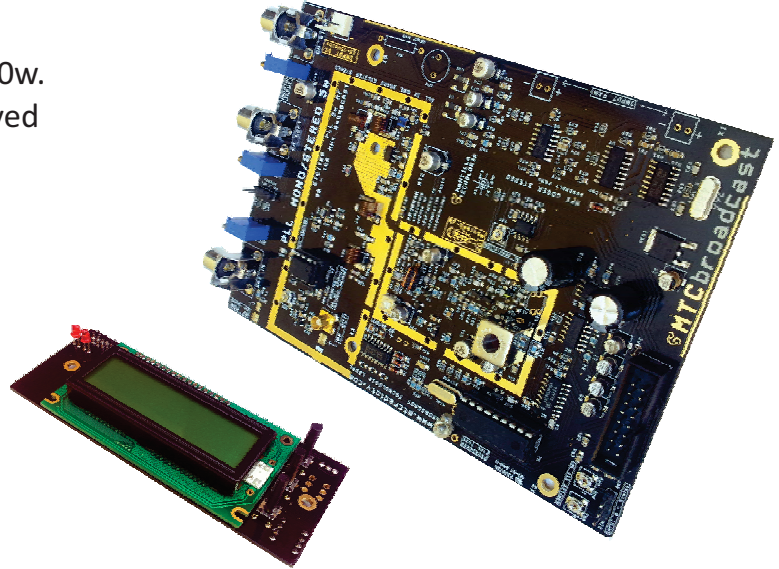


## Transmisor FM PLL MONO/STEREO 5w

- Output power 5w automatic control
- To excite pallets FM LDMOS 300w - 2000w.
- Income Power and external ROE, displayed
- Regulation digital power 20mw ~ 5W
- Monitoring and Alarm
- Low harmonic filter step aboard -60dB
- Mono / Stereo Swap
- Left Right Audio Level adjustable
- Coder Stereo separation 45dB
- Option MPX audio input
- RF Monitor out



### Graphic display, constant power 5w FM unadjusted clean energy!

PLL MONO /STEREO 5W is a 100mw adjustable transmitter to 5watts, manufacturing for Pallets modules amplify the existing FM 87.5 - 108 MHz, from 50w to 2000w. We also added 2 tickets call EXTERNAL POWER; If you have an amplifier with RF output sample (direct and reflected) of 0 volts- 5 volts maximum can be connected to its inputs PLL Mono / Stereo 5w Being able to visualize both the Graphic Display excitation power and external power while.

Just adjust the sensitivity of the directional coupler voltage from your amplifier Achieving resemble the power of your wattmeter with our graphic display screen PLL MONO / STEREO 5W. In conclusion you. You can display the excitation power and final power of his Pallets to 1200w. Various configurations within this powerful kits a price very competitive within the market. Ideal for Ing., Technicians and operators radio, perfect solution ratio QUALITY / PRICE.

### Specifications

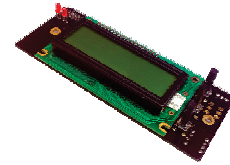
- ° Power 100mw - 5w
- ° Level Harmonic > -60dBm
- ° Stability +/- 200Hz frequency
- ° Voltage required 15 volts, 1 amp.
- ° Separation 45db
- ° S.N.R. > 75db
- External Input RF
  - ° Power displayed max 1200w
  - ° Voltage Pot. Direct up to 5 volts
  - ° Sensitivity adjustable via Trimpot smd
- ° Frequency 87.5 - 108 MHz; 100khz steps
- ° Spurious level > 75dBm
- ° MCX RF Connector type
- ° MPX adjustable -10db to + 10db input
- ° Input Audio L + R -10db + 10db adjustable
- ° ROE VSW 2: 1
- ° Connector type input 3 pin molex
- ° Voltage Pot. Reflected up to 5 volts
- ° Oscillator Direct FM

PLL MONO/STEREO 5w :

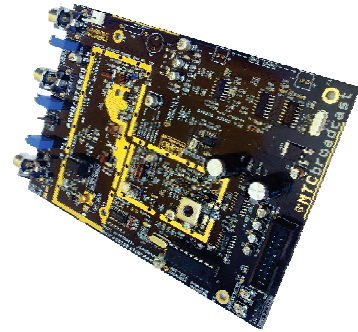
Composite Units

Showing controls by Graphic LCD Frequency, Direct Power, Reflected, Modulation Volts Amplifier, Assistant volts, temperature. Alarm Reflected ROE, Excess Voltage PA, Temp, Power External Dir, Ref.

