

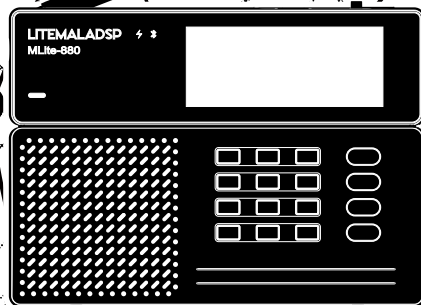
LITEMALADSP

Product manual

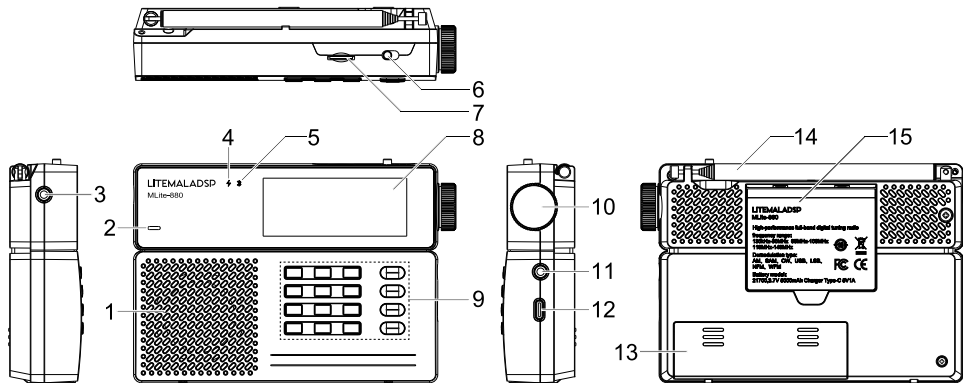
——MLite-880

Version: v2.1.0

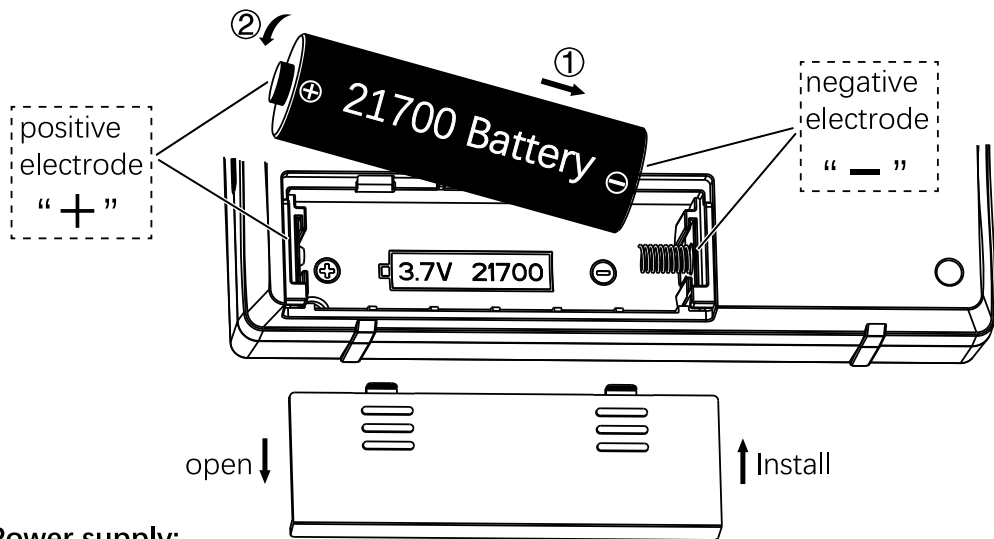
Release date: July 10, 2025



Functions and Operating Components Introduction



1	Speaker	5W	9	Key board	
2	Power LED	Blue	10	TUNING	Encoder with switch
3	Ext Antenna	AUX to SMA	11	EARPHONES	Stereo Out
4	Charging LED	Green/Red	12	TypeC	Externalpower supplycharging inputData interface
5	Bluetooth LED	Blue			
6	ON-OFF	Power Switch	13	BATTERY COMPARTMENT	
7	TF	MICRO SD (16G)	14	Antenna	Rod Antenna
8	LCD	DOTS192X64	15	Support frame	



Power supply:

MLite-880 is powered by a 21700 3.7V rechargeable lithium battery.

