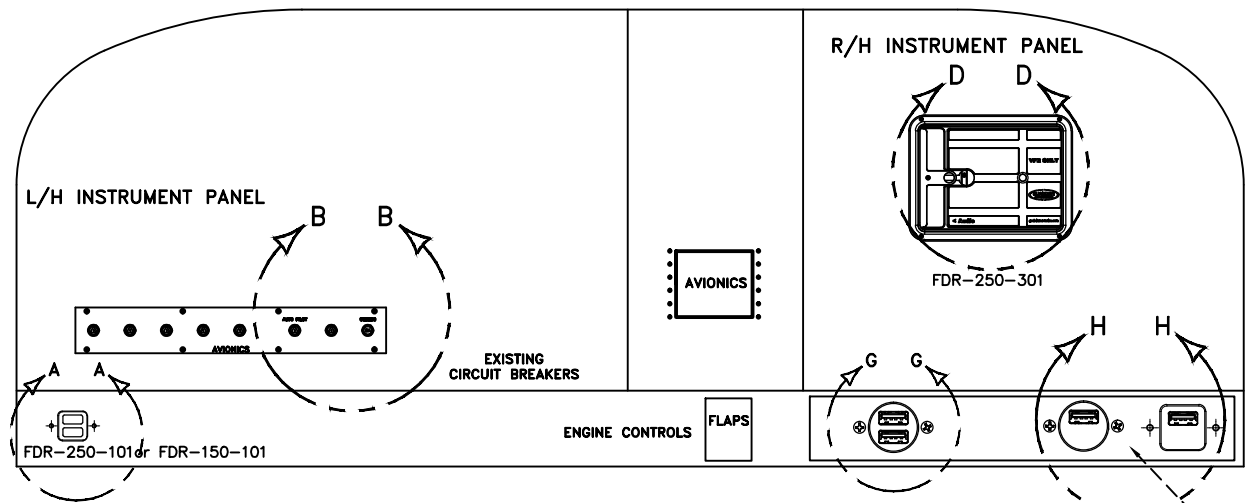


NOTES:

- EXISTING EQUIPMENT.
- PERMISSIBLE TO TRIM PARTS CREATED BY THIS DRAWING ON INSTALLATION AS REQUIRED.
- TOUCH UP ALL BARE ALUMINUM SURFACES WITH ALODINE PER MIL-C-5541 CLASS 3.
- 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.
- ALL GROUNDS GO TO NEAREST GROUND POINT ON AIRCRAFT.
- 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.
- 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.

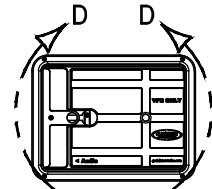
REVISIONS			
REV	DESCRIPTION	DATE	APVD
A	Initial release	06/2/2016	
B	circuit breakers changed to 2Amp	08/18/2016	
C	add round replacement page 3,5	12/17/2016	
D	add page 6 and updated H-H	03/25/2017	
E	add cooling fan options to page 4 and 7	01/06/2018	



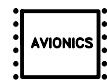
FDR-250-101 or FDR-150-101

EXISTING CIRCUIT BREAKERS

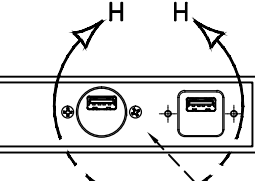
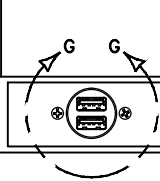
R/H INSTRUMENT PANEL