Visual Expander Units **1**



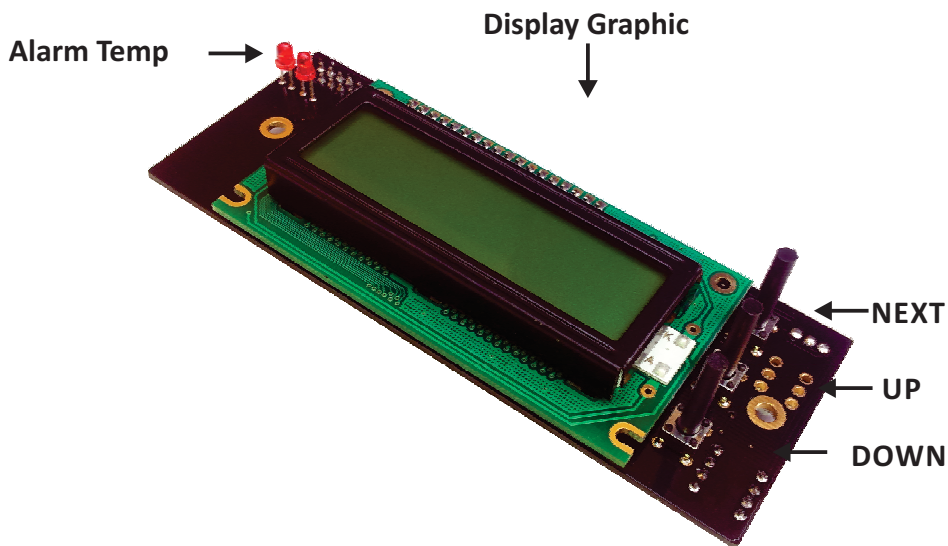
Card PLL Mono/Stereo **2**



Mono Stereo PLL delivers a final power throughout 5watt the band 87.5 - 108 MHz, hosted on a PCB Fr4 plated ENIG immersion gold, high quality, high oscillator PLL adding a stereo performance Coder 45db + and Input ideal for a sound processor MPX, plus has an output RF Monitor

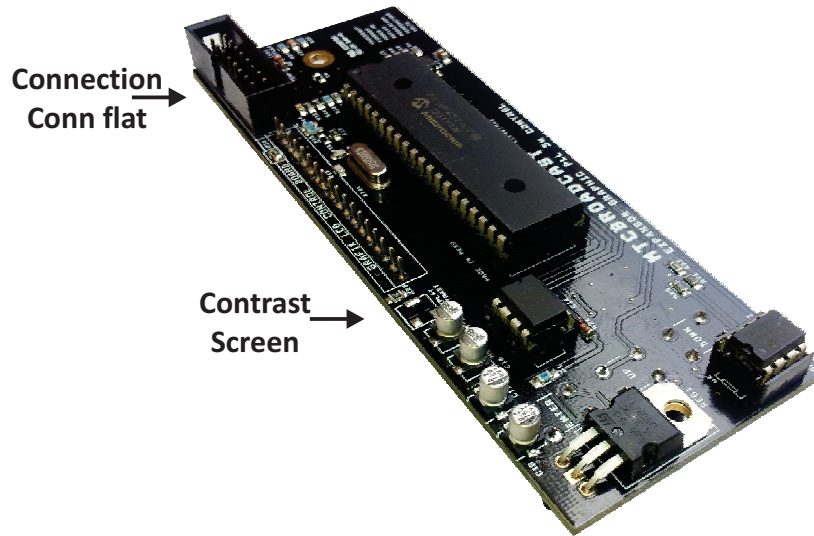
Visual Expander Units

The Unit Expander Card Viewer will, Transmitter PLL MONO / STEREO 5W is controlled using the 3 buttons on the right side of the main face (Fit in a cabinet). displaying the menu of options.



