

Snap-Trol Isolation Module

05/14/99

Instruction Manual

Models P1817-0400, P1817-0410 (For use with Snap-Trol Model DC Drives)
Models P1817-0420, P1817-0430 (For Stand Alone Application)

Alignment Procedure

Field adjustment tool list:

- Small screwdriver
- D.C. voltmeter (capable of indicating 0-500V, 0-10V)
- D.C. ammeter (capable of indicating 0-20mA)

1. Confirm that appropriate jumpers are installed for line input power (120 or 230VAC)
2. Set appropriate switch for required input voltage or current
3. With the input set at minimum level, set zero adj. pot. to 0V at **Terminals C & D** (See Note 2)
4. With the input set at maximum level, adjust scaling adj. pot. to 4VDC at **TP1** and input **Terminal 7** (input ground reference)
5. Adjust gain pot. to obtain 4VDC at **TP2 & Terminal D** (output ground reference)
6. Adjust output range pot to level desired at **Terminals C & D** (11V maximum) *
7. Set input to zero and recheck output (**C & D**) for 0V. Reset zero adj. pot. if required

*Step 6 above not required if **Terminals C & D** are not used

- 8 With input set at zero, set output (**Terminals A & B**) to 4mA with 4mA adj. pot.
- 9 With input at maximum, set output (**Terminals A & B**) to 20mA with 20mA adj. pot.
10. Recheck steps 8 & 9 as 4mA & 20mA adjustments interact with each other

Note 1

Polarity of inputs at terminals 3 or 4 may be reversed. This would result in a reversal of polarity at the output terminals C & D. Polarity at terminals A & B are NOT reversible.

Note 2

The minimum setting can be set at a negative value (-) as low as -10VDC. For example: A 0 to +10VDC input signal could output a -10VDC to +10VDC output voltage.

Note 3

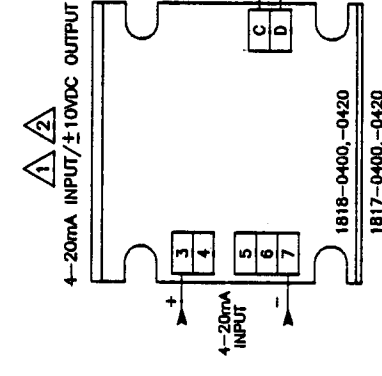
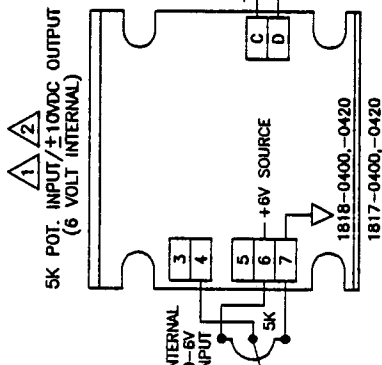
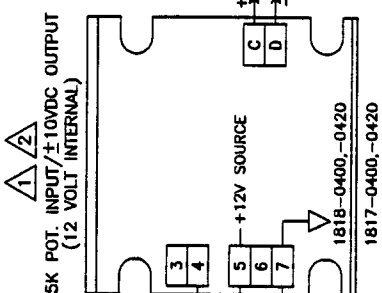
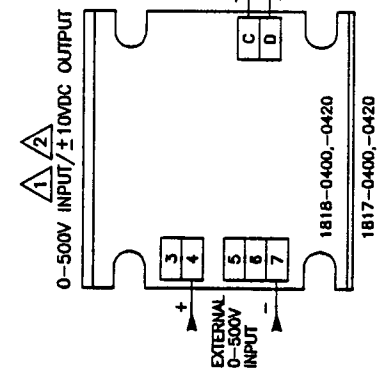
The 4V level at steps 4 & 5 should NEVER exceed 4.5V.

