REVISIONS				
REV.	REMARKS	DRAWN	DATE	APPROVED

FOR PREVIOUS REVISION HISTORY SEE EECAD DEPARTMENT OR DOCUMENT CONTROL GROUP

Glassman
Remote Control
Assembly in
Rack IN01B02

J1

J2

TB1
TERMINALS

J1 TO J3 CABLE

J2 TO J4 CABLE

TB1 terminals connect to J4 9-pin Dsub on Glassman Pressure Switch Relay Chassis

1- GROUND
2- COMMON (RETURN FOR ALL PROGRAMMING) (BLACK WIRE)
3- MODIFIED HV ENABLE-SEE DWG "GLASSMAN MOD2016) (BLUE WIRE)
4- V MON (0-10V IS 0-450KV) (BROWN WIRE)
5- V PROG (0-10V FOR 0-450KV) (RED WIRE)
6- LOCAL V CONTROL (LOCAL DIAL OUTPUT)
7- I MON (0-10V IS 0-3mA) (ORANGE WIRE)
8- I PROG (0-10V FOR 0-3mA) (YELLOW WIRE)
9- LOCAL I CONTROL (LOCAL DIAL OUTPUT)
10- +10V (SENt DIRECTLY TO XVME 244 DIGITAL INPUT CARD FOR "READY" SIGNAL bit 2.
11- HV ENABLE (TIED TO TB1-10, BECAUSE THIS WAS NOT A PROPER ENABLE SIGNAL FOR OUR USE)
12- HV STATUS (WHITE WIRE)

Glassman Driver Chassis in
tunnel at gun

J3 J1 JHV1 JHV2 J4

TB1 TB2-2 TB2-3
1 2 3

INTERLOCK

PSS Dry
relay contact

PSS
CONTACTOR
BREAKS
240VAC
MAINS

V V U

LV Bias Probe

RED	A=18V
Black	B= Com
Orange	C= 24V insert command
Green	D= Outer limit Com
Blue	E= Outer limit N.O. (closes when on outer limit)

GLASSMAN TANK

24VDC INPUT (J1)
Burndy G0B10-4SNE
A=+24VDC
B= GND

BNC out Glassman Voltage monitor X2

BNC out Glassman Current monitor X3

GLASSMAN
PRESSURE SWITCH
RELAY CHASSIS IN
RACK IN01B03
See Schematic
"Glassman interlock
relay chassis 2018"

https://wiki.jlab.org/ciswiki/images/3/37/Glassman_interlock_relay_chassis_2018.pdf

GLASSMAN TANK PRESSURE SWITCH CABLE
(J5 connection) Panel mount G0B12-88PNE

A: Black	
B: Brown	
C: Red	
D: Orange	
E: Yellow	
F: Green	
G: Blue	
H: White	

GLASSMAN TANK PRESSURE SWITCH CONNECTION BOX

A: Black	A: Black	QPSH-AP-42 (output 1)
B: Brown	B: Brown	QPSH-AP-42 (+24V)
C: Red	C: Orange	QPSH-AP-42 (Analog Out)
D: Orange	D: Blue	QPSH-AP-42 (Common)
E: Yellow	E: White	QPSH-AP-42 (output 2)
F: Green	F: Violet	Ashcroft COMMON
G: Blue	G: Yellow	Ashcroft N.O. (shorts to common at pressure)
H: White	H: Green	Ashcroft N.C.

J4 connection from pressure switch relay chassis to Glassman remote TB1 Panel mount 9 pin female D-sub connector

X2 connection	TB1 connection
1: Black	2
2: Brown	4
3: Red	5
4: Orange	7
5: Yellow	8
6: Green	
7: Blue	3
8: White	12

J2 PSS connection (AMP PT02E-12-8S)

A: Black	24V
B: Brown	K6 drive
C: Red	24V
D: Orange	K7 drive
E: Yellow	K6 NC
F: Green	K6 NC
G: Blue	K7 NC
H: White	K7 NC

J6 Hardware interlocks connection (Souriau UTSO-12E8S)

A: Black	24V
B: Brown	Dipole magnet relay
C: Red	24V
D: Orange	Global intlk relay
E: Yellow	24V
F: Green	LV Bias relay
G:	
H:	

J3 connection to EPICS cards 15pin female Dsub on panel — Breakout terminal board in rear of IN01B03

1	Black	EPICS digital output. HV Enable	81	To XVME244 digital ouput channel 1 IGLK100DIOLWTB.B0
2	Brown	EPICS digital input. HV status	82	To XVME244 digital input channel 1 IGLK100DIOFLRDB.B0
3	Red	EPICS digital input. SF6 Interlock OK	83	To XVME244 digital input channel 2 IGLK100DIOFLRDB.B1
4	Red-Black	EPICS digital input. Dipole Interlock OK	84	To XVME244 digital input channel 17 IGLK100DIOFHRDB.B0
5	Pink	EPICS digital input. Global Interlock OK	85	To XVME244 digital input channel 18 IGLK100DIOFHRDB.B1
6	Orange	EPICS digital input. LV Bias Probe retracted	86	To XVME244 digital input channel 19 IGLK100DIOFHRDB.B2
7	yellow	EPICS digital input. PSS system A OK	87	To XVME244 digital input channel 20 IGLK100DIOFHRDB.B3
8	Dark green	EPICS digital input. PSS system B OK	88	To XVME244 digital input channel 21 IGLK100DIOFHRDB.B4
9	light green	EPICS digital input. Glassman ready	89	To XVME244 digital input channel 3 IGLK100DIOFLRDB.B2
10	Dark blue	EPICS ADC input. SF6 pressure	90	To XVME566 ADC card channell 1 IGLK100TANKPSI
11	light blue	EPICS DAC output. Vprogram	91	To C1068 DAC channel 1 IGLOI00HVSET
12	Violet	EPICS DAC output. Iprogram	92	To C1068 DAC channel 2 IGLOI00Curr_Setpt
13	Grey	No connect	93	
14	White	EPICS DAC common	94	To C1068 DAC card breakout common
15	Grey-Black	EPICS DIO common	95	To XVME244 card breakout common

DRAWN	DATE	Thomas Jefferson National Accelerator Facility	
HANSKNECHT	2/13/19		
CHECKED	DATE	TITLE	
APPR/ORIGINATOR	DATE	CEBAF GLASSMAN 500KV CONTROL WIRING SCHEMATIC	
APPROVED		SIZE E	DWG LB. NO.
ENGINEER		SCALE NONE	SHEET 1 OF 1
J HANSKNECHT			