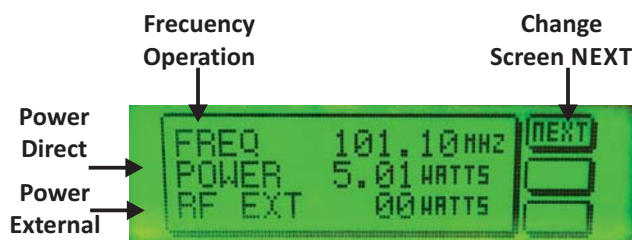
THE adjustment levels of display unit is already regulated from manufactures. You can adjust the contrast LCD Display by SMD trimpot located on the same drive (See figure below).

The connections for the flat cable 16 wires with a length of 25cm. install inside the cabinet will not be a problem now only need to place the expander unit Viewer will in the front of the cabinet and flat cable connections expander to Unit PLL Mono / Stereo 5w, to command the transmitter TX.



## Display Interface

Displays the main menu 3 indicators. Operating Frequency, Power Direct Diversion Modulation This menu is always in the foreground, you can move to other screens pressing the button at the point where it is written NEXT Once on the transmitter 5w, if the flat cable connection coming from the expander to PLL Mono / stereo 5w, is not placed correctly is likely to get the message "PLL ERROR"remove the transmitter power kits appropriate to revise the cable and any possible false contact. Turn again to keep sending the same message can reach us for more information



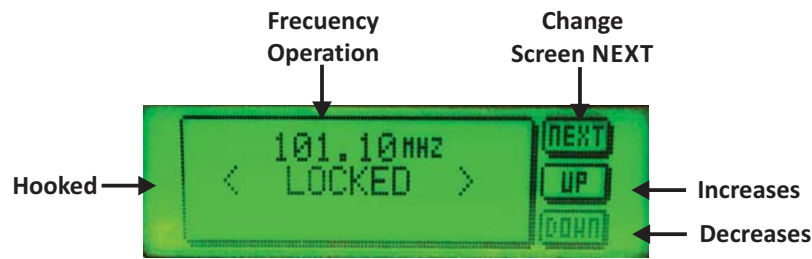
## Configuration Menu

3 buttons to choose forward (NEXT) top (UP) Download DOWN, all settings menu options are as follows:

- ° Frequency September
- ° Power in September
- ° Deviation Audio
- ° Voltages
- ° Temperature
- ° Alarms

## Change Frequency

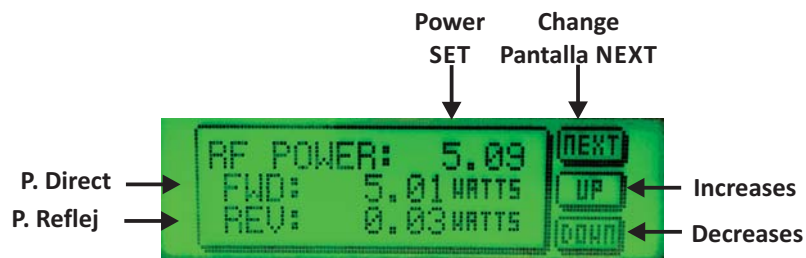
If you change the dial, press the NEXT button on the Main Menu, then to change just enough up (UP), lower (DOWN) achieving decrease or increase the frequency in steps of 100 khz If you require that steps be 50kHz frequency can also be adjusted from factory (Via Software), get in touch with us.



