LITEMALADSP

Product manual

——MLite-880

Manual version: V2.3
Release date: Oct 18, 2026



Thank you for choosing the MLite-880

Official Sales Link for MLite-880: https://www.elecevolve.com/products/mlite-880

More resources and technical support are available on the official self-built mall.Follow us to get a better device experience.

✔ Official Firmware Updates: Get performance optimizations and new features as soon as they are released.

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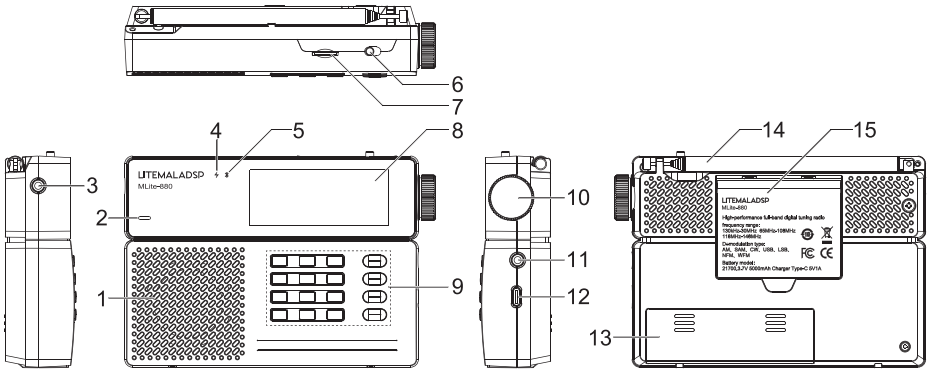
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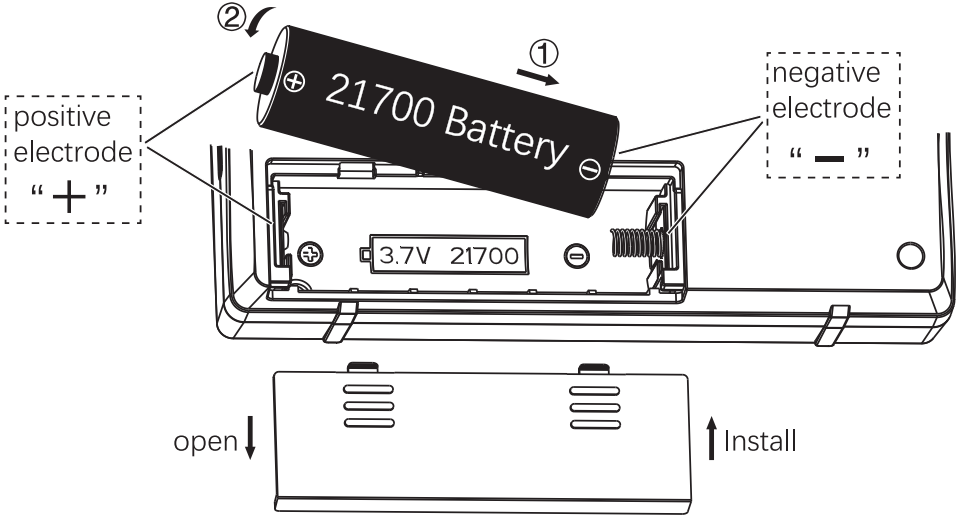
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Appearance and Part Descriptions



1	Speaker	4 Ω 5W	
2	Bias-T LED	DC Bias Output (blue)	
3	Ext Antenna	AUX to SMA	
4	Charge LED	Green/Red	
5	Bluetooth LED	Blue	
6	ON-OFF	Power switch	
7	TF	Micro SD	
8	LCD	DOTS192X64	
9	Key Board		
10	Knob	Encoder with switch	
11	Earphones	Stereo (output only)	
12	TypeC	External Power Charging Data interface	
13	Battery Compartment		
14	Antenna	Rod Antenna	
15	Support Frame		

