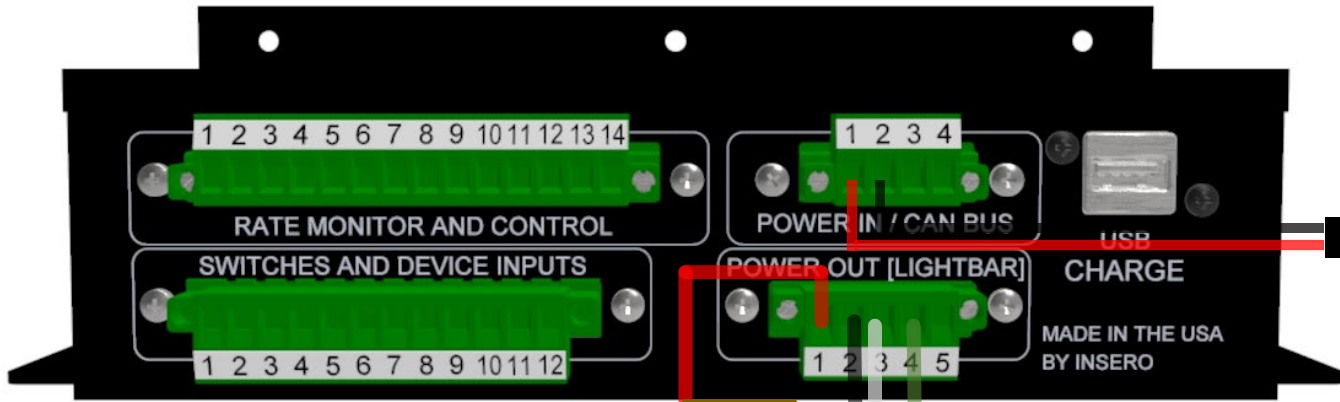


ASSY-9002 AgPilot X Hub

Cable-9001 Hub Power Cable – 15ft

POWER IN / CAN BUS	NAME	COLOR	TERMINATION
PIN 1	+ Vin	RED	Battery (+) Terminal
PIN 2	GND	BLACK	Battery (-) Terminal

Aircraft Battery +24VDC Power



CAN BUS Dry Gate Controller

POWER OUT / LIGHTBAR	NAME	COLOR
PIN 3	CAN H	WHITE
PIN 4	CAN L	GREEN

AgLaser Interface

GND PWR


Cable-9019 (serial wires shown) -15ft

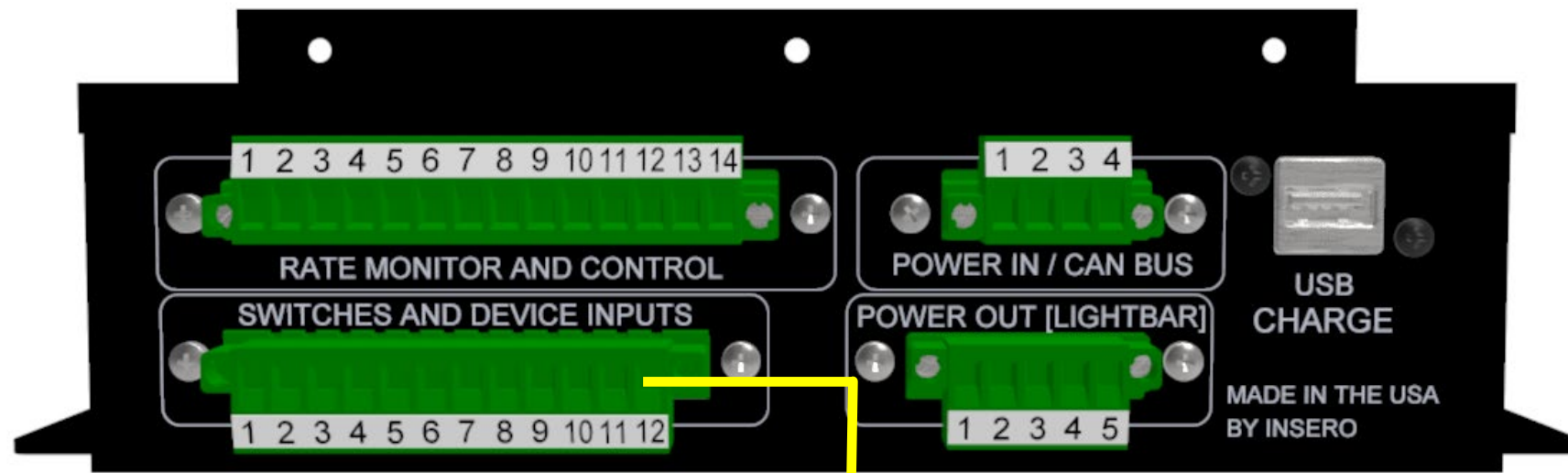
LB Connector	NAME	COLOR	TERMINATION
PIN A	+ Vin	RED	PIN 1 POWER OUT [LIGHTBAR]
PIN B	GND	BLACK	PIN 2 POWER OUT [LIGHTBAR]
PIN C	TX	WHITE	AgLaser
PIN D	RX	GREEN	NONE
PIN E	GND	BROWN	NONE
PIN F		N/C	NONE