Place a 21700 lithium battery in the correct polarity direction in the battery compartment.

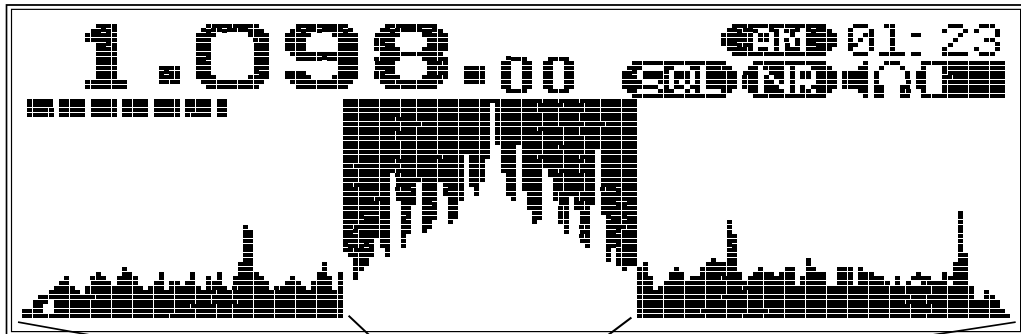
You can also use a power adapter (5V1A) connect to the Type C

Charging-LED flashes red during charging, Charging-LED flashes green after charging is completed

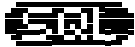
Attention: This device is not suitable for fast charging

MALAHIT TEAM

Display function indicator



bandwidth
spectrum

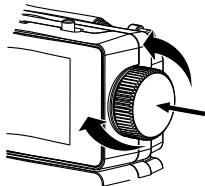
Indicator	Description	Operate	Indicator	Description	Operate
	S Meter	[5]-[A]-[1]		AM mode	[2]-[5]
	Audio output	[A]		SAN mode	[2]-[6]
	SQL trun on	[B]		NFM mode	[2]-[7]
	NR trun on	[C]		WFM mode	[2]-[8]
	USB mode	[2]-[1]	VOL:	Volume:	[Knob]
	LSB mode	[2]-[2]	PI:	RDS	[5]-[5]
	CW mode	[2]-[3]	01: 23	Time	
	DSB mode	[2]-[4]		Battery	

Operating nstructions

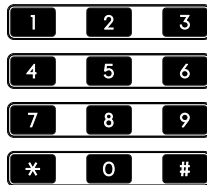
The operation of MLite-880 is based on the combination of keyboard and knob

TUNING

Encoder with
switch



Key board



KeyBoard Introduction

Key	Description	Key	Description
[Knob KEY]	Volume / Frequency	[5]	Display Settings /option 5
[A]	Audio output channel selection	[6]	Audio Settings
[B]	SQL enablement	[7]	Recording Menu
[C]	NR enablement	[8]	Channel Record
[D]	Return	[9]	Null
[1]	Frequency Step Menu/Option 1	[0]	Bands
[2]	Modulation mode menu/Option 2	[*]	Multi functional keys
[3]	Device Menu /Option 3	[#]	Enter
[4]	Manually enter frequency/option 4		

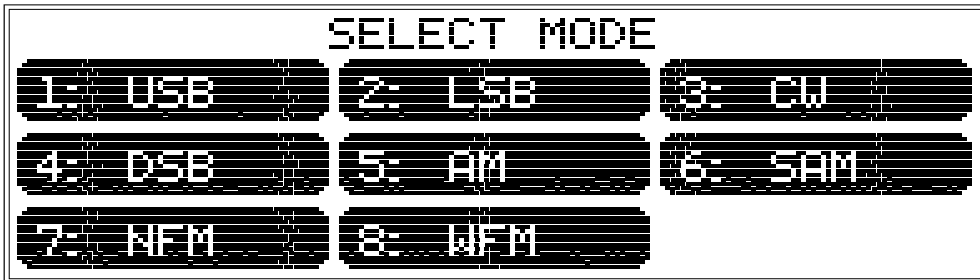
Keyboard button [1] - Frequency Step Selection menu



