

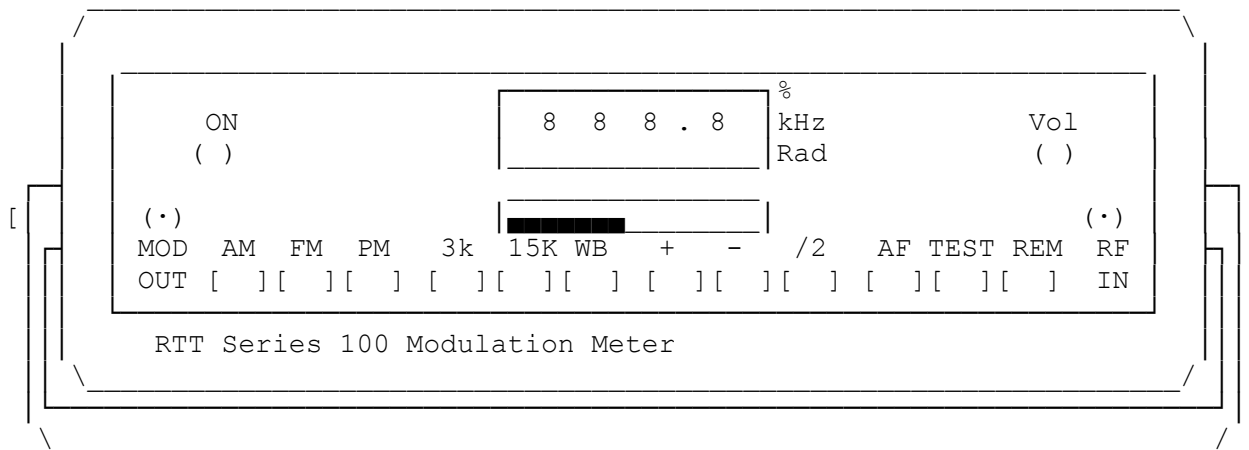
RTT Automatic Mod Meter (100)

By G8MNY

(Updated Jan 15)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

I bought this meter at a recent SK sale. It came with an Operating Guide, but no service information. (nothing on internet)



SO WHAT IS IT?

It is HF/VHF/UHF AM/FM/PM Digital Modulation Meter (Automatic scanning Rx).

SPECIFICATION

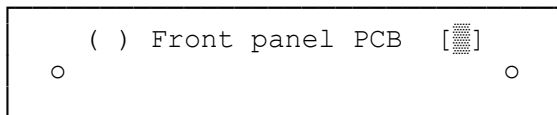
- Power AC IEC Mains input 230V/115 @ 15VA or internal batt, rear SW
- RF Input BNC socket 50Ω, Max 7V (1W).
- Frequency range Scanning type 1.5MHz-2GHz. (5-40mV input typical)
- Modulation meter Auto Rx. +/- peak & combined Average. With 20 bit bargraph.
- Ranges Automatic AM 0-100%, FM 0-9kHz & 10-100kHz, PM 0-5 Radians.(2% typical)
- AF Filters Comms 300Hz-3kHz, HiFi 50Hz-15KHz & Wideband 50Hz-30kHz.
- IEEE 488 bus Remote control for measurements & reporting test result.
- Mod Out BNC & Volume control for internal rear LS.
- IF Out 410KHz at rear BNC.

It was made in Feltham UK in 1980s. It has a comprehensive power on self check that tests all the systems & basic calibration.

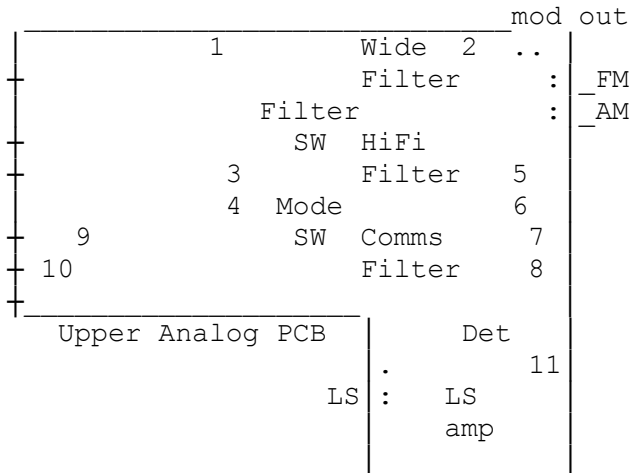
ERROR CODES

- 90 LEDs & Ram, 80 ROM Checksum, 18 Battery <10 or >14V, 5 +5V, 12 +12V, -6 -6V,
- 51 +ve detector, 52 +ve det 10x, 43 -ve Det 10x, 55 3kHz filter, 56 15k filter
- 57 Wideband filter.

INSIDE

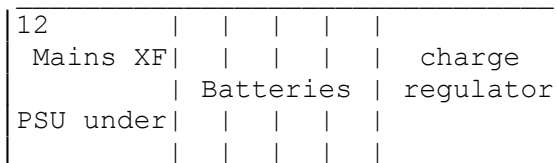


Rx Converter & IF modules  
below Digital PCB underneath.



- PRESETS
- 1 Bar Graph
  - 2 PM Cal
  - 3 Cal test tone 1
  - 4 10x gain Cal
  - 5 FM Cal
  - 6 AM Cal
  - 7 Cal test tone 2
  - 8 AM/FM/PM Gain Cal
  - 9 DC A-D cal (batt,12v)
  - 10 DC A-d offset (+5v,-6V)
  - 11 +Det gain
  - 12 Set +12V

Calibration is VERY a long winded  
round robbin if you upset A-D converter  
(gain & offset?) presets 9 or 10!



[LS]

.. ' ' .. Rear Panel IEC

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FAULTS

It internal 12V (10x AA 0.5AH) Nicad battery was missing, so I added 4 recovered 4AH Li cells to make a 12-16V pack. A voltage doubler & constant current is used for battery charging with cpu controlled boost if low.

One of the 2 diodes in the 12V PSU was high resistance & caused the toroid to overheat. The Logic card has it's own 5V reg & there is a -6V PSU somewhere.

AF Wideband 4 opamp filter, components changed to give 10Hz-60kHz

If anyone has more info one the unit I would appreciate it.

See my tech buls on "RTT Comms Test Set", "DYMAR Mod Meter Type 1785", "FM Deviation Calibration", & "FM Stereo Radio Principles".

Why don't U send an interesting bul?

73 de John, G8MNY @ GB7CIP