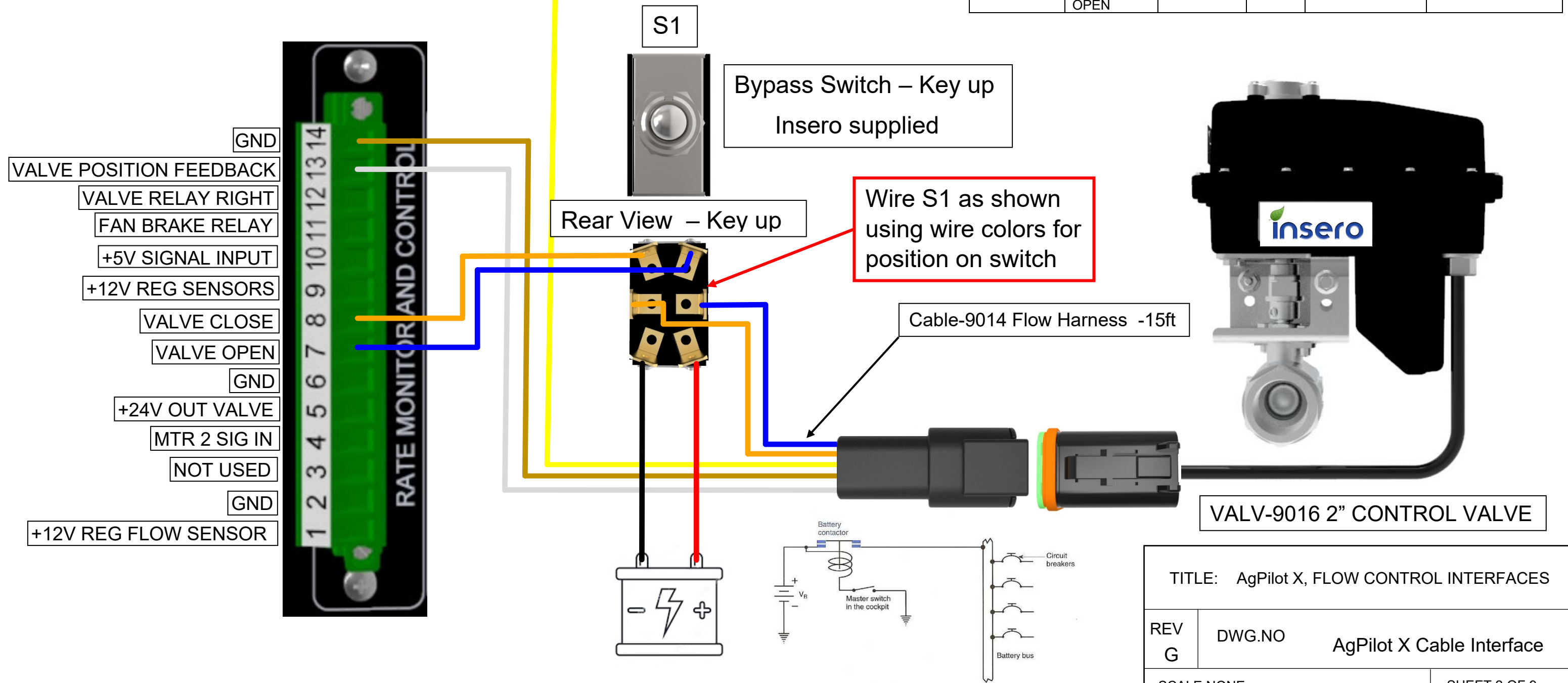
ASSY-9001 AgPilot X Lightbar

ASSY-9006 AgPilot X Lightbar (All Green LED Option)

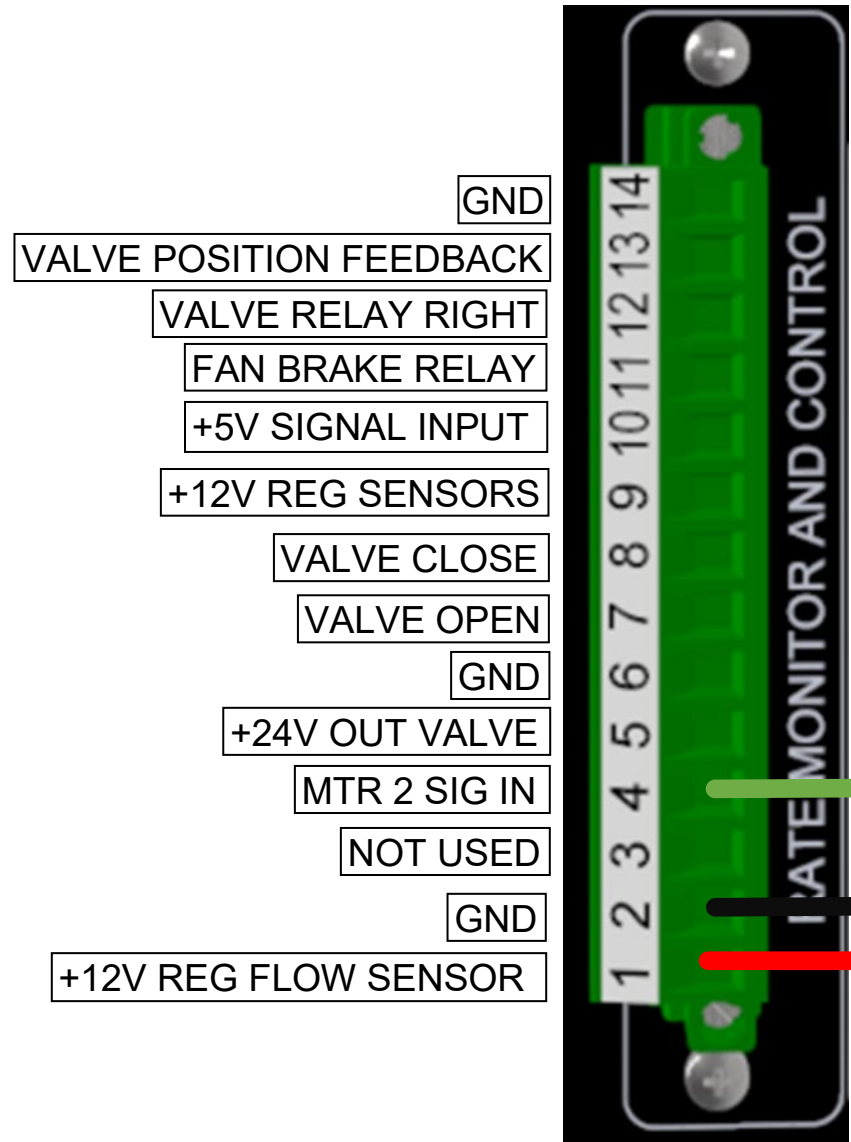
	NAME	DATE	 1640 E HERMOSA DR. TEMPE AZ 85282	
DRAWN	R.WONG	04/28/21		
CHECKED	B.HEDGE	04/28/21		
ENG APPR.			TITLE: AgPilot X, LB, Laser Altimeter, Cable Interface	
	REV	DWG.NO	AgPilot X Cable Interface	
	G			
			SCALE:NONE	SHEET 1 OF 9