FDR-250-301

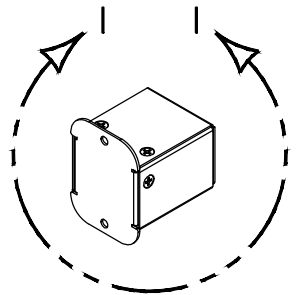


ENGINE CONTROLS

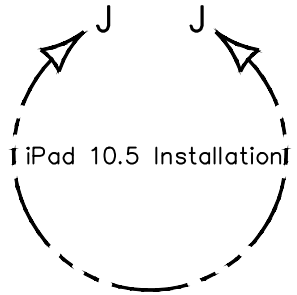


Typical installation shown

INSTRUMENT PANEL
VIEW LOOKING FWD



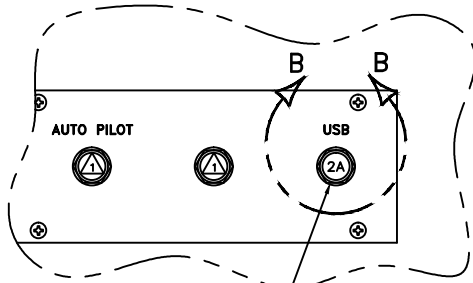
Remote USB Power Supply



iPad 10.5 Installation

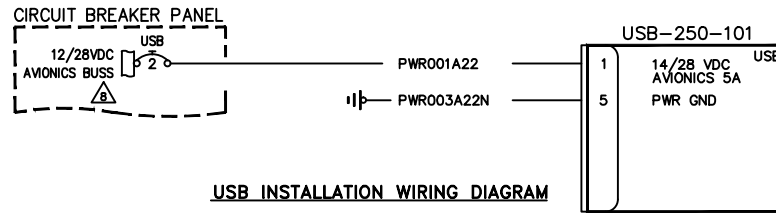
FILENAME: USBInst.dwg

① 1 USB-200-101		USB Port	GUARDIAN AVIONICS
ITEM	QTY	PART NUMBER	VENDOR
PROPRIETARY NOTICE This drawing contains specifications and/or data, technical material, proprietary designs and information that are the sole property of C. D. 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.		UNLESS OTHERWISE NOTED ALL DIM ARE IN INCHES TOLERANCES .000 ±.010 ANGLES .XX ±.03 ±1/2° .X ±.1	
DESIGN	Ahmed Hassan	DATE	07/7/2016
DRAWN		FINISH	NONE
CHECK		SCALE	NONE
INSP.		DRAWING NO.	USB-250
PROL.		SH	1
DASH		OF	7
NEXT ASSY		REV	E
REL.	ASH VIJ		
	08/18/2016		