Frequency Step: Used to adjust the encoder step size

Press key [1] - [9] to select the applicable option, Press key [D] to Exit menu

Keyboard button [2] - Modulation Mode Selection menu



Mode menu: Used to set the receiving mode

Press key [1] - [9] to Select the desired demodulation mode

* WFM is only available within the frequency range of 65-108MHz

Press key [D] to Exit menu

Keyboard button [3] - Device Menu

Press key [A] / [B] to change interfaces (2 pages)

Press key [1] - [5] to select configuration item

Press key [D] to Exit menu

```
RADIO SETTINGS 1/2  A: NEXT  B: PREV
1 Antenna type for SW: 50 Ohm
2 BiasT disable
3 Attenuator for SW: disabled
4 WFM bandwidth: Auto
5 Pres correct: 10 30 100
```

- [1] Select input antenna impedance for SW: 50 Ohm / HiZ

* <50 Ohm> for using an external antenna

< HiZ > for using telescopic rod antenna

- [2] Turn on/off the power LED: disable / enable
- [3] High frequency attenuator (ATT) : disabled / 6 -36
 - * Rotate [knob] to adjust the ATT value(db)
- [4] WFM bandwidth adjustment
 - * Only valid in FM mode
 - * Rotate [knob] to adjust the bandwidth value(56kHz-311kHz)
- [5] Frequency offset correction
 - * Rotate [knob] to adjust the frequency offset (+-0.1ppm)

```
RADIO SETTINGS 2/2 A: NEXT B: PREV
1 WFM tuner mode: manual
2 FM tuner mode: scanning
3 Date and time settings
4 Bluetooth mode: disabled
5 About
```

- [1] WFM channel search mode: manual / scanning
 - * IN scanning mode, return to the main interface.
 - Rotate [knob] forward or backward to search for channels up or down

- [2] AM channel search mode: manual / scanning
 - * IN scanning mode, return to the main interface.
Rotate [knob] forward or backward to search for channels up or down
- [3] Date and time settings
 - * 1. Time setting <HH: MM> Enter the time by pressing the keyboard digits
Press key [A] to save, Press key [D] to return.
 - * 2. Date setting <DD: MM: YYYY> -Enter the time by pressing the keyboard digits
Press key [A] to save, Press key [D] to return.
- [4] Bluetooth function: disable / enable
 - * Enable the bluetooth, MLite-880 will searching bluetooth peripherals automatically.
Enable broadcast mode of your Bluetooth peripheral.
MLite-880 will automatically connect to the target device after it is be found.
Bluetooth LED will turn on when successful connection.
 - * Restart Bluetooth When replacing other Bluetooth peripherals.
- [5] Device info: Software version and device ID

Keyboard button [4] - Manually Input Frequency

ENTER FREQUENCY

10.00

Incorrect frequency

*-- dot, A--kHz, B--MHz, C--Clear
D -- exit, # -- Enter

Input Frequency by pressing the keyboard buttons

- [1] - [9] input numbers
- [*] input small points
- [A] end of "kHz" units
- [B] end of "MHz" units
- [#] Confirm input
- [C] Cancel input
- [D] Exit menu

* EXA: Target frequency 10.00MHz, you may input [1], [0], [*], [0], [0], [B].

