

SPECIFICATION

Frequency : Range 80kHz (Usable to 30kHz) to 1040.0000MHz in 100Hz steps.
PLL Frequency has 7.5 digit readout.

Mod AF : 300, 400, 500, 1k, 3k, & 6k Hz 5%, for AM FM PM & AF out.
Ext Mod : BNC, 6Hz-100kHz, Cal Level warning LEDs/ALC for level calibration.
Ext FM Mod: 2nd Mod input allows pilot tones etc. to be added.

Mod Level : AM 0-99%, FM 0-1MHz (10%) Dev, PM [0M] 0-999 Radian. 3 dig readout.
Distortion: AM <5%, >-30dBc higher order sidebands @ 99% mod.

AF Output : BNC. 100uV to 5V RMS. -77.8 to +16.2dBm max. 3.5 dig readout.
RF Output : N 50Ω. 0.1uV to 1V RMS, -127.0 to +13.0dBm max. (6dB less on AM)

Memories : Store & recall of 100 freq, 0-20 has full params, non volatile.

Keys : Orange start data entry, Black Data, Grey Unit end. Blue 2nd mode.

Accuracy : <1/10⁷ after 5 min. Temperature controlled Xtal oven reference.
In out Ref: Rear 10MHz (1MHz Programmable) BNC for ref Out/In.

Spurious : Harmonics -30dBc typically -50dBc, & spuri better than -65dBc.

Protection: Accidental Tx RF OK to 50W Max!

Power : 55W 230V Adjustable. IEC socket RT angle plug to stand up on end.

Weight : 17kg.

CALIBRATION

Hole on RHS cover for the very accurate Ref Osc tweak (thin driver). Inside the top cover there are PSU for voltages +24 +15 +5 & -15V. Behind the front pannel is the plug in Modulation PCB & its row of presets (left to right) for Ext Gain Ext ALC, Ext Threshold (hi/low leds), AF Level, PM, AM, & FM. Marconi software map AF Gain changes for the 4 FM oscillators at 82 frequencies points, to keep calibration. Simular mapped changes for AM, Phase, & RF Level.

OPERATION

Power up gives software version 003 for a few seconds, then default setting 1040MHz @ -127dBm, 0 mod. (Memory 10 for other power up parms, see user manual)

- 1/ Press Orange Freq key, enter freq, & end with Grey MHz/kHz/Hz key.
- 2/ Press Orange RF Level key, enter level, & end with Grey dBm/V/mV/uV key.
- 3/ Press Orange AM/FM/PM if needed, enter mod level & its Grey unit key.
- 4/ Select a Black Disable key, eg. RF/Int/Ex/AF/Mod off/on etc. as needed.

/_ Delta, shows unit steps for the ^ up & v down keys. & allows changes.
2nd Function key, for additional set-ups see handbook. Any Orange key reset.
External key, can give error code ---15--- if no Ext Ref. Orange key reset.

USES

Although far more complex to use than my older Systron Donner Sig gen, it is lighter, & lends itself for FM & AM demos on Ham training courses, etc. Rx alignment & sensitivity tests, as it has a well screened RF output with 140dB range in 0.01dBs. Also its wide FM modulation of 1MHz deviation (>100MHz) with up to 100kHz of External AF, is useful for accurate calibration of broadcast deviation meters, measuring & compensating frequency response etc.

See my tech Buls on "Syston Donner Sig Gen", "Analyser Takeda Riken TR4122B"
"RTT Comms Test Set", "198kHz Off Air Standard", "Comparing Off Air Freq
Standards", "Off Air Lock for Ref Osc" & "Scope RF Trick".

Why don't U send an interesting bul?

73 de John, G8MNY @ GB7CIP