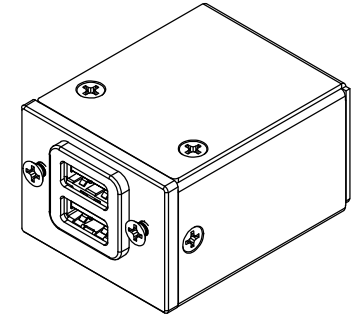
△ (P/N 7277-2-5) CIRCUIT BREAKER

SECTION B-B



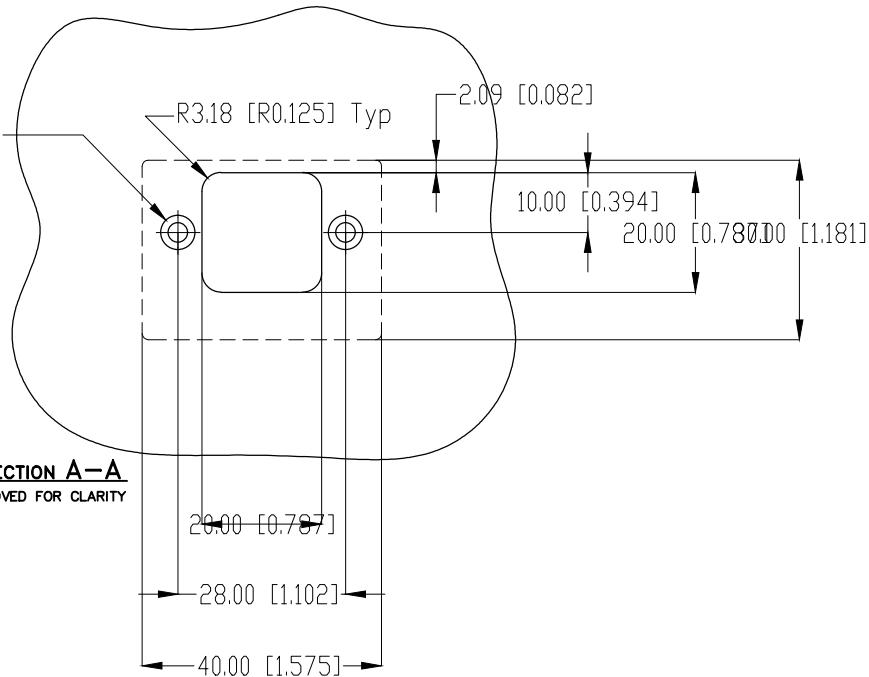
USB INSTALLATION WIRING DIAGRAM

USB-250-101 or USB-150-101



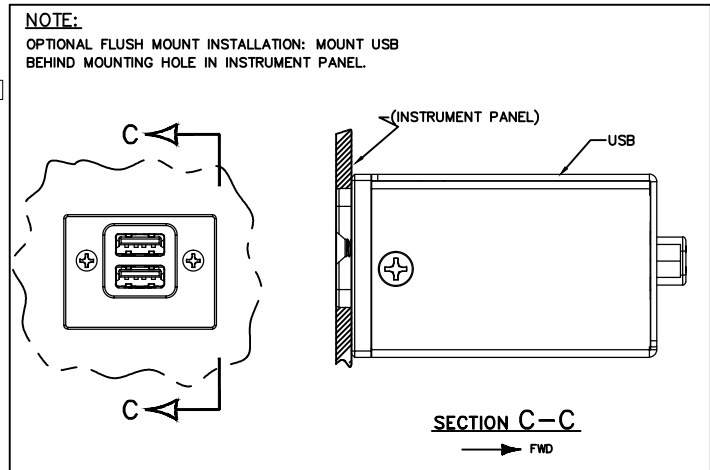
USB-250-101 shown

[#4 Countersink)
k2X Ø5.72 THRU ALL
∠Ø 5.72 X 82°



SECTION A-A
USB REMOVED FOR CLARITY

square faceplate panel cutout installation

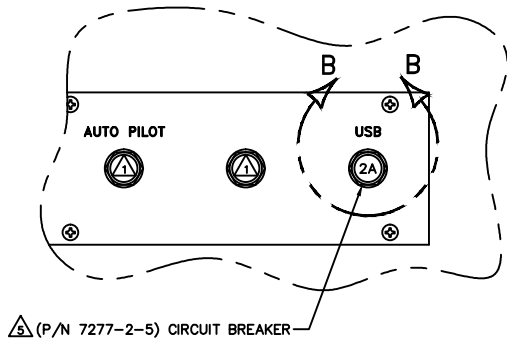


SECTION C-C

→ FWD

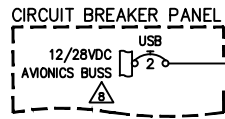
GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTL.		
DRAWING NO. USB-250	SH 2 OF 7	REV E

FILENAME: USBInst.dwg



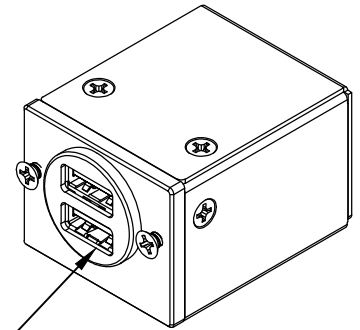
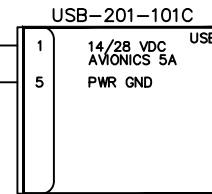
△ (P/N 7277-2-5) CIRCUIT BREAKER