CABLE 9014 6-PIN CON	SIGNAL NAME	COLOR	S1	SWITCHES AND DEVICE INPUTS	RATE MONITOR AND CONTROL
PIN 1	VALVE CLOSE	ORANGE	PIN 3		
PIN 2	VALVE OPEN	BLUE	PIN 4		
PIN 3	+5V VALVE POT	YELLOW		PIN 12	
PIN 4	POT GND	BROWN			PIN 14
PIN 5	POT SIGNAL	WHITE			PIN 13
PIN 6		N/C			
	BATTERY GND	BLACK	PIN 1		
	BATTERY POWER	RED	PIN 2		
	VALVE CLOSE	ORANGE	PIN 5		PIN 8
	VALVE OPEN	BLUE	PIN 6		PIN 7

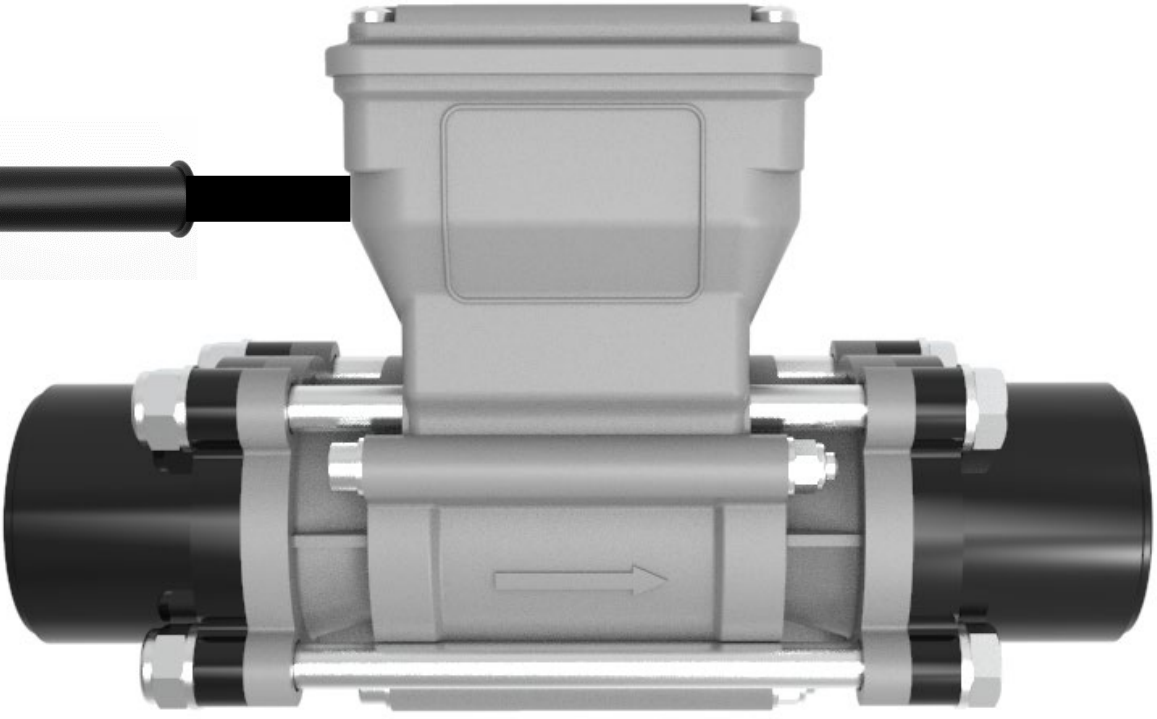


TITLE: AgPilot X, FLOW CONTROL INTERFACES	
REV G	DWG.NO AgPilot X Cable Interface
SCALE:NONE	SHEET 2 OF 9



CABLE-9015 CONNECTOR	NAME	COLOR	RATE MONITOR AND CONTROL	COLOR
PIN 1	GND	BLACK	PIN 2	BLACK
PIN 2	POWER	RED	PIN 1	RED
PIN 3	SIGNAL	WHITE	PIN 4	GREEN

FLMT-9001 2" Electromagnetic Flow Meter (Standard)




