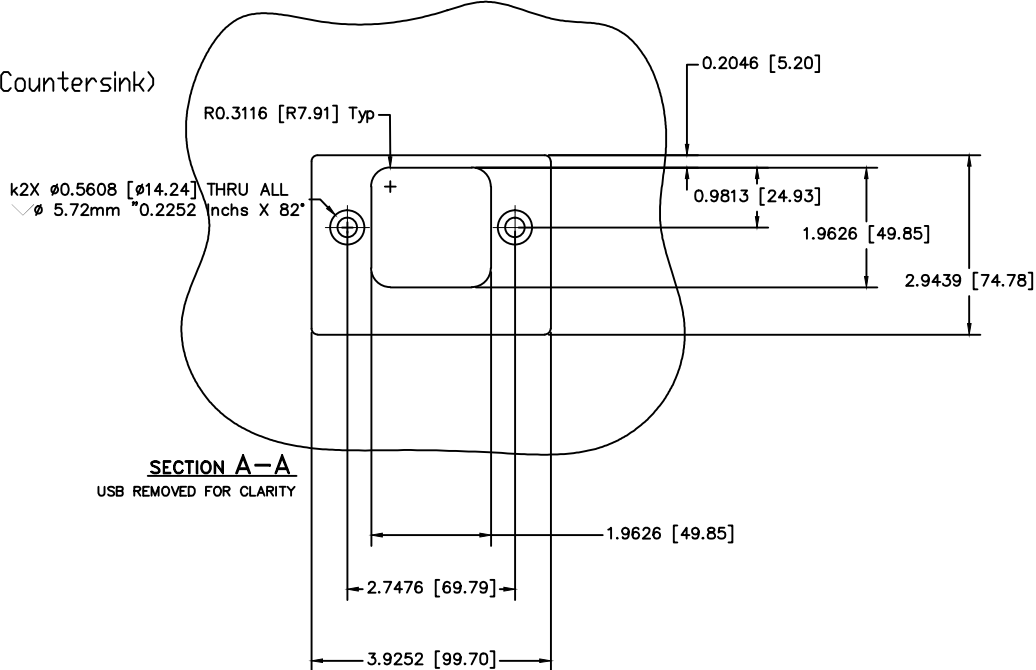
USB INSTALLATION WIRING DIAGRAM

USB-250-101 or USB-150-101

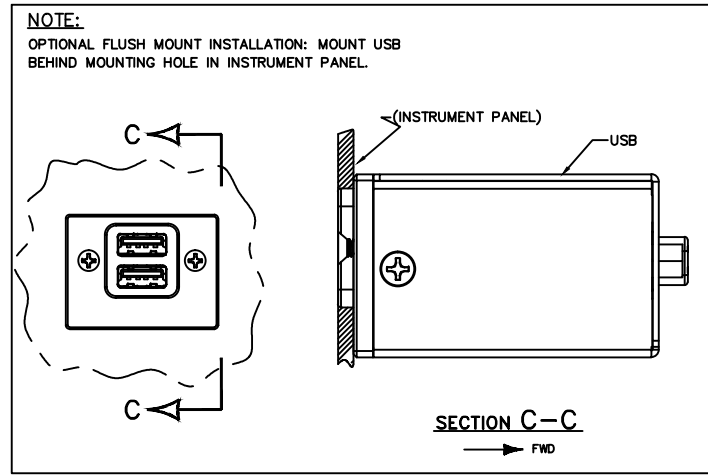


USB-250-101 shown

[#4 Countersink)