SECTION A-A



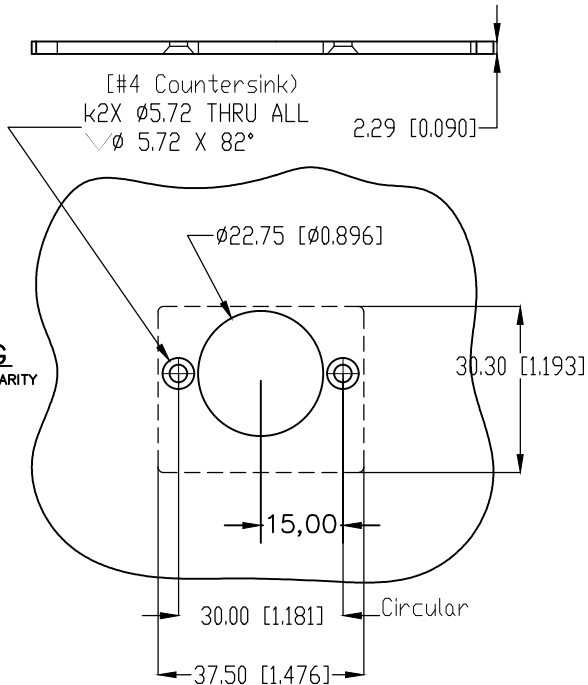
USB INSTALLATION WIRING DIAGRAM

USB-201-101C

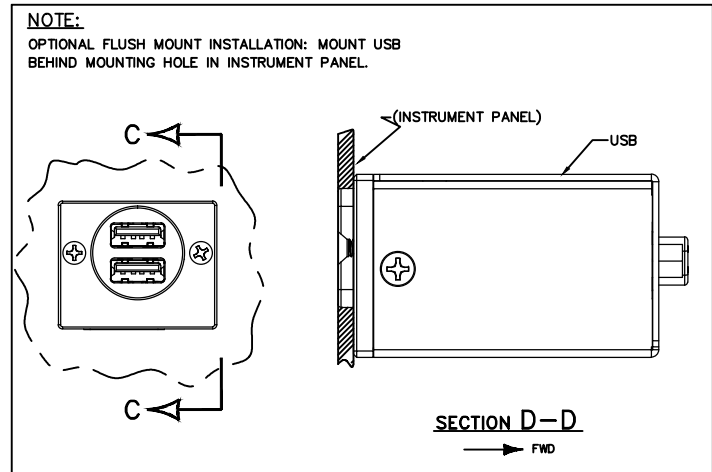


USB-201-101C shown

Cigarettes lighter round replacement (single or dual)



SECTION G-G
USB REMOVED FOR CLARITY

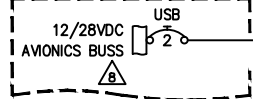


round faceplate (cigarette lighter) replacement installation

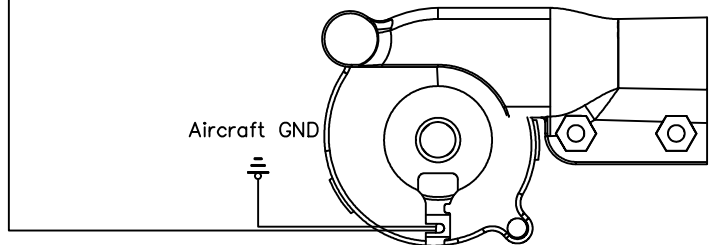
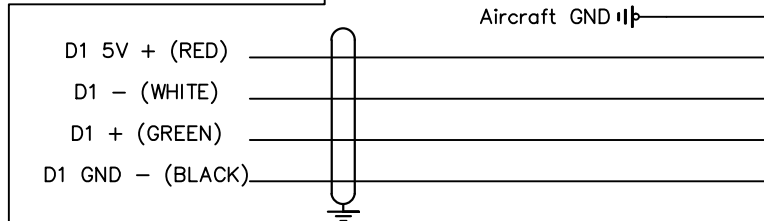
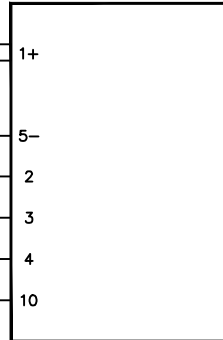
GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTL.		
DRAWING NO. USB-250	SH OF 3 7	REV E