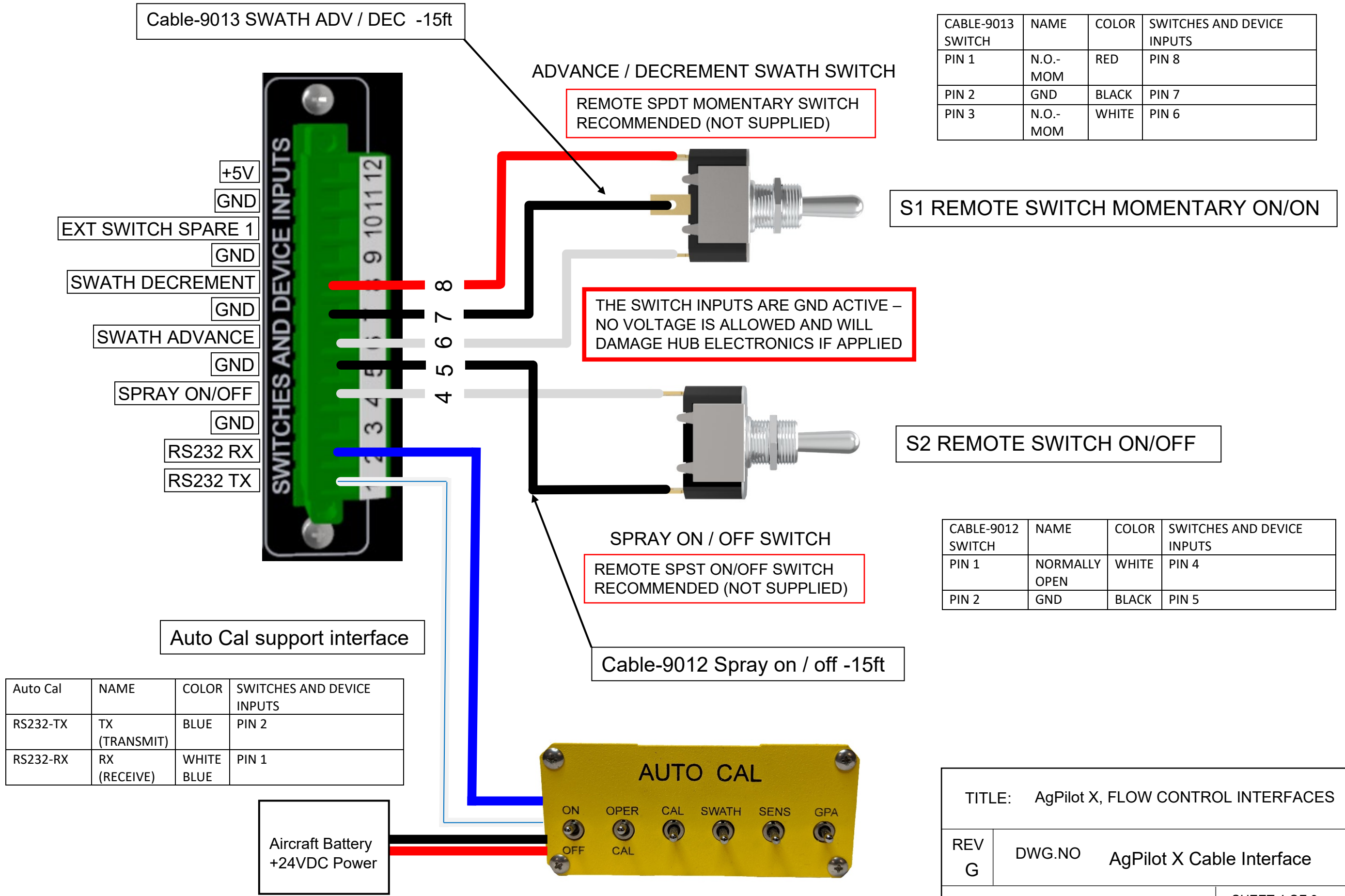
Cable-9015 ELECTROMAGNETIC PIGTAIL -4ft

Cable-9017 TURBINE PIGTAIL -4ft

Cable-9016 VALVE PIGTAIL (DEUTSCH) -3ft

Cable-9018 VALVE PIGTAIL (Amphenol) -3ft

	Name	Date	 1640 E. HERMOSA DR. TEMPE, AZ 85282	
Drawn	R. WONG	12/17/20		
Checked	B. HEDGE	12/17/20		
ENG APPR.			TITLE: AgPilot X, FLOW METER CABLE INTERFACE	
			REVISION G	DWG. NO AgPilot X Cable Interface
			SCALE: NONE	SHEET 3 OF 9



Cable-9013 SWATH ADV / DEC -15ft

ADVANCE / DECREMENT SWATH SWITCH

REMOTE SPDT MOMENTARY SWITCH
RECOMMENDED (NOT SUPPLIED)

CABLE-9013 SWITCH	NAME	COLOR	SWITCHES AND DEVICE INPUTS
PIN 1	N.O.-MOM	RED	PIN 8
PIN 2	GND	BLACK	PIN 7
PIN 3	N.O.-MOM	WHITE	PIN 6

S1 REMOTE SWITCH MOMENTARY ON/ON

THE SWITCH INPUTS ARE GND ACTIVE -
NO VOLTAGE IS ALLOWED AND WILL
DAMAGE HUB ELECTRONICS IF APPLIED

S2 REMOTE SWITCH ON/OFF

SPRAY ON / OFF SWITCH
REMOTE SPST ON/OFF SWITCH
RECOMMENDED (NOT SUPPLIED)

CABLE-9012 SWITCH	NAME	COLOR	SWITCHES AND DEVICE INPUTS
PIN 1	NORMALLY OPEN	WHITE	PIN 4
PIN 2	GND	BLACK	PIN 5

Auto Cal support interface

Auto Cal	NAME	COLOR	SWITCHES AND DEVICE INPUTS
RS232-TX	TX (TRANSMIT)	BLUE	PIN 2
RS232-RX	RX (RECEIVE)	WHITE BLUE	PIN 1

Aircraft Battery
+24VDC Power

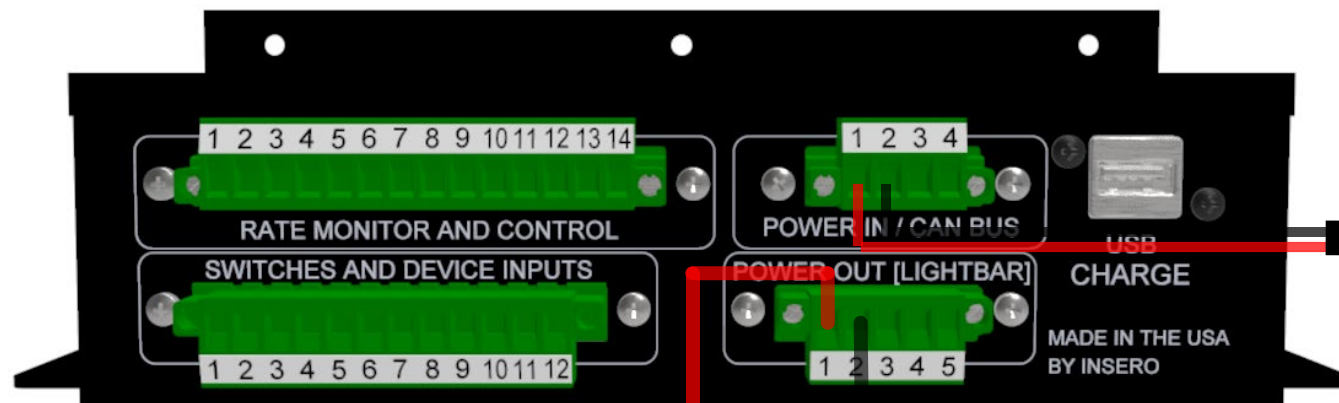
Cable-9012 Spray on / off -15ft



TITLE: AgPilot X, FLOW CONTROL INTERFACES	
REV G	DWG.NO AgPilot X Cable Interface
SCALE:NONE	SHEET 4 OF 9