SECTION A-A
USB REMOVED FOR CLARITY



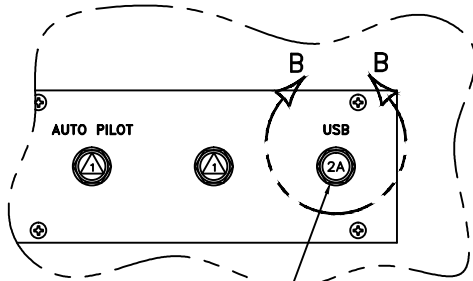
SECTION C-C

→ FWD

square faceplate panel cutout installation

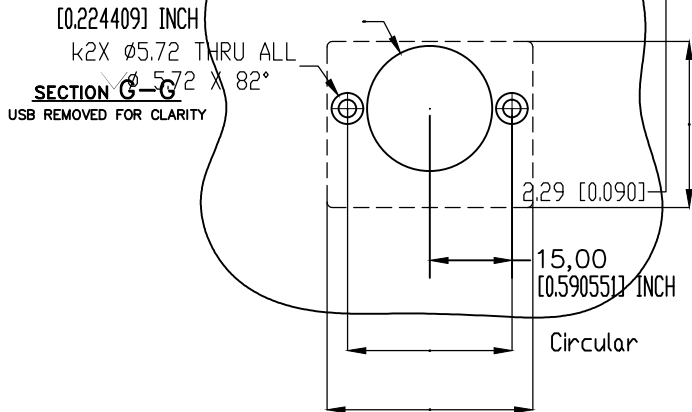
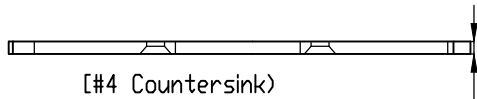
GUARDIAN AVIONICS <small>Your partner in the sky</small>	
TITLE USB INSTALLATION	
DRAWING NO. USB-250	SH 2 OF 11 REV G

FILENAME: USBInst.dwg

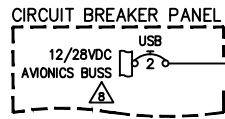


△ (P/N 7277-2-2) CIRCUIT BREAKER

SECTION A-A

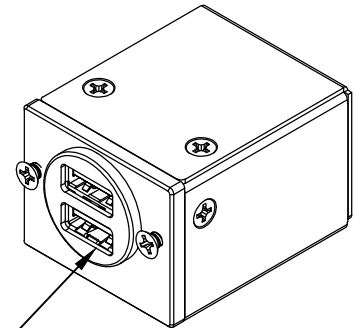
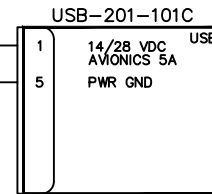


round faceplate (cigarette lighter) replacement installation



USB INSTALLATION WIRING DIAGRAM

USB-201-101C

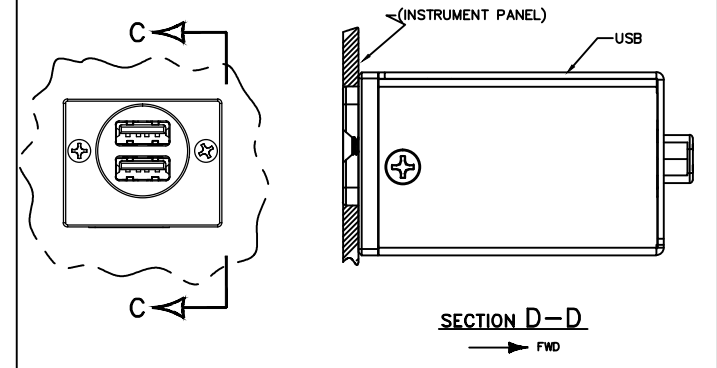


USB-201-101C shown

Cigarettes lighter round replacement (single or dual)

NOTE:

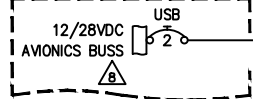
OPTIONAL FLUSH MOUNT INSTALLATION: MOUNT USB BEHIND MOUNTING HOLE IN INSTRUMENT PANEL.