## Power SET

Pressing UP DOWN, up and down, the RF power can be adjusted from 100mw to 5w up to 10mw steps, at the point you set the power eg 2.8W, have to shutdown when you switch remain engraved with the last power setting that I change and be well until you want to raise or lower the power, repeating the same algorithm

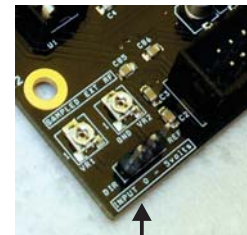
- ° Power SET output power (only set to this level)
- ° Forward and Reflected Power detected



## Pówer External RF

Whenever our PLL Connect Mono / Stereo 5w, to an amplifier RF output shows Direct and Reflected sampled ( maximum voltage for each input signal 5 volts ) can be displayed excitation power and the final power along with the frequency.

You need to adjust your wattmeter using the trimpots the power to visualize (see free photo below income by Jumper 3-pin)

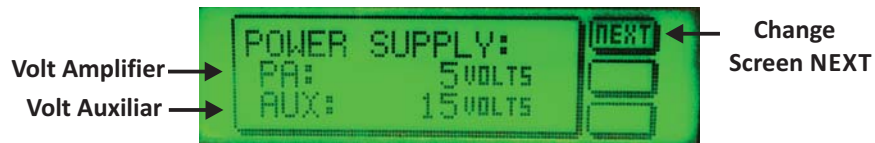


### IMPORTANT NOTE:

Since each sampled RF output has a curvature response different each one in particular, we can not ensure that the scale Whatever needs to be required.

## Voltages

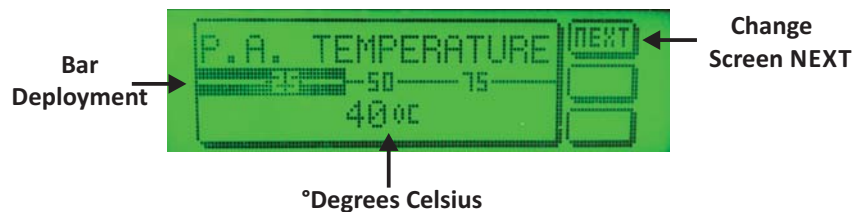
The ideal source of power 15volts, 1.5 amps (if ud. Has no less voltage equipment can guarantee covering up the 5w at certain frequencies) levels also voltage from its power source are digitally measured to control in If overvoltage



## Temperature

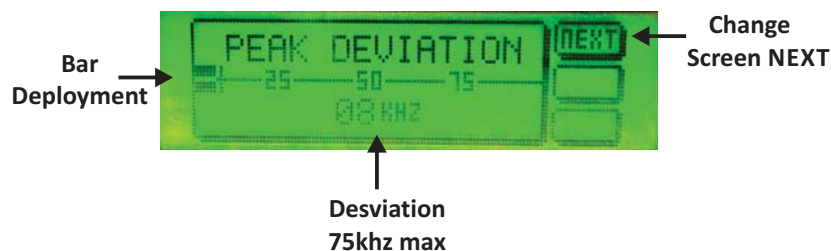
A sensor measures the ° degrees centigrade for display in Celsius achieving that level menu Temperature is the amplifier. (you need to screw the 5w compulsorily Kit a heatsink radiator (may be the same cabinet + flow fan preferably) while the computer is on.

The optimum operating temperature should be around from # 50 to # 60, several factors depend on the level of warming may be less or more, from the size of the heatsink and fans as the tuning of the antenna, cable type, location TX in cool or warm place. if any alarm occurs around 70 °



## Desviation Modulation

Since the audio input Left, Right Stereo MPX signal u, we can monitor the percentage of Modulation entering the transmitter and to take precautions to avoid over modular following parameters



