# **TECSUN**

# **PL-880**

# PLL MULTIBAND RADIO WITH EXCELLENT PERFORMANCE

# **ADDITIONAL FEATURES**

[ ]	[ ]	[ ]		RUN TIME [ VF/VM]
FM SET  [ 1 ] BAT LOW	LW ON/OFF [ 2 ] LIGHT	9/10kHz [ 3 ]	[AM]	[FM]
FEAT ON/OFF	FM US/EUR	DNR	F . 7	F7
[4]	[5]	[6]		v [\]
[7]	SEC ON/OFF  [ 8 ] SSB CAL	MUTING [ 9 ]	SYNC [USB]	SYNC [LSB]
[ M ] MEMORY	[0]	[ ← ]	[-]	[+]

Due to different firmware versions not all of these features will work on every PL-880. These features work on my PL-880.

# **SYSTEM SETTINGS (In Power On Mode)**

#### [4] ADDLTIONAL FEATURES ON/OFF

In order to use some of the outlined additional features it is necessary to turn on the ADDITIONAL FEATURES option.

Select either [AM] or SW. Press & hold the [4] button until "ON" or "OFF" appears on the display..

#### [5] SETTING THE FM DE-EMPHASIS OPTION

Broadcasters pre-emphasize some FM audio frequencies by this amount. De-emphasis attenuates the FM frequencies back to normal on your receiver. The purpose is to improve signal-to-noise.

Select [FM] then press & hold the [5] button until "50" or "75" appears on the display. Set to 50 uS for Europe or 75 uS for the USA.

## [6] DIGITAL NOISE REDUCTION (DNR) ON/OFF †

Press & hold the [6] button until "ON" or "OFF" appears on the display. Press [6] again to change the setting. Note that the narrow band-pass filters do NOT staying set while tuning if DNR is turned ON.

#### [7] LINE OUT LEVEL

Select [AM] or [FM]. Press & hold the [7] button until the current line out level is displayed. Use the TUNING knob to set a level between 30 - 63. This only works on the AM and FM bands and not on the SW bands.

# [9] ADJUSTING THE MUTING THRESHOLD †

Select the [FM], [AM/MW]<sup>†</sup>,SW<sup>†</sup> or a SSB<sup>†</sup> button. Press & hold the [9] button until a number between 00 and 40 DBu starts flashing on the display. Use the TUNING knob to set the threshold value. Press the [9] again to set. Note that the FM, LW/MW, SW and USB/LSB each store their own threshold values, Setting the value to 00 turns off muting.

#### [0] CALIBRATE SSB FOR ZERO BEAT OPERATION

Press [DISPLAY] to show the signal indicator display then press [SW] or [AM]. First press [USB] then press & hold the [0] button. Look at the upper right corner of the display, where the clock and S/N ratio appear, a two-digit number is flashing as well as the last two Hz digits of the tuned frequency. Release the [0] button and adjust using the FINE TUNING knob. Check the tone when tuned to xxx.95 USB. Next, press the [LSB] button then press & hold the [0] button and repeat as outlined above. Check the tone when tuned to xxx.05 LSB. The USB and LSB should sound exactly the same. Press [0] again to save.

You will probably have to slightly tune/de-tune and re-tune several times before calibration is perfect.

#### [AM BW] BANDWIDTH SCROLL

Press [AM BW] then immediately use either TUNING knob to scroll through the bandwidths.

#### CALIBRATING THE SSB

Tune to a strong MW (AM) signal. Turn on either SSB mode (USB or LSB). Move the FINE TUNING knob until you have a good SSB signal (i.e obtain a good zero-beat of the AM station). Press & hold the [SNOOZE] button until the current correction value is displayed. To save press [SNOOZE] again until 00 appears.

#### SSB SYNC DETECTOR ON/OFF

Press & hold either the [USB/NORM] or [LSB/NORM] button until "SYNC" appears on the display. SYNC will stay on if you switch between USB and LSB but will turn off when you turn off either SSB mode.

† Requires that ADDITIONAL FEATURES mode be "ON".