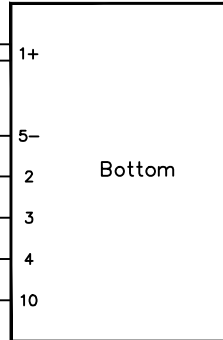
GUARDIAN AVIONICS <small>Your partner in the sky</small>	
TITLE USB INSTALLATION	
DRAWING NO. USB-250	SH 3 OF 11 REV G

FILENAME: USBInst.dwg

CIRCUIT BREAKER PANEL



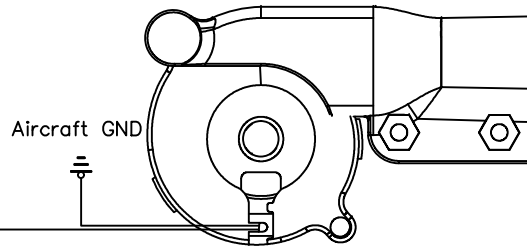
FDR-250-201 & 301



Aircraft GND

- D1 5V + (RED)
- D1 - (WHITE)
- D1 + (GREEN)
- D1 GND - (BLACK)

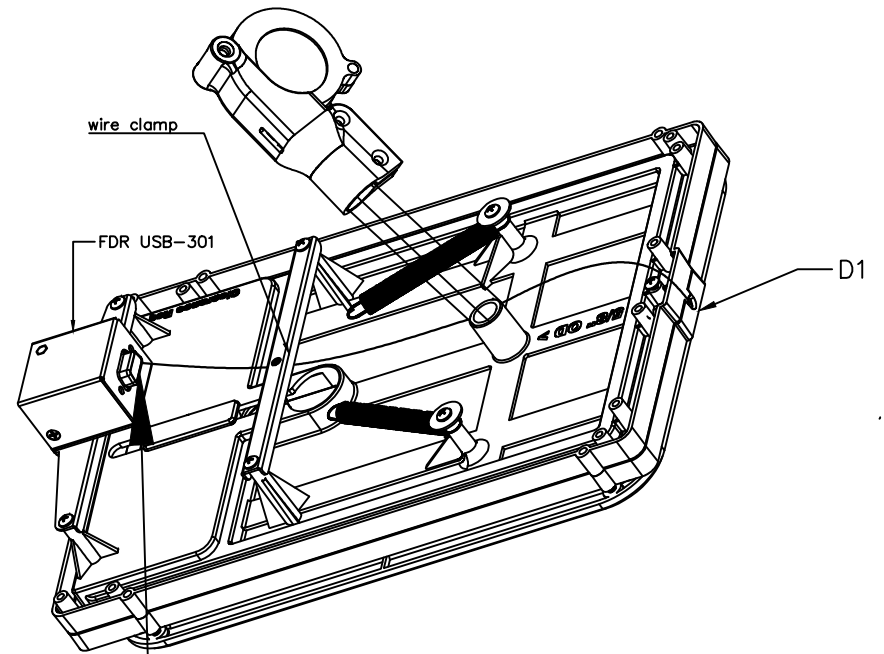
GAV MFI Lighting Cable Connections (D1)



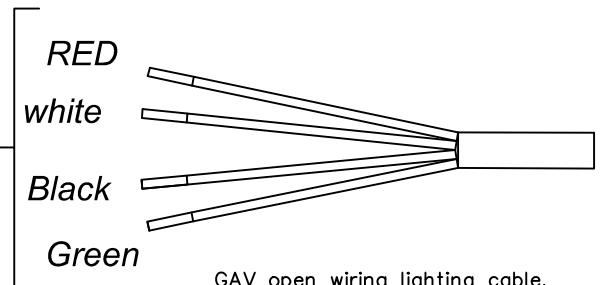
Typical optional cooling fan installation

USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB150-301 INSTL



SECTION D-D

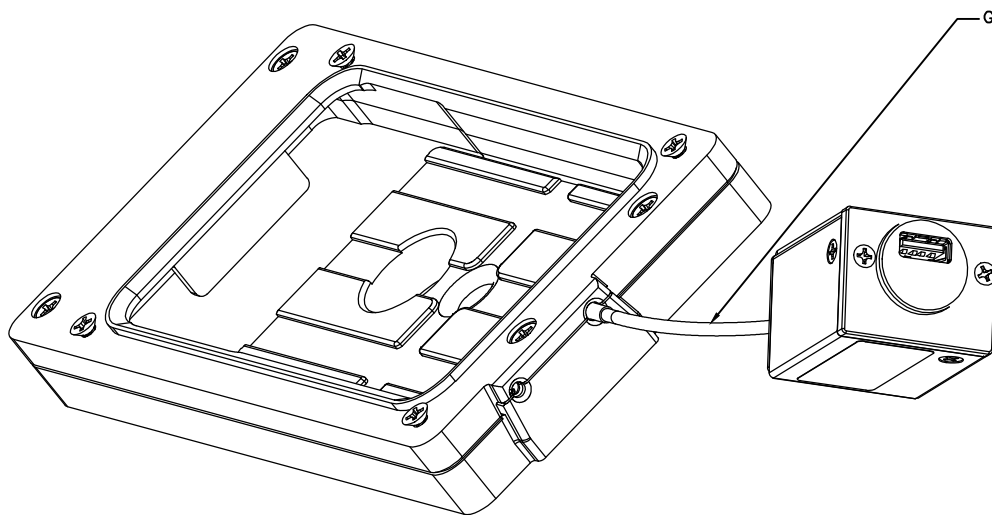


GAV open wiring lighting cable.
Recommended PN: 52-4

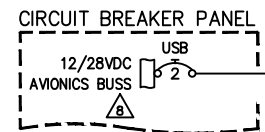
REMOTE USB POWER INSTALLATION

GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTALLATION		
DRAWING NO. USB-250	SH 4 OF 11	REV G

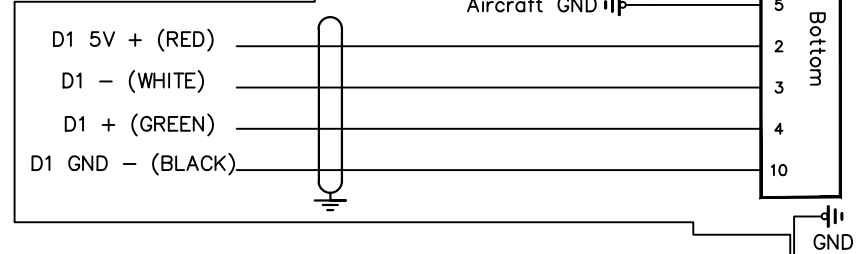
FILENAME: USB Inst.dwg



GAV MFI Certified Lighting Cable as Required in Installation
Recommended PN: 52-4

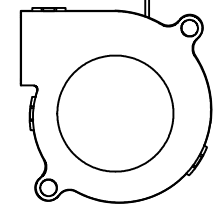
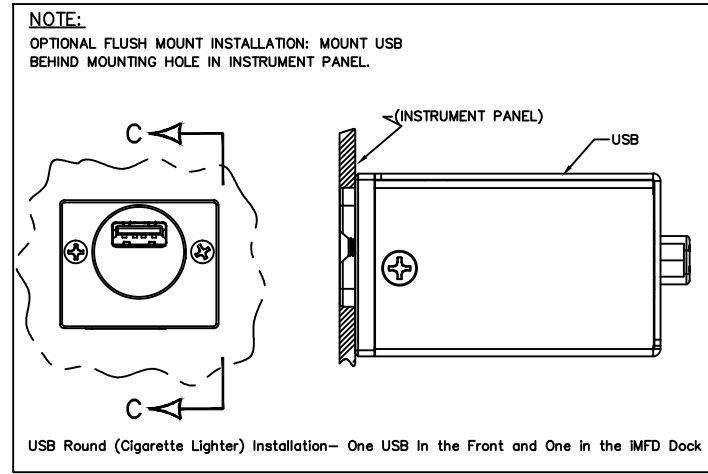
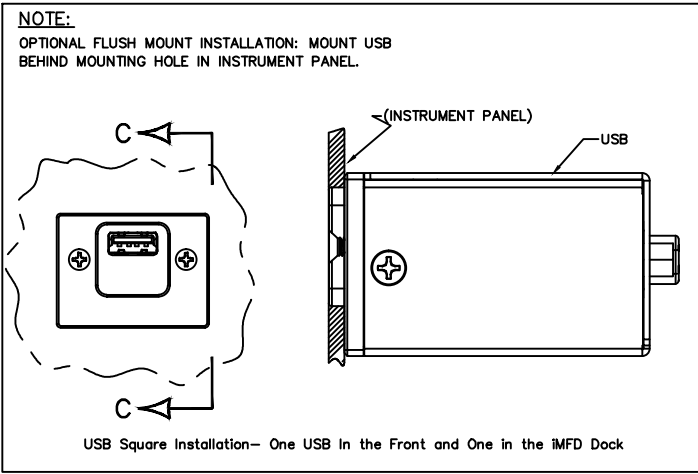