ASSY-9002 AgPilot X Hub

Cable-9001 Hub Power Cable – 15ft



Aircraft Battery +24VDC Power

POWER IN / CAN BUS	NAME	COLOR	TERMINATION
PIN 1	+ Vin	RED	Battery (+) Terminal
PIN 2	GND	BLACK	Battery (-) Terminal

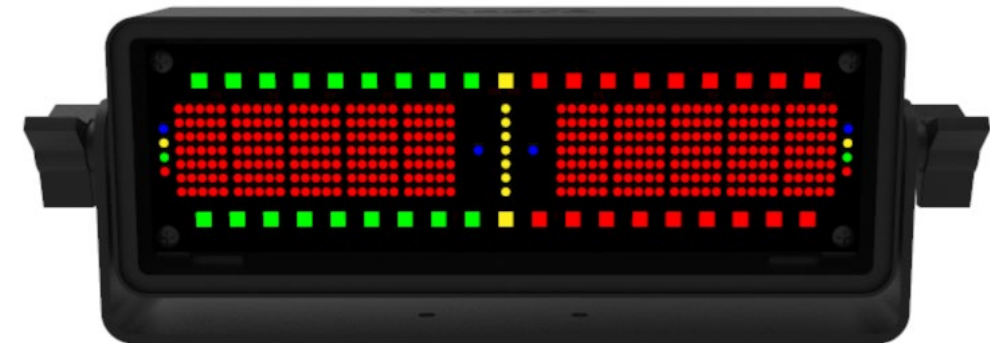


GANT-0002 GNSS Antenna

Cable-9019 (serial wires not shown) -15ft

Cable-0037 GPS Antenna Cable – 15ft

FRONT VIEW ASSY-9004

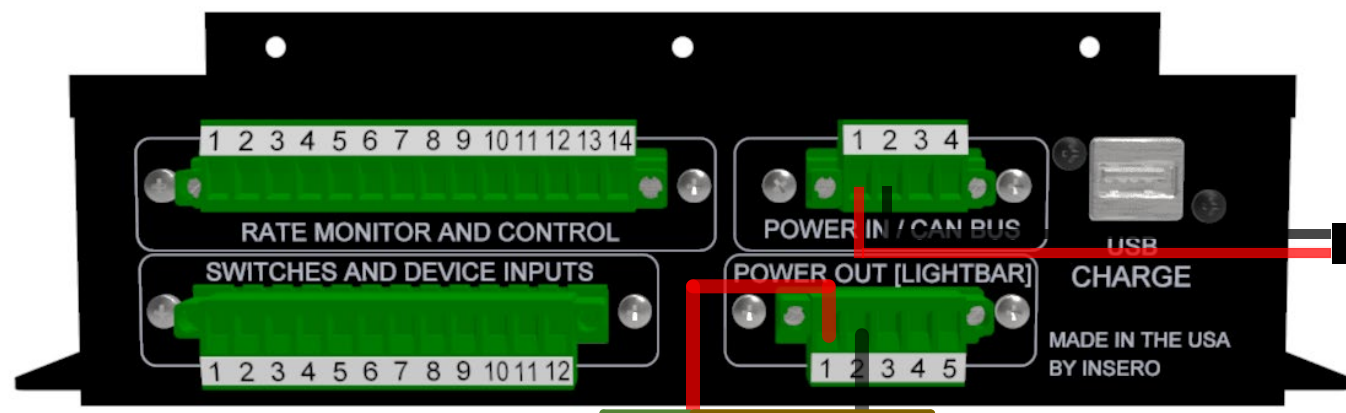


ASSY-9004 AgPilot X Helicopter Lightbar

ASSY-9006 AgPilot X Helicopter Lightbar (All Green LED Option)

TITLE: AgPilot X, LB , Antenna, Hub Interface	
REV G	DWG.NO AgPilot X Cable Interface
SCALE:NONE	SHEET 5 OF 9