Manual M18104XA.DOC

EXTRON

5735 Lindsay Street Minneapolis, MN 55422 Phone: (763) 544-4197 Fax: (763) 544-4419

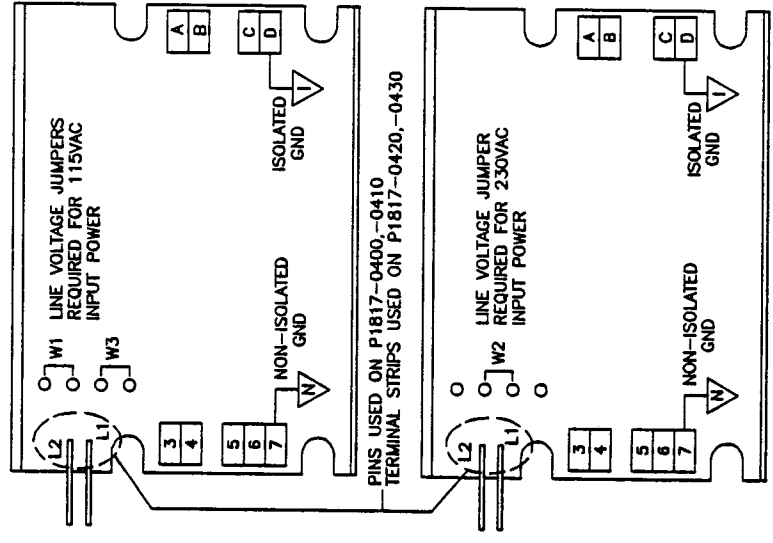
NOTE: MODELS P1817-0400,-0410 FOR USE AS "PLUG IN" OPTIONS TO EXTRON SERIES 181 D.C. DRIVES. MODELS P1817-0420,-0430 FOR USE AS "STAND ALONE" OPTIONS.



SYMBOL: D
L.C.O.:
BY: RCS
REVISION DESCRIPTION: REVISED TO TWO "C" SIZE DWG REFER TO D1862 FOR PAGE 2
DATE: 5/6/99
APPROVED:

NOTE: POLARITY OF INPUTS AT TERMINALS 3 OR 4 MAY BE REVERSED. THIS WOULD RESULT IN A REVERSAL OF POLARITY AT THE OUTPUT TERMINALS C AND D. POLARITY AT TERMINALS A AND B ARE NOT REVERSABLE.

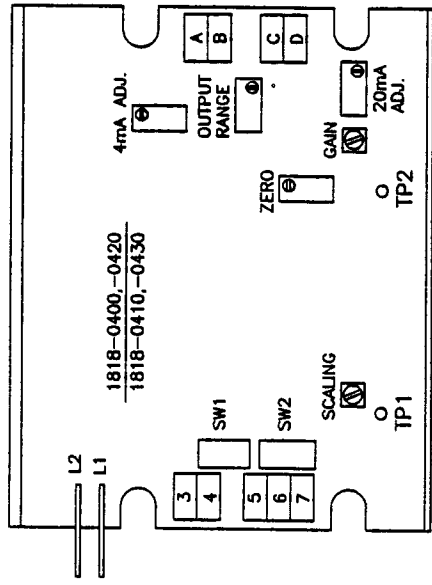
NOTE: THE MINIMUM SETTING CAN BE SET AT A NEGATIVE VALUE (-) AS LOW AS -10VDC. FOR EXAMPLE: A 0 TO +10VDC INPUT SIGNAL COULD EQUAL A -10VDC TO +10VDC OUTPUT SIGNAL.