FDR-201-101C Panel and Remote



SECTION D-D

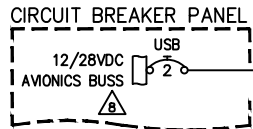
GAV MFI Lighting Cable Connections (D1)



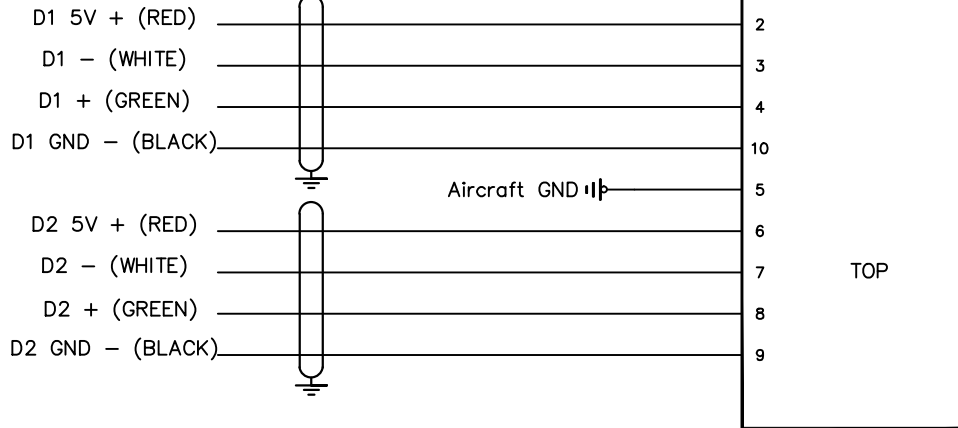
TYPICAL OPTIONAL COOLING FAN INSTALLATION

H-H Dual Power USB Single faceplate (Square & Round)

GUARDIAN AVIONICS <i>Your partner in the sky</i>		
TITLE USB INSTALLATION		
DRAWING NO. USB-250	SH 5 OF 11	REV G