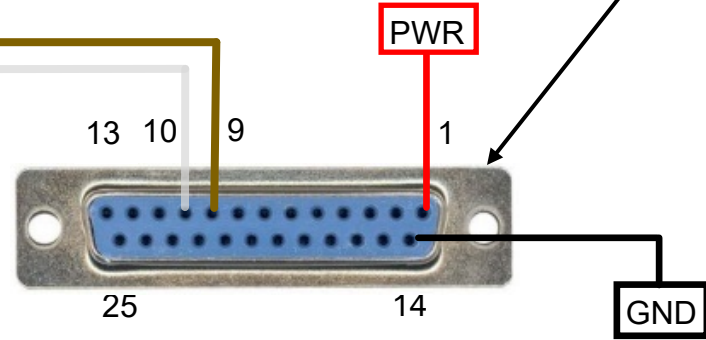
ASSY-9002 AgPilot X Hub



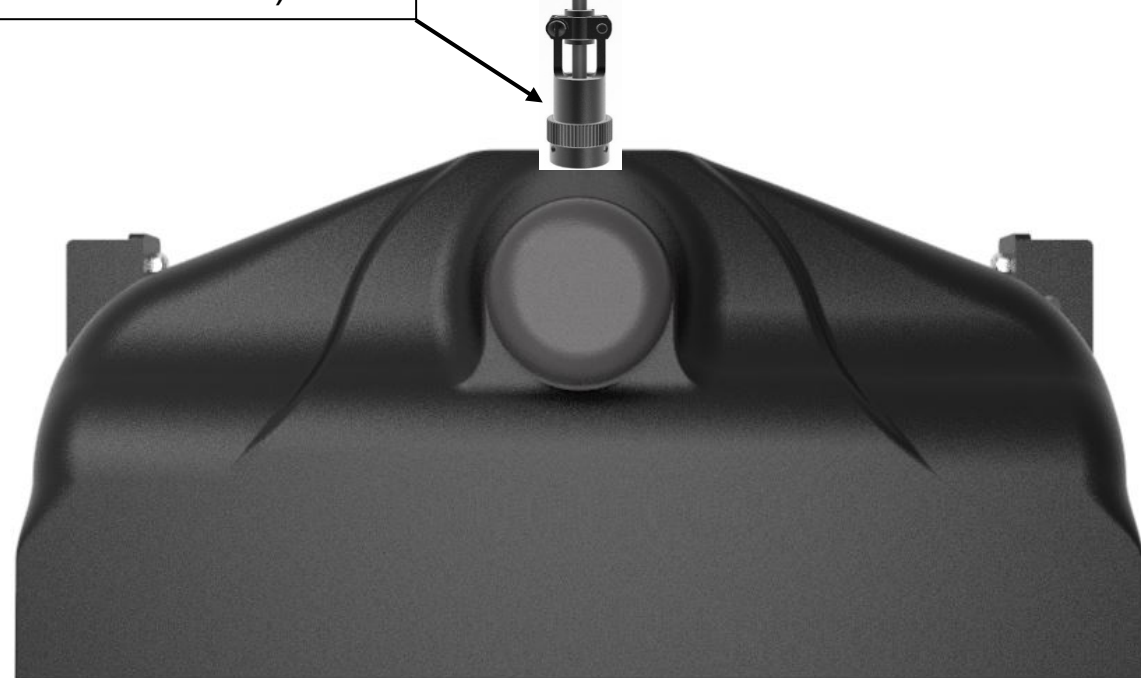
Cable-9001 Hub Power Cable – 15ft

Aircraft Battery +24VDC Power

DB25 Pin Female Connector located on rear of MVP-50



Cable-9019 (serial wires shown) -15ft




ASSY-9001 AgPilot X Lightbar

MVP-50	NAME	COLOR	Connection
Pin 1	Power +24V	RED	Aircraft Power
Pin 14	Ground (power)	Black	Aircraft Ground
Cable-9019	Serial Out RS232	White	DB25 – Pin 10
	Serial GND	Brown	DB25-Pin 9



MVP-50 Engine Monitor

	NAME	DATE
DRAWN	R.WONG	05/05/20
CHECKED	B.HEDGE	05/05/20
ENG APPR.		



