

W Calibration Outline

Presets	
Range	+11 volts
Comparison Voltage	11.00 (10-10-0)
Both AC-DC-Grnd	Ground
Input Atten.	1
Display	A-V _c
MV/CM	50
Var MV/CM	Calib.
Position	Midrange

1. Adj V_c Cal (R310)
- Adj R310 for +11v at V_c jack.
R310 is upper pot on V_c Range Switch.

Presets	
Comparison Voltage	1.00 (0-10-0)

2. Adj Tracking (R323)
- Adj R323 for +1.0v at V_c jack.
R323 is lower pot on V_c Range Switch.

3. Check Tracking of Comparison Voltage Control ±0.2%

4. Check V_c Range Switch
- Check at +1.1, -1.1, & -11.0v.

Presets	
<u>V_c RANGE</u>	○
Position	Centered
Short wipers of mv/cm switch with jumper.	

5. Position Range (R176)
- Center the trace vertically.

6. Adj DC Level (R280)
- Adj R280 for 6v from collector to emitter of Q184. (Ceramic strip test point to 3rd notch below test point) S/N 3270 & up measure between TP291 & TP296

NOTE: STEPS 5& 6 INTERACT, REPEAT.

Presets	
Remove Vom & jumper	
Var Bal	Midrange
DC Bal	Midrange
V _c Range	0v

7. Heater Bal (R293)
- No shift as Var mv/cm is rotated

Preset	
MV/CM	1

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W Calibration Outline (cont)

8. DC Bal (R127)

Minimum shift as Var mv/cm is rotated.

NOTE: Var Bal (R161) may need to be adj to keep trace on screen.

Preset

Variable	Calib.
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9. Var Bal (R161)

Center trace with Var Bal.

NOTE: Steps 8 & 9 interact, readjust.

Presets

MV/CM	50
Input A	DC

10. Gain Adjust (R157)

Adj for 4cm of deflection with .2v cal signal at A input.

11. Check Grid Current

Less than 2cm shift at 1mv/cm

12. Check MV/CM Accuracy

±3%

13. Check Variable MV/CM

2.5:1 minimum.

Presets

Input B	DC
Display	A-B
MV/CM	1

14. Diff Bal (R223)

Apply 20v P-P 60 cycle sinewave & adj for minimum deflection.

15. Check CMR at 60 Cycles

Apply 20v of 60 cycles to A & B inputs in AC position. mv/cm at 5. Less than 4cm of deflection.

16. Check CMR at 500kc

MV/CM at 20. 2cm or less with 20volts of signal. *USE DC COUP*

Presets

Input B	Ground
Input Atten.	100
MV/CM	50

17. Overdrive Recovery (C116, C216)

Apply 10v (2cm) of 10kc from 106 to input A terminated in 50 ohms. Set input atten. to 1 & mv/cm to 10. Waveform must return to within 10mv of original level in less than .3us. Adj C116 for A & C216 for B.

1. The purpose of this document is to provide a detailed description of the system and its components.

2. The system is designed to be flexible and scalable, allowing for future expansion and modification.

3. The system is composed of several key components, including the hardware, software, and network infrastructure.

4. The system is designed to be secure and reliable, ensuring that data is protected and available when needed.

5. The system is designed to be easy to use and maintain, allowing for quick deployment and ongoing support.

6. The system is designed to be cost-effective, providing a high level of performance at a reasonable price.



7. The system is designed to be modular, allowing for easy integration with other systems and components.



8. The system is designed to be robust, capable of handling a wide range of data and operations without interruption.

9. The system is designed to be future-proof, with the ability to adapt to new technologies and requirements.

W Calibration Outline (cont)

18. Check Overdrive DC Shift

Time/cm to 1msec & A input to ground. Center trace. Switch to DC & wait 10sec. Trace shift less than 0.5 cm. Check B.

19. Check CMR at 20kc

20v of 20kc sinewave. A & B at DC & 1mv/cm. Input atten at 1. (Adj C113 if more than 1cm of deflection-s/n 170 & up. Repeat 17, 18, & 19.)

20. Check CMR at DC

Apply 10v from V_c Output to A & B inputs at max DC sens. Less than .5cm shift, from V_c Range positions of +11 to 0 or -11 to 0.

21. HF Adjustments (C174, C274, C284)

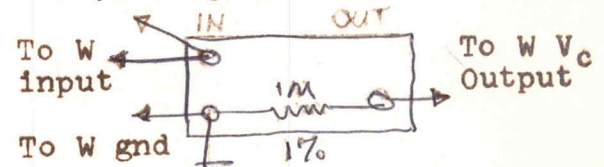
500kc from 106. 50mv/cm

Presets

Input Atten	10
Display	A- V_c
MV/CM	1
Comparison Voltage	10-10-Past 0
DC Divider	10:1

(SOLID GN WIRE)

To Junction R310
& SW310 wiper



22. Adjust R106E & R206E

Position trace to center. Position Comparison Voltage Switch between 10 & 9 detents. Switch V_c Range to +11 & adj R106E for min shift between 0 & +11 for input A. R206E for B.

23. Adj R108G & R208G

Input Atten to 100 & DC Divider to 100:1. Same as step 22.

Presets

Comparison voltage	0-1-10
Input Atten	1000
Remove all connections & DC Divider except jumper from input to SW310	

4. Check 1000X Attenuator

Max .2cm shift when switching from 0 to +1.1 V_c position. Check both inputs.

Presets

Insert 1M 1% resistor in series with jumper.	
Input Atten	10
V_c Range	+1.1

W Calibration Outline (cont)25. Adj R105B & R205B

Position trace to center with Comparison Voltage control (Approx. 0.55v or 5-5-0). Measure DC level at input with Fluke & switch Input Atten to 1 & V_c Range to +11. Adj R105B for null on Fluke. Repeat for B. Disconnect jumper, res. etc.

26. Attenuator Time Constants

Use 20pf standardizer. 4cm of 1kc signal from 106.

Input	Input Atten	mv/cm	Adjust
B	X1	50	C210
A	X1	50	C110
A	X10	50	C106C
			C106E
			C106B
A	X100	20	C108C
A	X100	10	C108B
A	X1000	1	C109B
A	X1000	2	C109C
B	X1000	2	C209C
B	X1000	1	C209B
B	X100	10	C208B
B	X100	20	C208C
B	X10	50	C206C
			C206E
			C206B

27. Bandpass

At 50 mv/cm, X1 input atten. Bandpass in a 544 should be at least 23mc.

