3-21-62

575 MOD 122C
FOR CUSTOM INSTRUMENTS

1. Start with the instrument upside down.

2. Using CSB as a base for the jig, center punch and then drill (4) 5/32" holes, that would be a #23 bit. See sketch.

3. Remove the nut of the mounting screw on C243, nearest the sub-panel, and mount a #6 solder lug facing the front.

4. (3) wires, (2) 9-4 wires and (1) 3-N wire are laced together from the grommet and main cable. They are loose at this time. Remove the lacing and re-tie at the main cable to prevent unraveling.

5. Remove both (2) 9-4 wires. (1) is a short wire that would run from CSB4 to the toggle switch on the front porch. The other is a long wire that would run from CSB4 to the Horiz. Volts/Div. switch.

6. Do not connect the 3-N wire at this time.

7. Add two (2) four slot strips in the holes that were previously drilled. See sketch.

8. Remove the large varible cap (C735) and straps.

9. Rewire the strips as follows:

   A. Remove:

(1)	47pf cer. cap	from CSA4 to CSB4 (delete)
(2)	1 meg 1/2W 1%	from CSA4 to CSB4 (delete)
		CSA3 to CSB3 (delete)
(1)	Mica Cap	from CSA1 to CSB1 (delete)
(1)	10K 1W 10%	from CSA2 to CSB2 (keep to be used again later)

   B. Move:

(1)	-150 wire from cable to CSB2 to CSB1
(1)	Strap from pin 1 of V733 to CSA4 to CSB3

   C. Add:

(1)	#20 strap	from CSA4 to CSB4
(1)	300K 1/2W 1%	from CSA3 to CSB2
(1)	.002 ufd mica cap	from CSA2 to CSB2
(1)	10K 1W 10%	from CSA1 to CSB1 (same resistor as was removed previously)

10. Now connect the 3-N wire to CSB2.

11. Add three (3) box jumpers and four (4) 2.5 meg 1/2W 1% resistors. See sketch.

12. Clean all four strips.

13. Rubber stamp, (R730A above), between CSB and the new strip. See sketch.

continued

14. Add a 1 meg Tek pot. Center tap to CSB3
Left tap to CSB4
Right tap to new strip A, slot 4
(see sketch)

15. Connect two 9-N "Hyrad" wires to CSA1. (1) is a short wire approximately 6" long. Leave the other end loose for now. The other 9-N "Hyrad" wire is approximately 24" long and should go thru the grommet at the center front of chassis to the top of the horiz. volts/div. switch, following approximately the same path as the 3-N wire.

16. Tie the "Hyrad" wire to the cable, in several places for a neater installation.

17. Clean the dirty part of the strips again, but caution should be taken as the solution will smear the rubber stamping quite easily.

18. Using the special front panel as a guide, locate and center punch the "press to check" button hole.

19. Remove panel and punch a 3/8" hole.

20. Install the push-button with approximately a 5" length of #18 solid 4-131 wire connected to the top solder lug.

21. Connect the loose end of the 4-131 wire, from the push-button, to the top contact of the circuit breaker.

22. Install the new collector box, making sure that the special cable is mounted on the back side of the box.

23. The transformer support bracket (lid) should now be installed. Use (2) 6-32 x 3/8 B.H.S.

24. The cable on the back of the box will connect to the H.V. transformer on the "lid" as follows: 4-131 to term. 1
4-111 to term. 2
9-N to term. 3
Term. 4 should be grounded

25. Collector box wire connections:

9-14 #18 str. from term. 8 of the H.V. transformer connects to the top center contact of the polarity switch.

9-14 #18 str. from the 470K 2W 10% on the ceramic strips on the "lid" connect to the center bottom contact of the polarity switch.

9-6 wire from the "peak volts" switch to the 3-12pf ceramic cap. on the "lid".

9-7 wire from the "peak volts" switch to the 4.5-25 pf ceramic cap. on the "lid".

9-7 wire from the 470K 2W 10% on the ceramic strips on the "lid" connect to the center 4.5-25pf ceramic cap on the rear of the box.

9-0 wire from "lid" and strap from caps. on the box, will connect to the solder lug on the top of the resistor stack, directly behind the box.

continued

26. The 9-N "Hyrad" wire and the 9-N #20 solid wire from the box will go down thru the grommet to the under side of power deck.

27. The 9-1 #18 solid wire from the box goes up to the vertical volts/div. switch 6W23 f & r. (Same as standard).

28. Connect the 4-111 wire from the collector box cable to pin 1 of T701. (power stat transformer).

29. Turn the instrument around so that you are on the right side. Connect the 4-131 wire from the collector box cable to the bottom solder lug of the push-button switch.

30. Install the new horiz. volts/div. switch and wire as follows: (Very much the same as standard).

From the cable

-150 to 1W3F
9-1 to 1W4R
9-2 to 1W5F
9-3 to 1W6F
9-4 to 1W7F
9-5 to 1W8F
9-6 to 1W9F
9-0 to 1W10 F&R
3-N to 1W15F
9-7 to 2W11R
(2) 9-8 to 5W11F
8-N to 2W20R
9-N to 5W2F
Black wire from coax to 2W9R
Red wire from coax to 4W9F
9-2 from toggle switch goes to 5W22R
9-N "Hyrad" to 4W4R

31. Wires from switch connect to:

9-5 from 6W10R to CSB14.
9-3 from R334 pot on circuit board to CSB18.
9-0 wire from center tap of R434 pot on circuit board to 4W9R of the vertical volts/div. switch.
9-2 wire from side tap of R434 pot on circuit board to 4W8R of the vertical volts/div. switch.