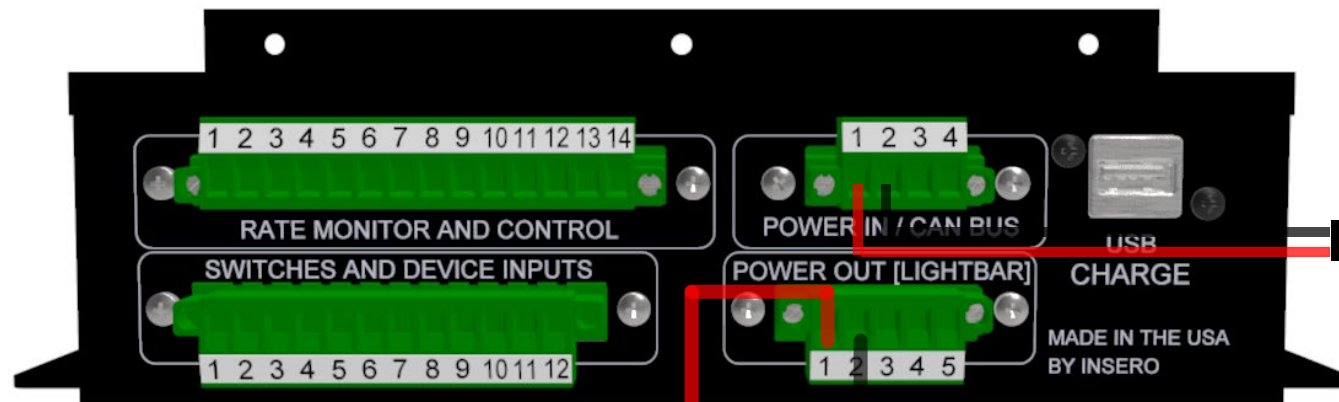
1640 E HERMOSA DR. TEMPE AZ 85282

TITLE: AgPilot X, MVP-50, Cable Interface

REV	DWG.NO	AgPilot X Cable Interface
G		

SCALE:NONE SHEET 6 OF 9

ASSY-9002 AgPilot X Hub

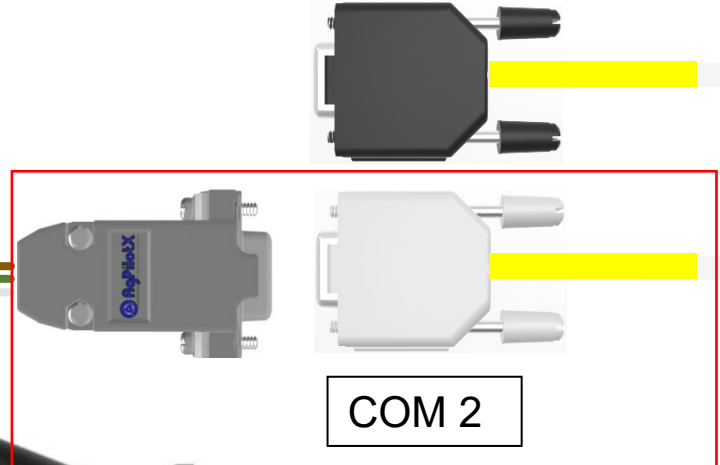


Cable-9001 Hub Power Cable – 15ft

Aircraft Battery +24VDC Power

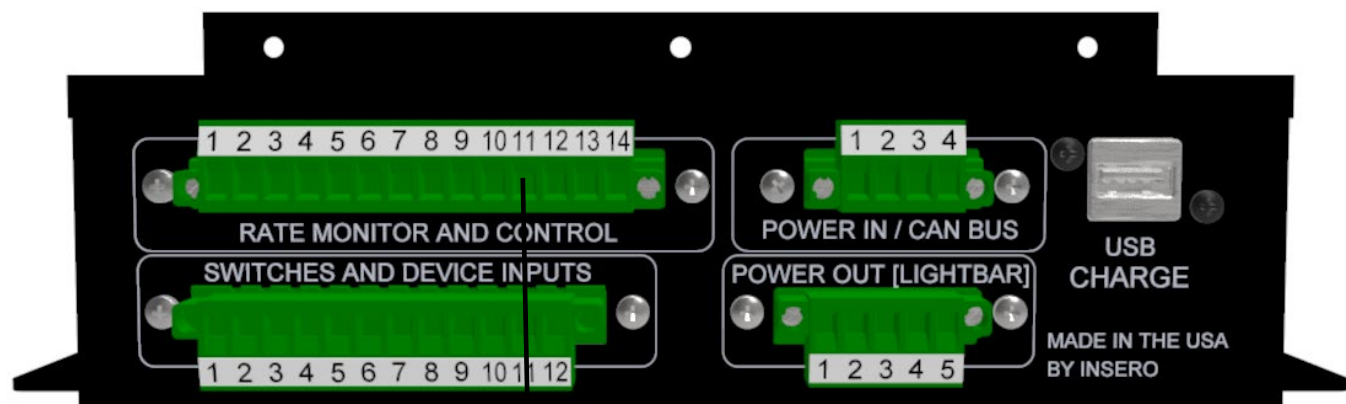
AgPilot X J1 RS-232	NAME	COLOR	AIMMS CPM RS-232 DB9
Pin 2	Serial (Out) RS232	White	RS-232 – Pin 2
Pin 3	Serial (In) RS232	Green	RS-232 – Pin 3
Pin 5	Serial GND	Brown	DB25 – Pin 5

Cable-9019 (serial wires shown) -15ft

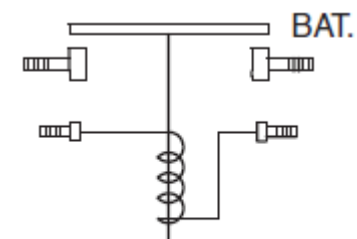


ASSY-9001 AgPilot X Lightbar

			1640 E HERMOSA DR. TEMPE AZ 85282	
			TITLE: AgPilot X, AIMMS 20 CPM, Cable Interface	
DRAWN	R.WONG	05/05/20	REV	DWG.NO AgPilot X Cable Interface
CHECKED	B.HEDGE	05/05/20	G	
ENG APPR.				
			SCALE:NONE	SHEET 7 OF 9