FILENAME: USBInst.dwg

CIRCUIT BREAKER PANEL



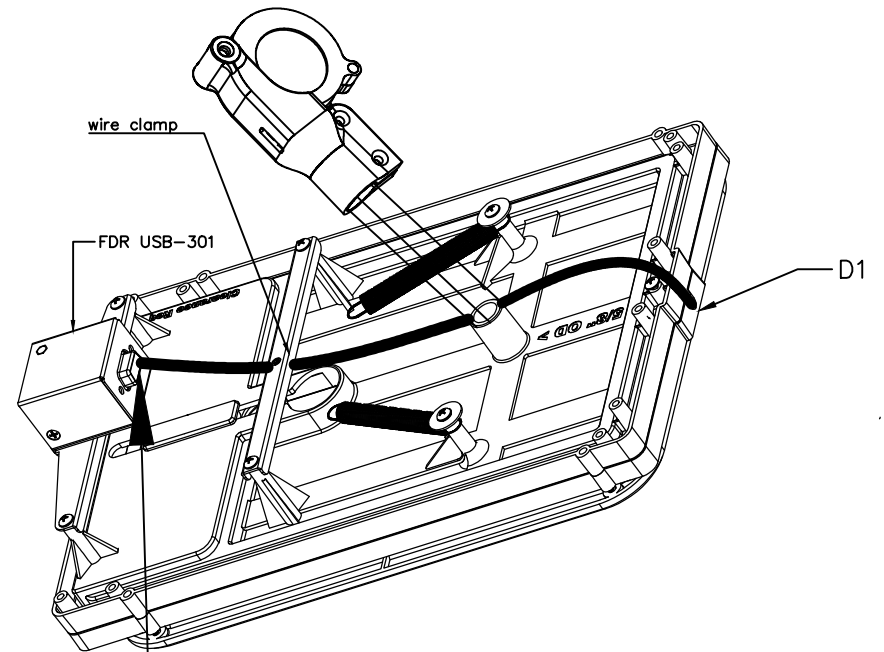
FDR-250-201 & 301



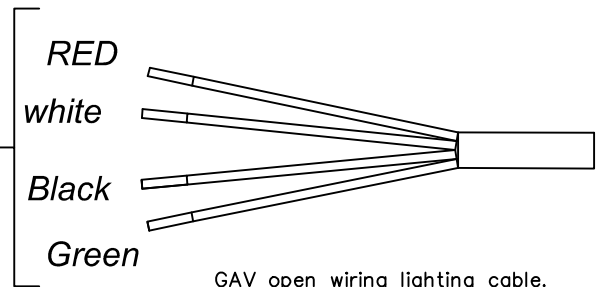
Typical optional cooling fan installation

USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB150-301 INSTL



SECTION D-D

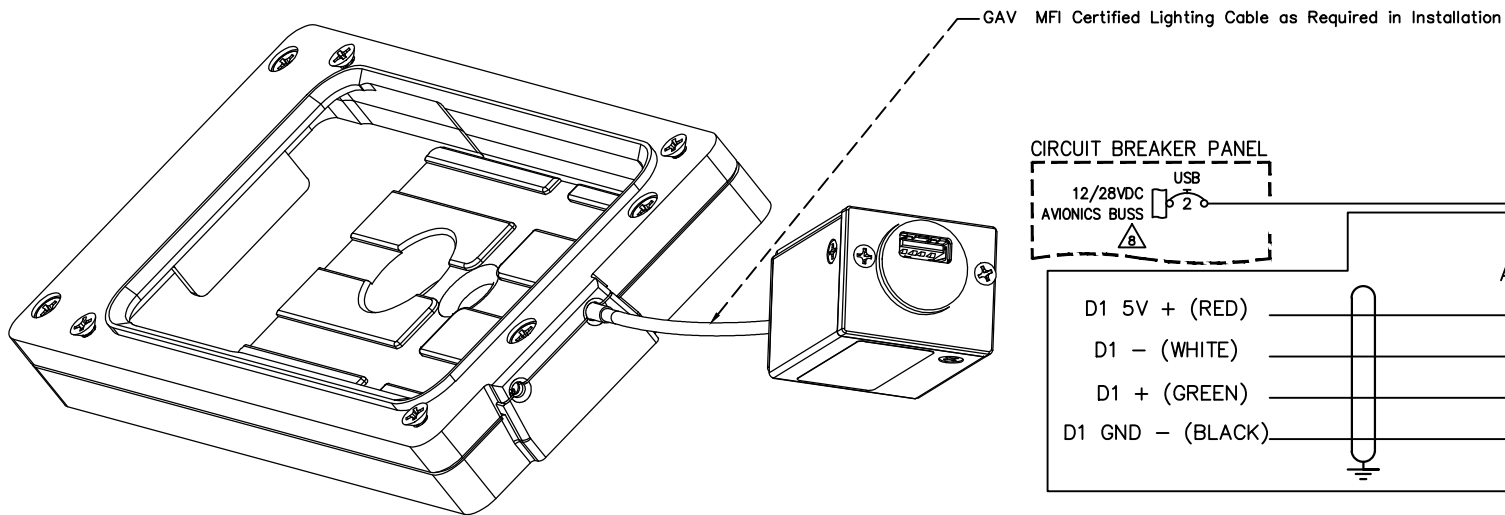


GAV open wiring lighting cable.

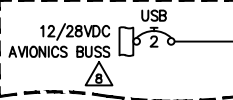
REMOTE USB POWER INSTALLATION

GUARDIAN AVIONICS <small>"Your partner in the sky"</small>		
TITLE USB INSTL		
DRAWING NO. USB-250	SH 4 OF 7	REV E

FILENAME: USB Inst.dwg

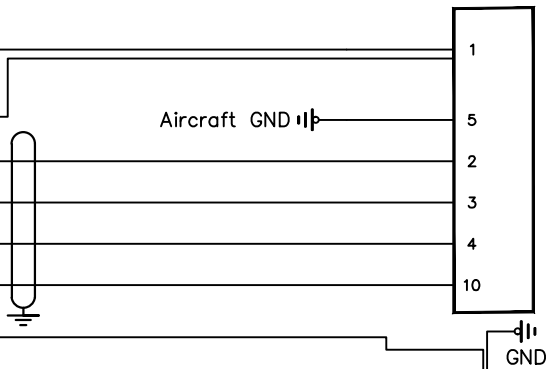


CIRCUIT BREAKER PANEL

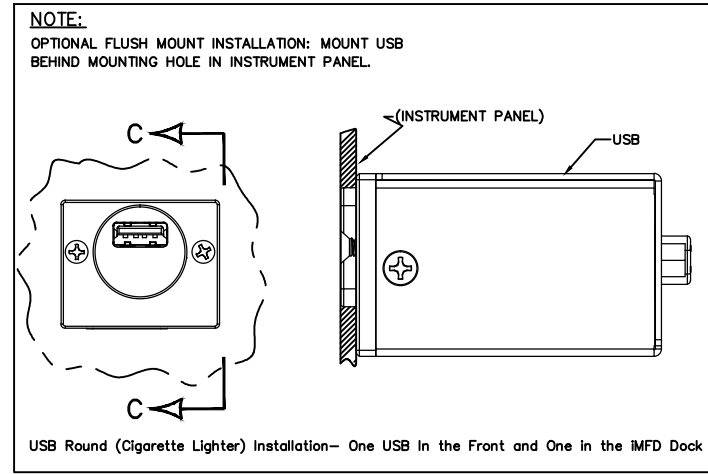
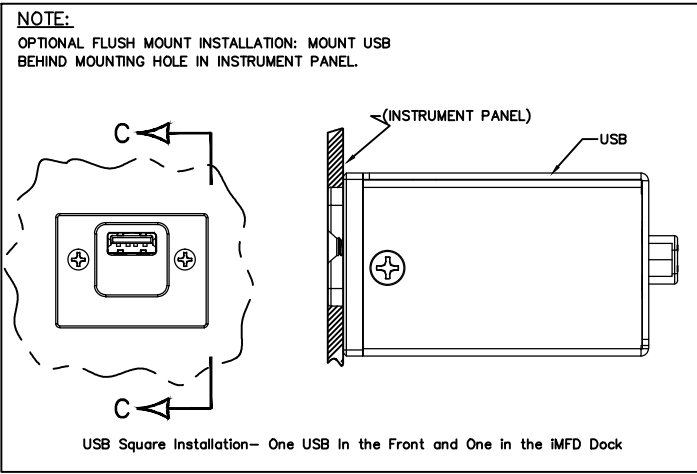
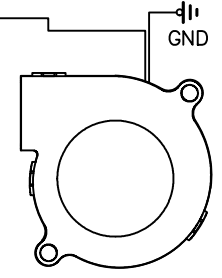