SWITCH CHART
ONLY ONE SWITCH ON AT ANY GIVEN TIME

INPUTS	ON	OFF
400V-500V	4	3
200V-400V	3	2
NO CONNECTION	2	1
100V-200V	1	4
50V-100V	4	3
15V-50V	3	2
0-15V	2	1
4-20mA	1	4

LOCATION OF ADJUSTMENTS



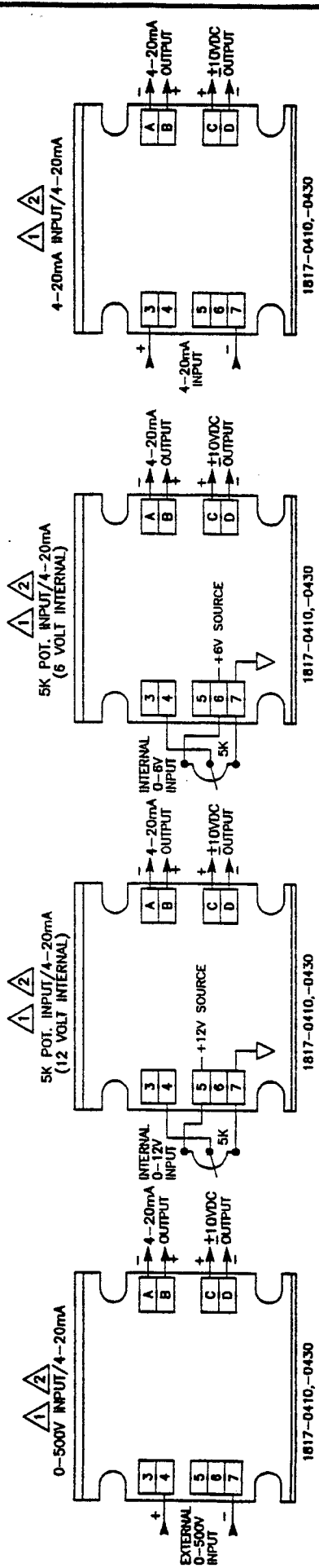
- FIELD ADJUSTMENT TOOL LIST:
- SMALL SCREWDRIVER
 - D.C. VOLTMETER (CAPABLE OF INDICATING 0-500V 0-10V)
 - D.C. AMPMETER (CAPABLE OF INDICATING 0-20mA)

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE IN INCHES	DATE: 5/6/99
FRACTIONS .XXX/100	DRAWN BY: RCS
DECIMALS .XXX	CHECKED BY:
ANGLES 1/16	APPROVED BY:
SCALE: 1" = 1.000"	CAD NO: D39D
MATERIAL:	MODE FROM: D39C
FINISH:	SHEET 1 OF 2

EXTRON CO.
MINNEAPOLIS, MINN.
TITILE: CONNECTIONS & ADJUSTMENTS
SIGNAL ISOLATION CARD MODELS:
P1817-0400, P1817-0420

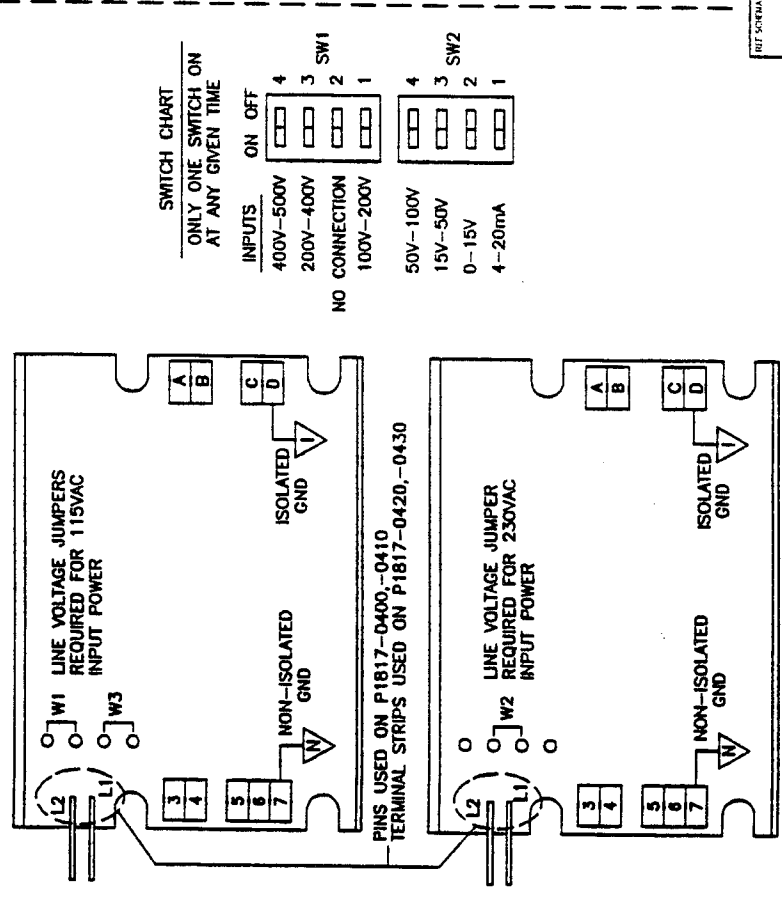
DATA FOR ALL P1817-0400,-0420 & P1817-0410,-0430