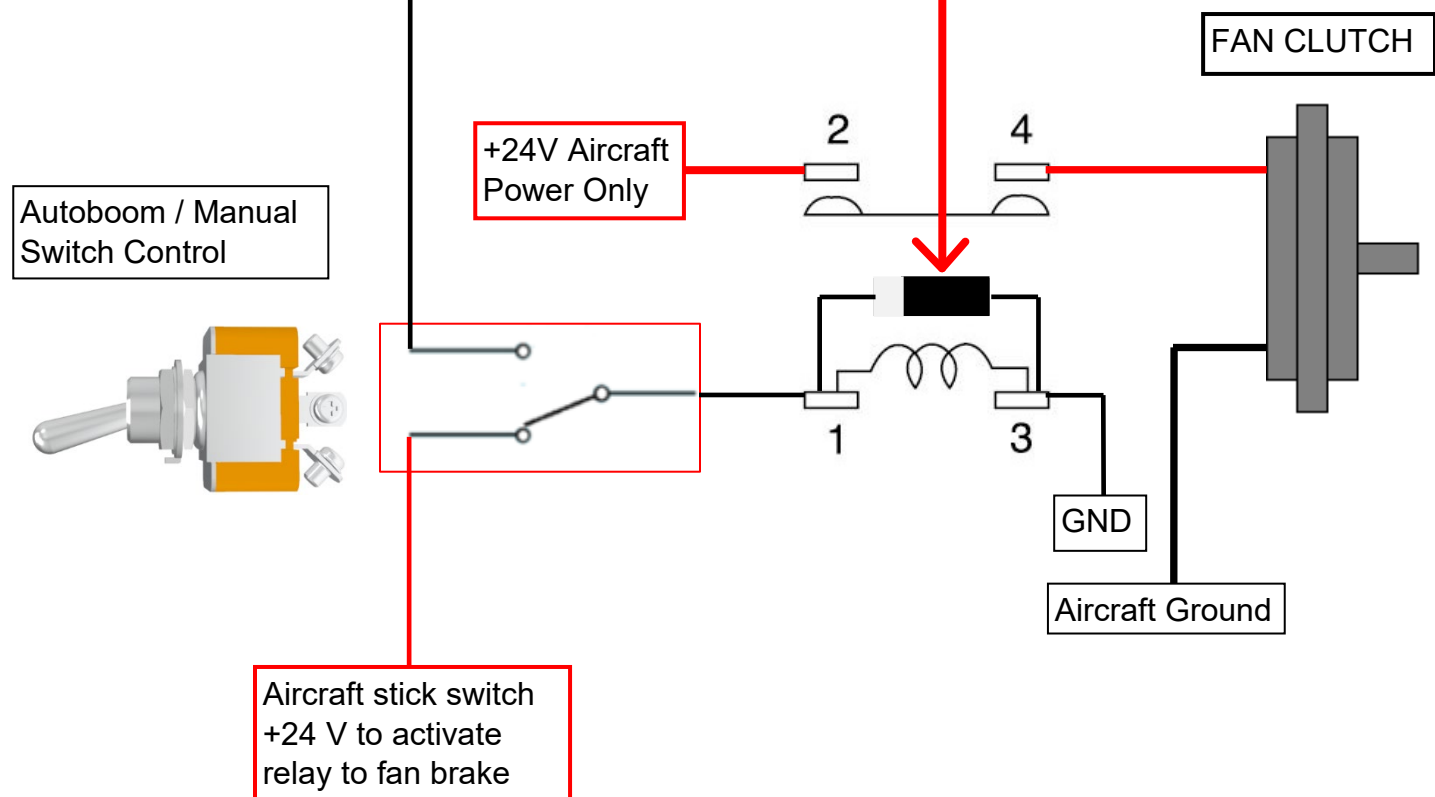


STANCOR RELAY TERMINALS

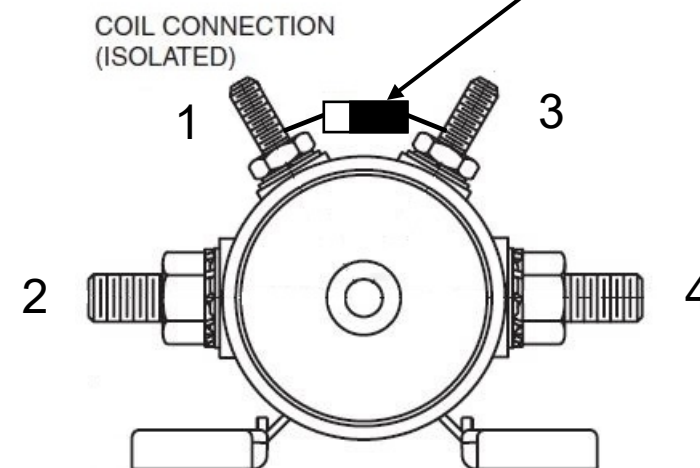


CIRCUIT DIAGRAM


Reverse bias diode must be installed to prevent back EMS voltage back to the supply.



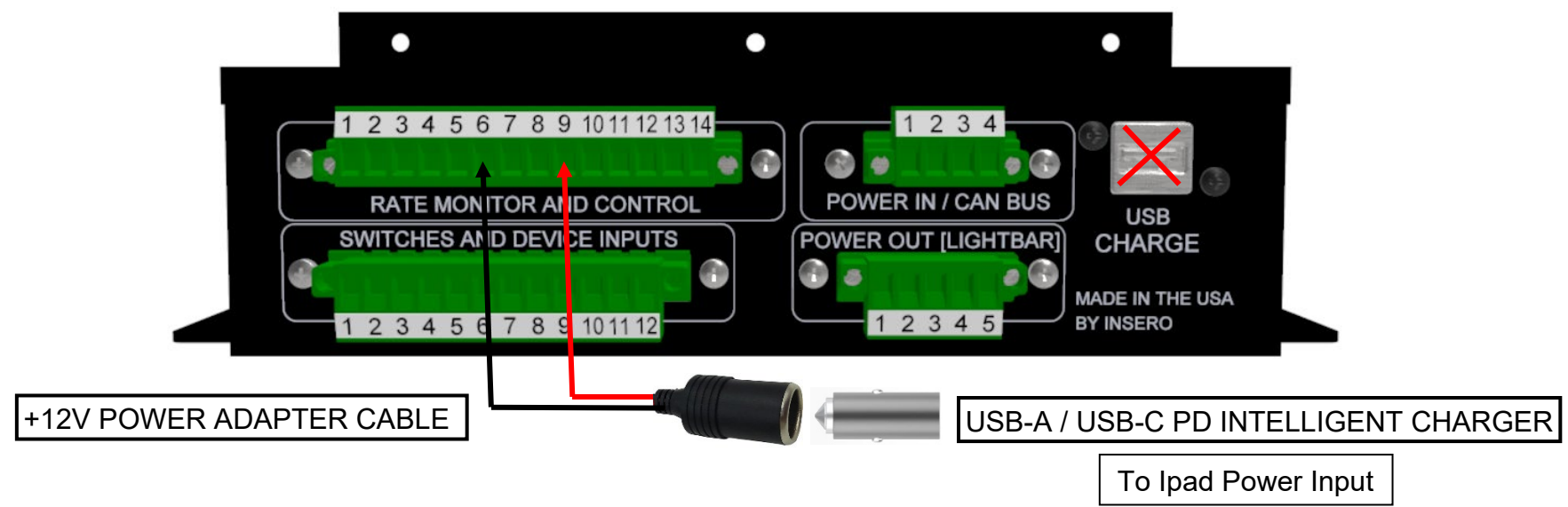
DIODE LOCATION ON RELAY AND POLARITY



The AgPilot X hub Autoboomb signal output is +24V when powered on. The signal automatically defaults to fan brake on and can be bypassed via the Autoboomb / Manual switch control. When in the Manual switch position, the relay is activated by supplying +24V from the stick switch. It is important to install a reverse polarity diode as shown to prevent back EMS voltage when the relay is disengaged.


	NAME	DATE	 1640 E HERMOSA DR. TEMPE AZ 85282	
DRAWN	R.WONG	05/05/20	TITLE: AgPilot X, Autoboomb Relay Schematics	
CHECKED	B.HEDGE	05/05/20		
ENG APPR.				
REV	DWG.NO	AgPilot X Cable Interface	SCALE:NONE	
G				
			SHEET 8 OF 9	

ASSY-9002 AgPilot X Hub



The current Hub design can use the +12V regulated output to power the adapter. The adapter will be prewired and connected to new systems. The adapter will use pins 6 (gnd) and pin 9 (+12V Reg) for power on the rate monitor and control I/O block.

The new Ipad Pro requires intelligent interactive charging. The new technology is only available integrated into +12V adapters. In order to comply with the new standard, we have designed a solution that can be wired to the AgPilot X hub I/O and can be used instead of the USB A port.

	NAME	DATE	 1640 E HERMOSA DR. TEMPE AZ 85282			
DRAWN	R.WONG	11/11/20			TITLE: AgPilot X, IPAD CHARGER, ADAPTER	
CHECKED	B.HEDGE	11/11/20				
ENG APPR.			REV	DWG.NO		
			G	AgPilot X Cable Interface		
			SCALE:NONE			
			SHEET 9 OF 9			