## Alarm

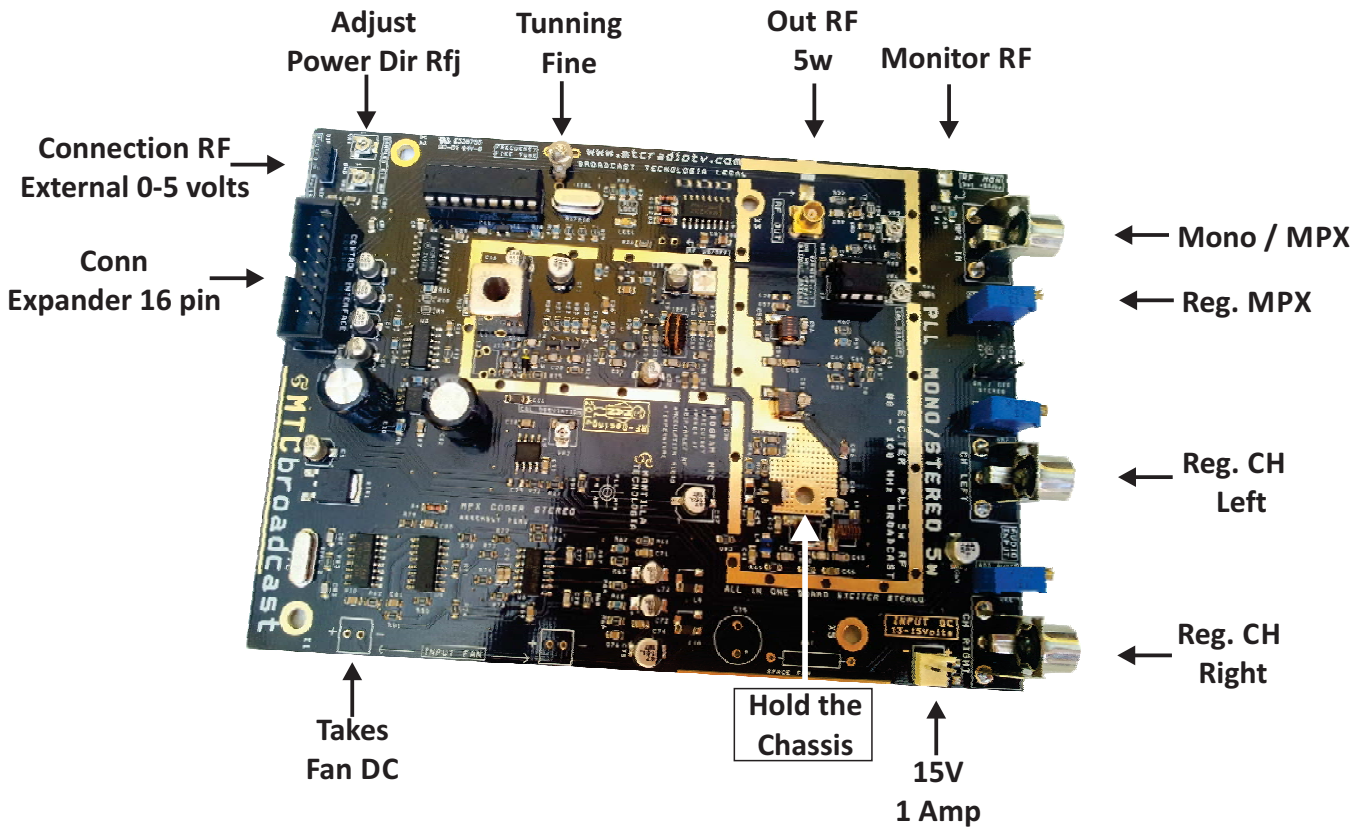
ROE Alarm, Temperature, Voltage Warning ....!

Check if you have properly connected the cable to the TX, then proceed to verify ú calibration antenna cable was going antennas is damaged.



### Card PLL Mono/Stereo

The kits 5w, comes a PLL stable ultra low noise 45db stereo separation Coder power LDMOS Pd85004, harmonic filter, directional coupler, all mounted on printed PCB GOLD high quality and excellent heat distribution. Millimetre five bronze fasteners in M3, to connect the card to the cabinet, mandatory use the cabinet this hole above transistor RF output. We recommend placing the unit in a ventilated place to drain the hot air from the PCB. Audio inputs via RCA connector, can regulate the signals I + R (Left and Right Channel) from your console, compressor limiter etc. If you have External audio processor can move the jumper Jumper MPX or Mono viceversa off - on, enter the appropriate signal to RCA connector, adjust to taste level from of the MPX stereo processor.



If you set the fine frequency needs frequencymeter, be consider disconnecting the audio to proceed to calibrate

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