Keyboard button [5] - Display Settings

Press key [A] / [B] to change interfaces (2 pages)

Press key [1] - [5] to select configuration item

Press key [D] to Exit menu



```

VISUAL SET.   1/2 A: NEXT B: PREV
[1] Brightness level: maximal
[2] Brightness off timer: 30
[3] Spectrum average: 80
[4] Spectrum fill: enable
[5] RDS view: enable
  
```

- [1] LCD brightness level: maximal / middle / minimal
 - * Rotate [knob] to adjust the brightness level
- [2] LCD brightness off time: disable / 5 S - 300S
 - * Rotate [knob] to set the brightness off time
- [3] Average value of frequency spectrum curve : 50 - 99
 - * Rotate [knob] to set the value
 - * The higher the value, the smoother the appearance of the frequency spectrum curve
- [4] frequency spectrum curve fill: disable / enable equenc
 - * Display spectra in line or color form
- [5] RDS view: disable / enable
 - * Display RDS information on the screen in FM mode: PI: XXXX

VISUAL SET. 2/2 A: NEXT B: PREV
[1] S meter view: disable

- [1] S meter view: disable / enable

- * Display Signal strength on the screen

- * Invalid in FM mode

Keyboard button [6] - Audio Settings

Press key [A] / [B] to change interfaces (3 pages)

Press key [1] - [5] to select configuration item

Press key [D] to Exit menu

AUDIO SETTINGS 1/3 A: NEXT B: PREV

[1]	Filter type: Narrow
[2]	Filter low freq: 0.00kHz
[3]	Filter high freq: 12.00kHz
[4]	NR level: 17
[5]	WFM threshold: disable

- [1] Filter type: Narrow / Normal / Wide
 - * Rotate [knob] to set the wave filter type
 - * Default threshold for narrowband: 0.00Hz - 8.00Hz
 - * Default threshold for normalband: 0.00Hz - 12.00Hz
 - * Default threshold for wideband: 0.00Hz - 15.00Hz
 - * The threshold can be manually adjusted and save it in the corresponding type
- [2] Low threshold setting:
 - * Rotate [knob] to set the frequency(Auto save)
- [3] High threshold setting:
 - * Rotate [knob] to set the frequency(Auto save)
- [4] NR level 0 - 30

- * Rotate [knob] to set the NR threshold
 - * Only effective when NR enabled (Back to main interface, press key [C])
 - * Invalid in FM mode
- [5] WFM stereo: disable / enable
- * Use external headphones/speakers through audio port or Bluetooth



AUDIO SETTINGS 2/3 A: NEXT B: PREV

1 AGC mode MANUAL

2 Manual gain 20 db

- [1] AGC mode: MANUAL/FAST/MIDDLE/SLOW/LONG
 - [2] AGC limit: 40 - 90(db)
 - [3] AGC gain: 0 - 60(db)
- * Rotate[knob] to set the AGC mode and AGC threshold(db)

AUDIO SETTINGS 3/3 A: NEXT B: PREV

[1]	NB mode	NB disable
[2]	NB threshold	2.1
[3]	Equalizer type	SOFT
[4]	Key beep level	1
[5]	SOL threshold	1.7

- [1] NB mode: NB disable / 1 / 2
 - * pulse suppression mode, Noise blanker
 - * Rotate [knob] to set the NB mode
- [2] NB threshold : 2.1 - 20.0
 - * threshold of activation of the pulse suppressor
 - * Rotate [knob] to set the NB threshold
- [3] Equalizer type: VOICE / POP/ JAZZ /BASS / ROCK / CLUB / LIVE / SOFT / EQ OFF
 - * the selected type of equalizer.
 - * Rotate [knob] to select
- [4] Key beep level: key beep off / 1 - 20
 - * the level of "beep" when pressing key

- * Rotate [knob] to adjust the value
- [5] SQL threshold: -30 dBm - -120 dBm
 - * the threshold for triggering the SQL noise suppressor
 - * Rotate [knob] to set SQL

Keyboard button [7] - Recording Menu



Firstly, set the channel to be recorded on the main interface and press the keyboard button [7] to enter the recording menu.