# **SYSTEM SETTINGS (In Power Off Mode)**

#### [1] FM FREQUENCY RANGE

Press & hold the [1] button until 88-108MHz, 76-108MHz or 87-108MHz appears on the display. Press the [1] button to select a suitable frequency range for FM,

#### [2] TURN ON/OFF LW

To turn ON/OFF LW press & hold the [2] button until "LW ON" or "LW OFF" appears on the display.

#### [3] MW (AM) 9K/10K TUNING STEPS

To select your desired AM tuning steps press & hold the [3] button until "9kHz" or "10kHz" appears on the display.

## [4] BATTERY LOW VOLTAGE SHUTDOWN LIMIT

Press & hold the [4] button until the current low battery limit is displayed. Use the TUNING knob to adjust the low battery limit between 3.4 – 3.7 volts. Press [4] again to save.

#### [5] LCD BACKLIGHT ON/OFF

Select the OFF position on the LCD Back light switch then press & hold the [5] button to toggle the display between "ON" and "OFF". If OFF the display light will not turn on when you flip the light switch on the side of the radio to ON.

#### [8] ADDING SECONDS TO THE TIME DISPLAY

Press & hold the [8] button until seconds appear on the clock display..

#### [AM BW] LCD TEST / FIRMWARE VERSION

Press & hold the [AM BW] button until all the LCD elements turn on. Pressing [AM BW] again will display the firmware version (Latest version is 8820). In some receivers pressing [AM BW] a third time displays the manufacture date.

# [VF/VM] RUN TIME SINCE BATTERY CHARGE/RESET

Press & hold the [VF/VM] button until the amount of time the radio has ran since the last battery charge or the last time the receiver was reset is shown.

# [VF/VM] DAYS SINCE FIRST POWER ON

Press & hold the [VF/VM] button until the Run Time appears Before the RunTime display clears press the [VF/VM] button again. The number in the upper right is the number of days since the radio was new and the battery was first installed.

A time in the format XX.xx also appears where xx is in seconds.. At this time the purpose of this number is unknown.

## [+] MYSTERY FEAURE #1

Press & hold the [+] button until a number appears The reported numbers are "1000" and "1001". It is unknown what these numbers are for. at the time of this writing.

#### ADDITIONAL SYSTEM SETTINGS

These features don't work on my PL-880, but they have been reported to work on other receivers,

#### [MW] EXTERNAL MW/LW ANTFNNA

This feature switches from the internal AM/LW ferrite antenna to the external SW antenna.

Radio on. .Press [AM] and tune to any frequency. Press [USB/NORM] to turn USB on. Press [AM] to select the MW band, if the LW feature is ON (see [2] above) then pressing this button will switch to the LW,band, press [AM] again to switch back to the MW band. Next, press [USB/NORM] to turn off USB. Press the [FM] button then press the [USB/NORM] button to turn on USB then press [USB/NORM] again to turn USB off. You can now switch between the internal and external antenna by pressing the [AM] button and either SW button.

You can only tune upward or the frequency will jump to 29999 kHz. Only the main tuning knob can be used if you use the USB/LSB/SYNC modes, otherwise use either tuning knob for 5 kHz and 1 kHz steps. To return to normal operation simply tune downward using either tuning knob.

In most cases it is necessary to RESET the radio to get this to work correctly on firmware version 8820. For frequencies below 1000 kHz a leading '0' will be added to the frequency and SW will appear on the display making it appear as if the SW band has been extended below 1711 kHz.

## [SW] 1.0 kHz BANDWIDTH FILTER †

Radio on and select any SW band. Turn on [4] ADDITIONAL FEATURES if it is OFF. Then adjust the [9] MUTING THRESHOLD to 13 or more (but not less then 10). Now turn OFF ADDITIONAL FEATURES then turn it back ON by

pressing & holding the [4] button twice Press the [AM BW] button to see the 1.0 kHz. It will stay until you press [AM BW] again. The 1.0 kHz bandwidth can be used with both SW and MW bands.

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