NOTE: MODELS P1817-0400, -0410 FOR USE AS "PLUG IN" OPTIONS TO EXTRON SERIES 181 D.C. DRIVES. MODELS P1817-0420, -0430 FOR USE AS "STAND ALONE" OPTIONS.

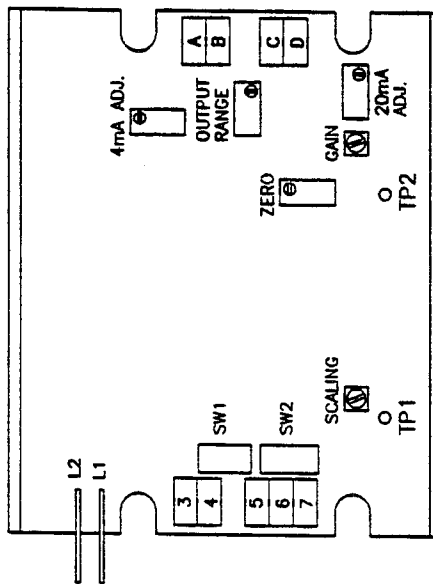


NOTE: POLARITY OF INPUTS AT TERMINALS 3 OR 4 MAY BE REVERSED. THIS WOULD RESULT IN A REVERSAL OF POLARITY AT THE OUTPUT TERMINALS C AND D. POLARITY AT TERMINALS A AND B ARE NOT REVERSABLE.

NOTE: THE MINIMUM SETTING CAN BE SET AT A NEGATIVE VALUE (-) AS LOW AS -10VDC. FOR EXAMPLE: A 0 TO +10VDC INPUT SIGNAL COULD EQUAL A -10VDC TO +10VDC OUTPUT VOLTAGE.



LOCATION OF ADJUSTMENTS



- FIELD ADJUSTMENT TOOL LIST:
- SMALL SCREWDRIVER
 - D.C. VOLTMETER (CAPABLE OF INDICATING 0-500V, 0-10V)
 - D.C. AMPMETER (CAPABLE OF INDICATING 0-20mA)

1817-0400, -0420
1817-0410, -0430

REV	DATE	DESCRIPTION
A	5/8/99	[RCS] REFER TO D39 FOR PAGE 1

UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN INCHES	DATE	REV
TELEPHONE USE IN HOLES	5/8/99	2 of 2
FRACTIONS	DECIMALS	SHEET
1/16, 1/8, 1/4, 3/16, 1/2, 5/8, 3/4, 7/8	0.0625, 0.125, 0.25, 0.375, 0.5, 0.625, 0.75, 0.875	2
MATERIAL	MAKE FROM	PC 1814-0510 PAGE 2
1817-0410, -0430	D1862A	REV. A

EXTRON
MINNAPOLIS, MINN.