- [1] START
 - * Rotate [knob] to adjust the audio gain level when recoding
 - * The recording indicator should be approximately at the level of half to $\frac{3}{4}$ of the scale
- [2] STOP

- * Simultaneously return the record list
- * Create a file of the current recording content and automatically add it to the list
- * Information: channel, file size, date
- [3] PLAY
 - * Rotate [knob] to Select a file , press key [3] to play, [2] Return to List
 - * press key [knob key] to convert adjust positon / adjust volume
 - * Rotate [knob] to adjust positon / volume
- [4] Pause, press key [2] Return to List
- [5] DELETE Need to press key [5] again to confirm deletion
- [D] Exit menu

Keyboard button [8] - Channel Record

```

Page 01: free cells 45
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
01 mem1 7.50MHz LSB
02 mem2 7.100MHz CW
03 mem3 9.650MHz AM
04 mem4 65.0MHz WFM
05 mem5 127.800MHz NFM
  
```



press key [A] / [B] to Switch page, Rotate [knob] to Browsing List

press key [D] to Exit menu

* Hover the cursor at position" CREATE NEW CELL "and press [*] to save the current channel and create it in the list. There are 10 pages, 50/page, a total of 500 channels can be saved

* Rotate [knob] to select the saved channel, press [*] to enter the editing page.

EDIT MEMORY CELL

01. mem1 7.50MHz LSB

[2] Edit name [3] Delete cell
[0] Exit this menu

- [2] Edit name Rename
- [3] delete cell Delete Channel
- [5] Exit Return

EDIT MEMORY CELL

Mem1

[A] Next, [B] Prev
[*] Restore text
[D] Return to Previous menu

- [A] Next -[B] Prev
 - [*] Restore text --Cancel input
 - [D] Return to previous menu --Save changes and return
- * Move the cursor using the [A] [B] buttons and Rotate [knob] to select text / numbers / symbols.(limit 7 characters)

Keyboard button [0] - Bands

press key [A] / [B] Switch options page (1, Broadcast / 2, Amateur / 3, FM & VHF bands)

* Rotate [knob] to Select frequency band

press key [#] to enter and return to the main interface

press key [D] to Exit menu

Broadcast LW, MW, SW bands GEN: *

Broadcast bands									
522	kH	N	-	1620	kH	N	(	MW	)
2300	kH	N	-	2400	kH	N	(	120m	)
3200	kH	N	-	3400	kH	N	(	90m	)
3900	kH	N	-	4000	kH	N	(	75m	)
4750	kH	N	-	5060	kH	N	(	60m	)
5900	kH	N	-	6200	kH	N	(	49m	)
7200	kH	N	-	7450	kH	N	(	41m	)
9400	kH	N	-	9900	kH	N	(	31m	)
11600	kH	N	-	12100	kH	N	(	25m	)
13570	kH	N	-	13800	kH	N	(	22m	)
15100	kH	N	-	15300	kH	N	(	19m	)
17480	kH	N	-	17900	kH	N	(	16m	)
18900	kH	N	-	19200	kH	N	(	15m	)
21450	kH	N	-	21800	kH	N	(	13m	)
25600	kH	N	-	26100	kH	N	(	11m	)



Amateur bands

GEN: *

160m 1.8MHz - 1.9MHz (30m) 12.25MHz

472kHz - 479kHz (60m)

1800kHz - 2000kHz (160m)

3500kHz - 3800kHz (80m)

5351.5kHz - 5366.5kHz (60m)

7000kHz - 7200kHz (40m)

10100kHz - 10150kHz (30m)

14000kHz - 14350kHz (20m)

18068kHz - 18108kHz (17m)

21000kHz - 21400kHz (15m)

24000kHz - 24900kHz (12m)

28000kHz - 29700kHz (10m)

70MHz - 70.5MHz (4m)

144MHz - 148MHz (2m)



FM&VHF bands

GEN: *

FM&VHF bands

88MHz - 108MHz (FM)

108MHz - 136MHz (Airband)



Firmware update:

You need to turn off the receiver first.

Press and hold the button [1] to turn on the radio, then release the button [1].

The screen will show a notification that the device is in DFU mode.

Connect the device data interface (TypeC) to the PC and update the software.