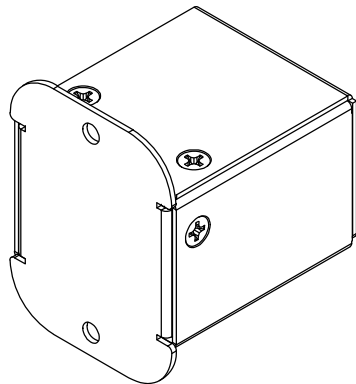


FDR-250-201 & 301

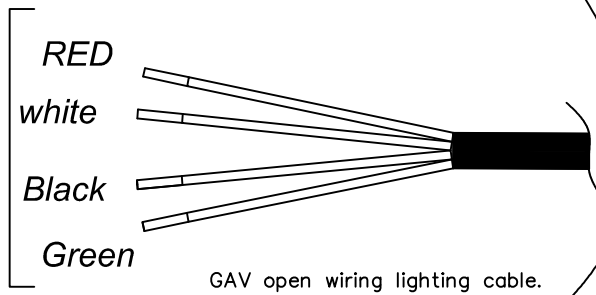
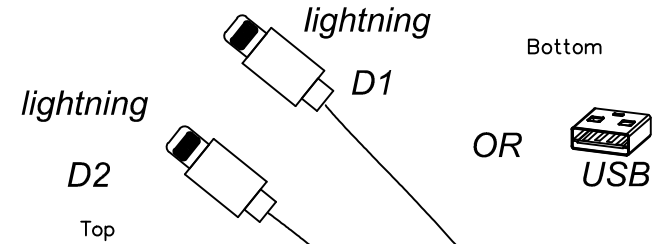
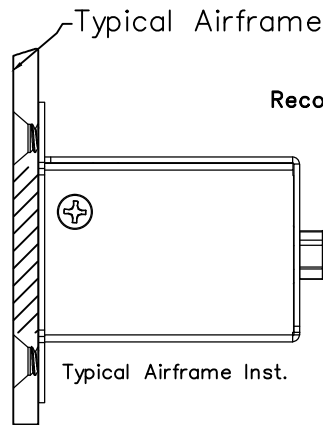


USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB-250-201 & 301 INSTL



SECTION 1-1



Recommend PN: 52-2, 52-4, 52-7 and 52-8

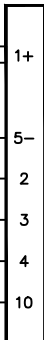
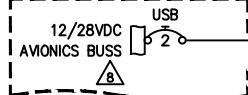
REMOTE USB POWER INSTALLATION

GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTALLATION		
DRAWING NO. USB-250	SH 6 OF 11	REV G

FILENAME: USB Inst.dwg

FDR-250-201 & 301

CIRCUIT BREAKER PANEL



Aircraft GND

D1 5V + (RED)

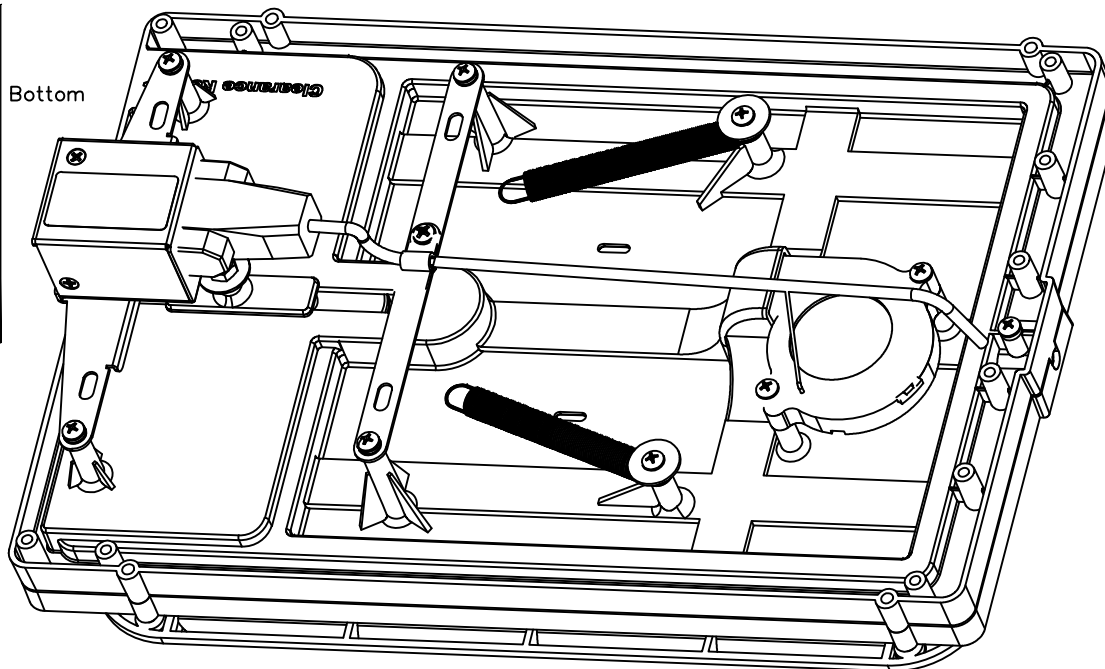
D1 - (WHITE)