32. Remove the short 9-0 wire from the "Amplitude Calibration" toggle switch and replace with the longer 9-0 wire from 2W14F of the horiz. volts/div. sw.

33. Remove the (C735) silk-screen and all the silk-screen pertaining to the adjustment of same. Caution should be used, so as not to remove the (V733 6AU6) silk-screen.

34. Spray area with "Krylon" lacquer.

35. Install the front panel. Also use a single dot knob on the polarity sw.

continued

36. To install the front porch, a relief notch is needed to clear the new toggle sw.

37. This notch should be approximately 1/8" deep by 1 1/8" wide.

38. Install porch and ground coaxial cables the same .25 standard.

39. The #20 9-N wire from the box will go to ground on the solder lug on C243 that was installed earlier.

40. The #18 solid 9-1 wire goes to ground on the porch the same as standard.

41. On the new toggle switch there are four rows of contacts. The row closest to the sub-panel shall be #1 and the next row #2, etc. We shall then number the contacts from left to right 1,2,3, and 4 etc.

42. Toggle switch connections are as follows:

    9-N "Hyrad" from collector box to row (1) contact (3).

    (2) coax cables to row (1) contact (1).

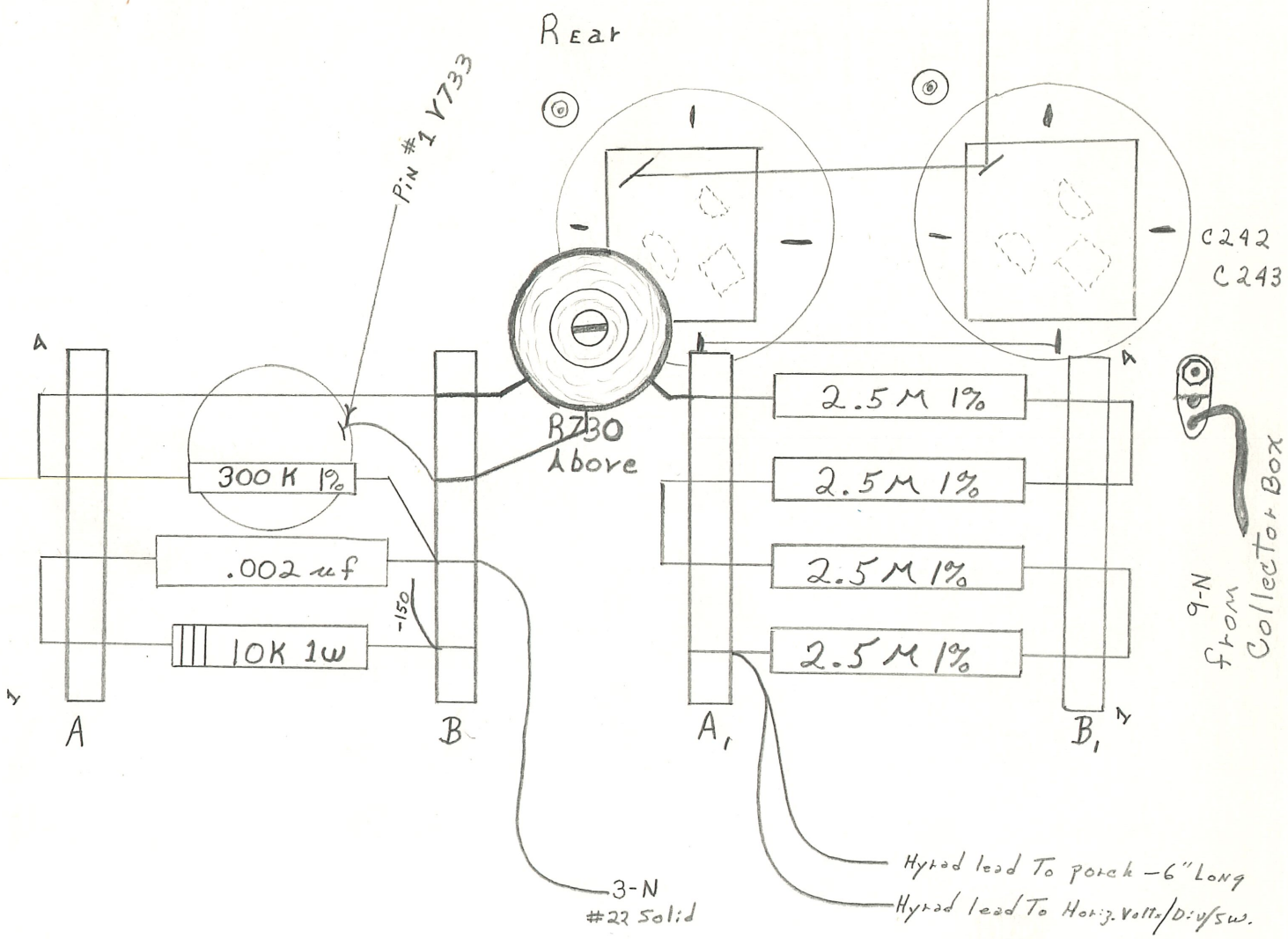
    9-N "Hyrad" from new ceramic strips to row (4) contact (4).

43. Install the 100Ω 1/2W 10% from your standard final kit from row (1) contact (3) to row (4) contact (4).

Final Wire Kit:

1	4-131 #18 solid	5" long
1	9-N "Hyrad"	24" long
1	9-N "Hyrad"	6" long

575-1220



Front View