

FD – PM5 - 0815

PM5-0815: Dual Channel RF POWER Meter Board For GCPUx CPU

PM5 Calibration Procedure by Frank / K7SFN

FoxDelta PM5 Calibration Procedure



- 1. Connect GCPU to Power Source and Power the Unit "ON". (Button on Lower Rear Panel)
- 2. Press either "White" Button until the Display shows the ChA dBm Watt Screen.



- 3. Press "Green" Push Button to "Highlight" (LF, HF, CST, VHF) at the bottom of the display
- 4. Press either "White" button to display the "HF" Range at the bottom of the display.
- 5. Press the "Green" Button to return to the "ChA dBm Watt" screen.
- 6. With no Signal applied to the ChA BNC Input, the dBm reading should show <-60 dBm



- 7. To Enter the Calibration Mode, Press and "Hold" the Red Button for approximately 1-second.
- 8. You should now see the "Calibrate" selection Screen. The ">" should be just to the left side of the Calibrate ChA [HF] selection. You can make other selections by pressing the green button.



9. Press the "Red" Button once to display the ChA Calibrate [HF] Range. You should now see ">" next to "P1".



- 10. Apply a -40dBm signal at 10 MHz (or any HF Frequency) from an external signal generator or source.
- 11. You will notice a numerical reading at the bottom right-hand side of the display representing the -40dBm signal level.
- 12. Momentarily press the "Red" button to transfer this numerical value into the "P1" Register.



- 13. Momentarily press the "Green" button to move the ">" next to "P2" on the display
- 14. Increase the Signal Generator Level to 0 dBm.
- 15. You will notice the numerical reading at the bottom of the display has significantly increased in value, representing the 0 dBm signal level.

16. Momentarily press the "Red" button to transfer this numerical value into the "P2" Register.



- 17. Momentarily press the "Green" button to move the ">" next to "SAVE" on the display.
- 18. Press and Hold the "Red" Button to Save & exit the Calibration Mode.



19. Press and hold the "Red" Button to Save the calibration data, and return to the previous display screen (Calibrate Selection Screen). The ">" should be next to the "EXIT" selection.



20. Press and Hold the "Red" Button to exit the Calibration Mode and return to the Measurement Display screen.



- 21. You can step thru the screens using the two "White" Buttons. If you are still applying a 0 dBm signal from your signal generator, it should be displayed on the PM5 screen.
- 22. This completes calibration of the ChA HF range. You can individually calibrate the LF, CST and VHF ranges for ChA, as well as, all ranges for ChB.
- 23. Here are a couple of the other ChA Screen Displays.



24. This completes the Calibration for ChA HF. I used a 10 MHz Signal for this procedure. The Frequency Counter can display frequencies to approximately 52 MHz with a 0 dBm signal applied. Good Luck and Have fun with your new PM5 Power Meter.

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