D1 + (GREEN)

D1 GND - (BLACK)

Recommended PN: 52-4

Bottom



SECTION J-J

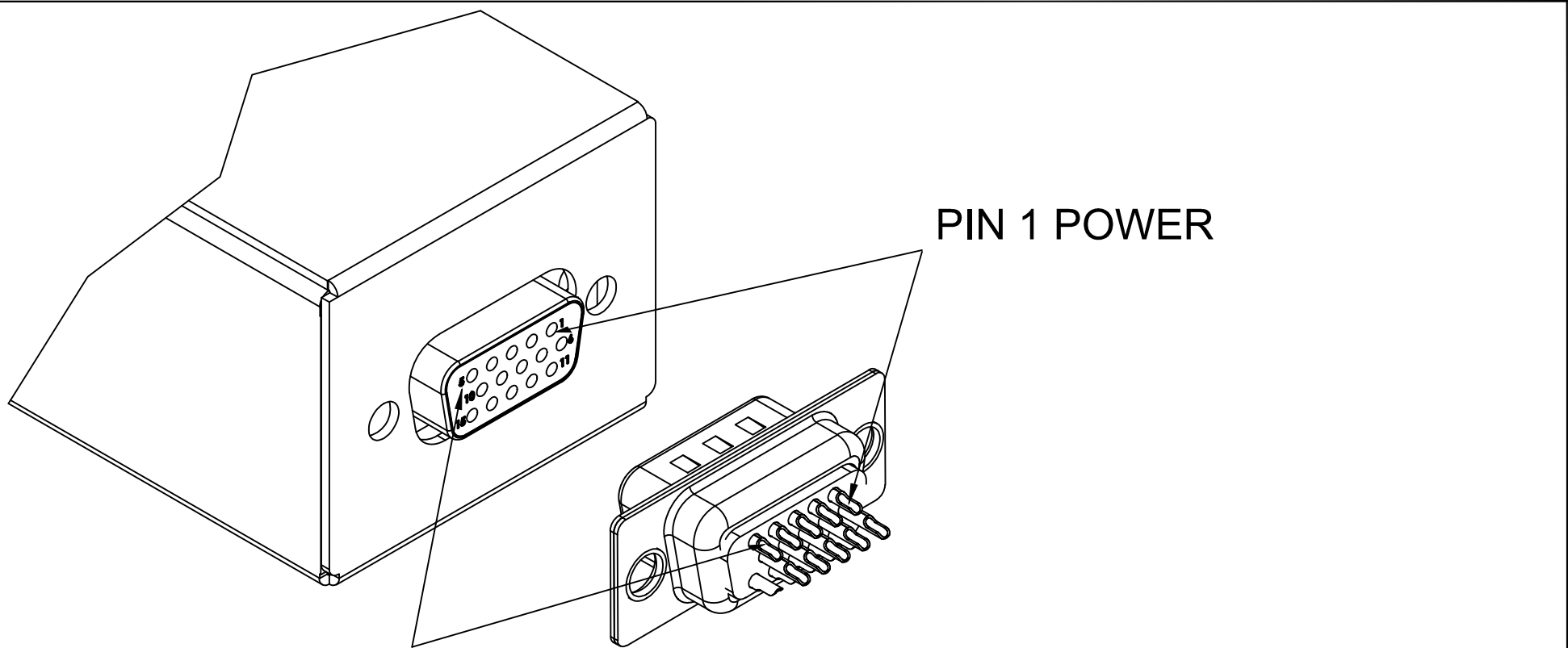
typical cooling fan installation 10.5 inch iPad

USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB150-301 INSTL

GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTALLATION		
DRAWING NO. USB-250	SH 7 OF 11	REV G

FILENAME: USB Inst.dwg



PIN 1 POWER

PIN 5 GROUND

Pin 1 and 5 shown for clarity

TITLE USB INSTALLATION		
DRAWING NO. USB-250	SH 8 OF 11	REV G