CONNECTIONS & ADJUSTMENTS
SIGNAL ISOLATION CARD MODELS:
P1817-0410, P1817-0430

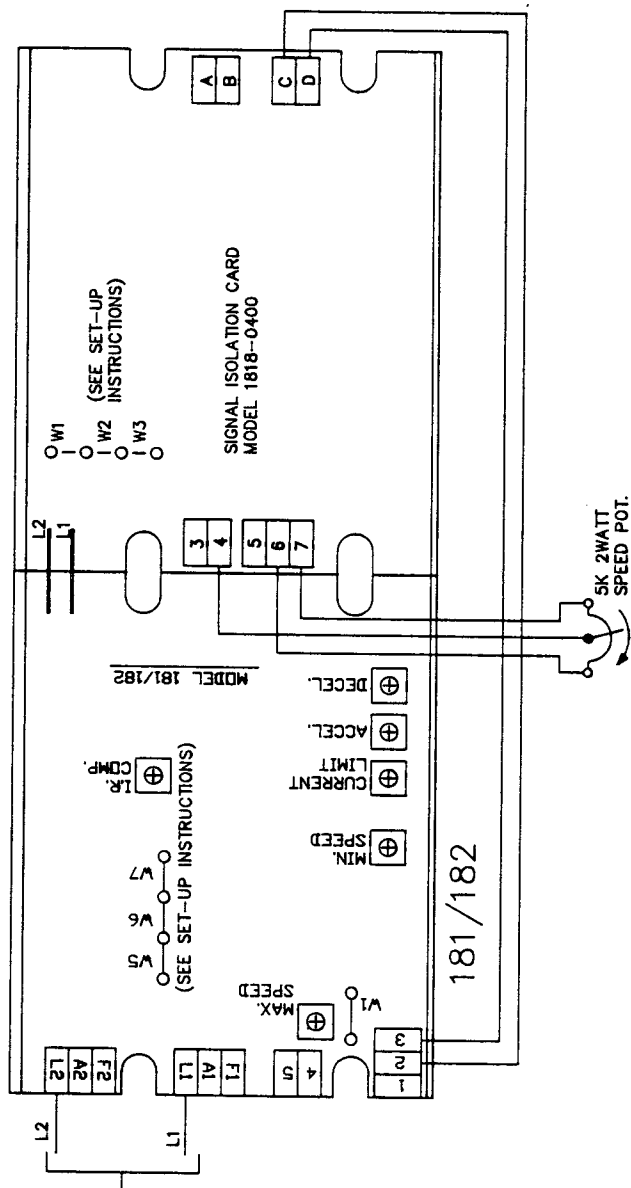
DATA FOR ALL P1817-0400, -0420 & P1817-0410, -0430

SIGNAL ISOLATOR VOLTAGE SET-UP

INPUT	W1	W2	W3
115VAC	IN	OUT	IN
230VAC	OUT	IN	OUT

W1	W2	W3
○	○	○

115VAC	○ W1	○ W2	○ W3
230VAC	○	○	○



181/182 DRIVE VOLTAGE SET-UP

115V OR 230V
50 OR 60HZ
(SEE SET-UP INSTRUCTIONS)

INPUT	ARMATURE	FIELD
115VAC	90VDC	100VDC

W5	W6	W7	W1
○	○	○	○

W5	W6	W7	W1
IN	OUT	IN	IN

F1	F2	L2
○	○	○

F1	F2	L2
○	○	○

OPTIONAL 50V FIELD

INPUT	ARMATURE	FIELD
230VAC	180VDC	200VDC

W5	W6	W7	W1
○	○	○	○

W5	W6	W7	W1
OUT	IN	OUT	OUT

F1	F2	L2
○	○	○

F1	F2	L2
○	○	○

INPUT	ARMATURE	FIELD
230VAC	90VDC	100VDC

W5	W6	W7	W1
○	○	○	○

W5	W6	W7	W1
OUT	IN	OUT	IN

F1	F2	L2
○	○	○

F1	F2	L2
○	○	○

UNLESS OTHERWISE SPECIFIED
REMOVE ALL DIMS AND SHARP EDGES
DIMENSIONS ARE IN INCHES
TOLERANCE ON FRACTIONS DECIMALS ANGLES
1/2 .010 .001/20 2
3 MATERIAL FINISH

DATE 12/28/87
DRAWN BY RCS
CHECKED BY
APPROVED BY
SCALE 1 of 1
SHEET 1 of 1
Dwg No. PC 1814-0500
REV. A

EXTRON MANUFACTURING

TITLE
CONN/WIRING DIAG.
181/182 WITH SIGNAL ISOLATION

CAD NO. D38
D38
CADD FROM CAD D9