- D1 5V + (RED)
- D1 - (WHITE)
- D1 + (GREEN)
- D1 GND - (BLACK)

FDR-201-101C Panel and Remote



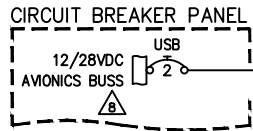
SECTION D-D



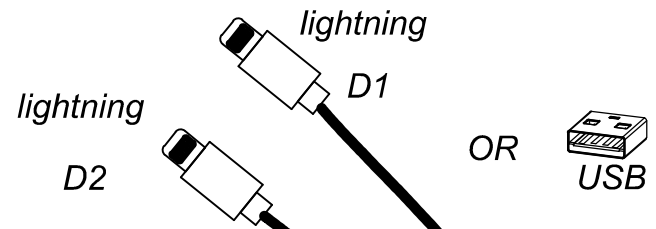
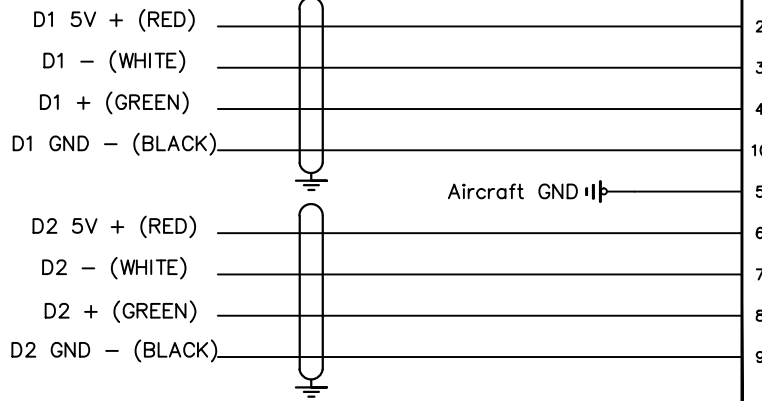
H-H Dual Power USB Single faceplate (Square & Round)

FILENAME: USB Inst.dwg

GUARDIAN AVIONICS <i>Your partner in the sky</i>		
TITLE USB INSTL		
DRAWING NO. USB-250	SH 5 OF 7	REV E

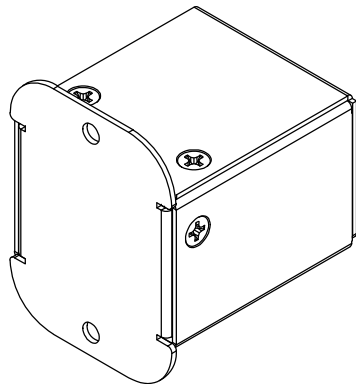


FDR-250-201 & 301

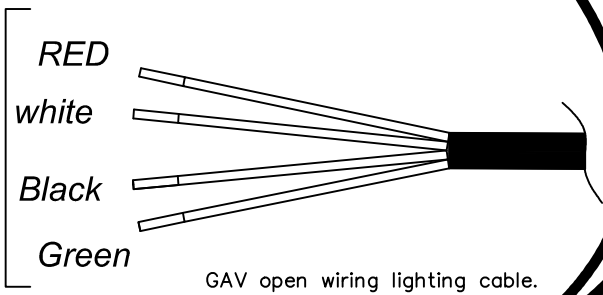
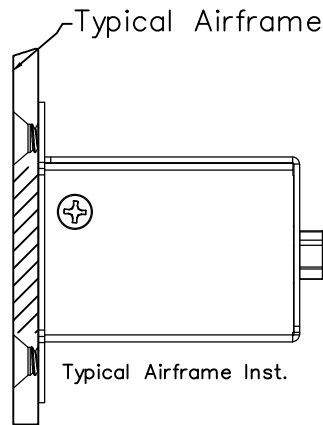


USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB-250-201 & 301 INSTL



SECTION 1-1



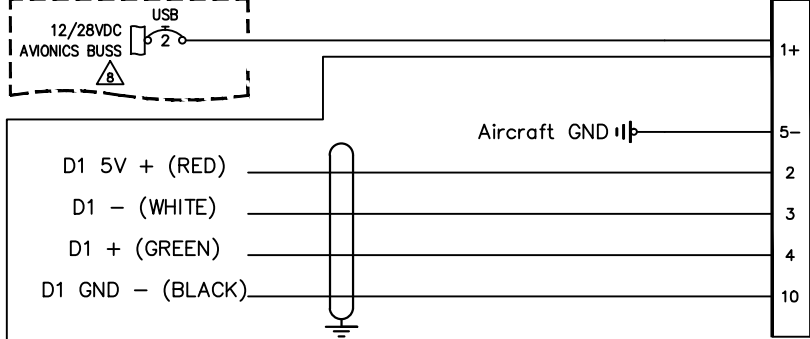
REMOTE USB POWER INSTALLATION

GUARDIAN AVIONICS <small>Your partner in the sky</small>		
TITLE USB INSTL		
DRAWING NO. USB-250	SH 6 OF 7	REV E

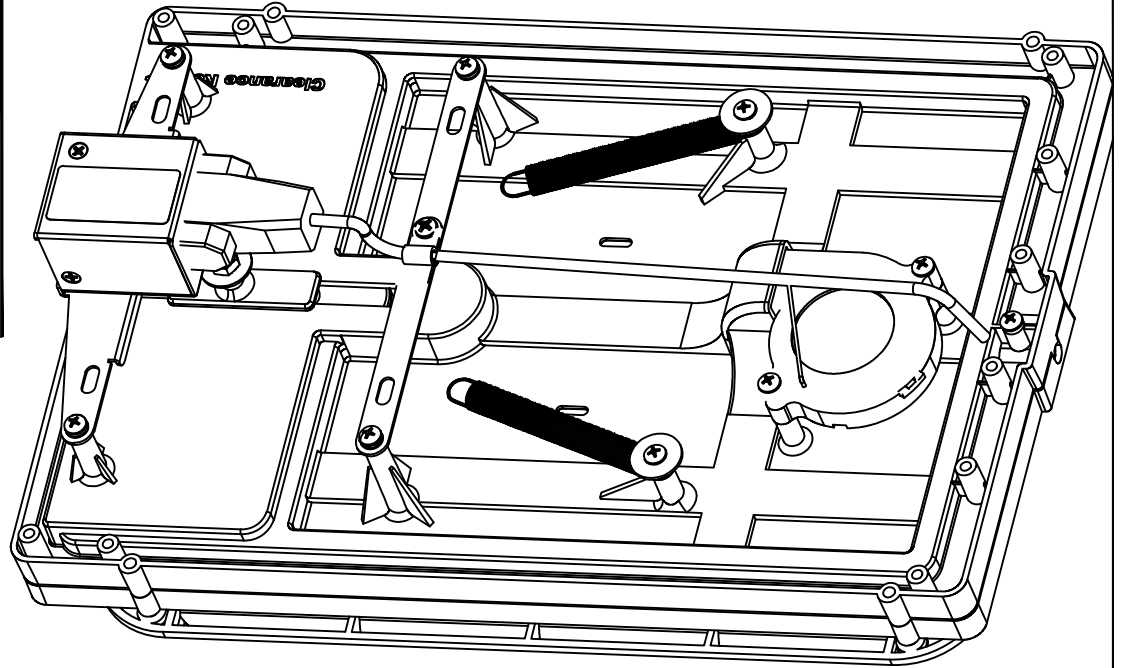
FILENAME: USB Inst.dwg

CIRCUIT BREAKER PANEL

FDR-250-201 & 301



Aircraft GND



SECTION J-J

typical cooling fan installation 10.5 inch iPad

USB INSTALLATION WIRING DIAGRAM (REMOTE BOX)

USB150-301 INSTL

			
TITLE USB INSTL			
DRAWING NO.	SH	REV	
USB-250	7	7	E

FILENAME: USB Inst.dwg