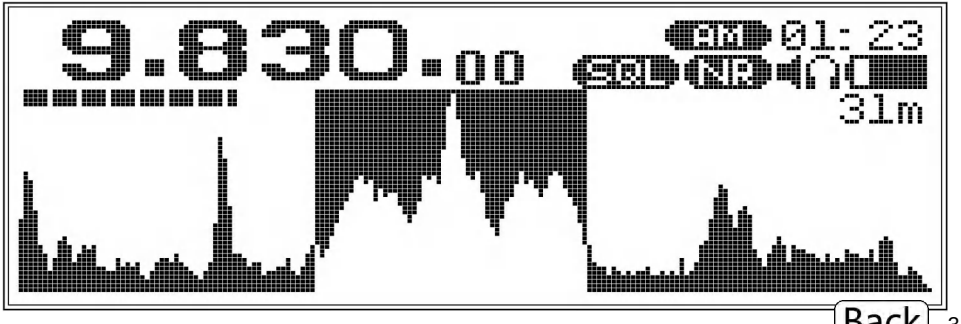
Back



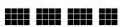
Power supply

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.
Lights red during charging, Lights green when charging is completed.
Attention: This device is not suitable for fast charging

MALAHITEAM



Icon Function Description

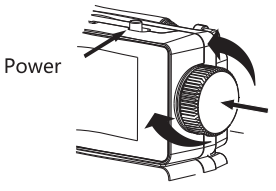
Indicator	Description	Operate	Indicator	Description	Operate
	S meter	[5]-[A]-[1]		AM mode	[2]-[5]
	Audio	[A]		SAM mode	[2]-[6]
	SQL Active	[B]		NFM mode	[2]-[7]
	NR Active	[C]		WFM mode	[2]-[8]
	DRM mode	[2]-[0]		Volume	[knob]
	USB mode	[2]-[1]		RDS	[5]-[5]
	LSB mode	[2]-[2]		Meter band	
	CW mode	[2]-[3]		HIZ	[3]-[1]
	DSB mode	[2]-[4]		Battery	

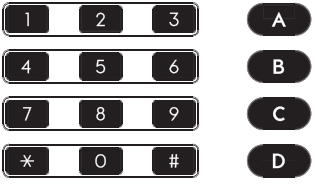


Indicator	Description	Indicator	Description
⁜	Constellation diagram	CH--	Channel Name
xHE--	Audio Coding	QAM16	16-QAM modulation
SNR--	Signal-to-Noise Ratio	WMER--	Weighted Modulation Error Ratio
d=--	Carrier Frequency offset	DRM-B	DRM Robustness Mode B
symb. sync.		Symbol synchronization status	Back

Operating instructions

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





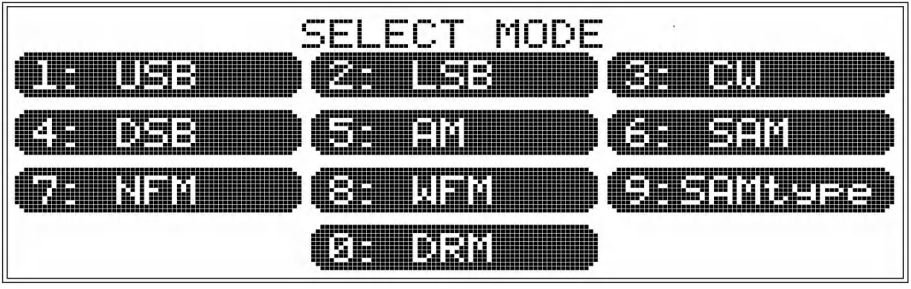
Key Functions			
KEY	Description	KEY	Description
[Knob KEY]	Volume / Frequency	[5]	VISUAL SET / option 5
[A]	Audio output channel	[6]	AUDIO SET / option 6
[B]	SQL enable	[7]	Record menu
[C]	NR enable	[8]	Channel memory
[D]	Return	[9]	Screen OFF
[1]	STEP / option 1	[0]	Bands
[2]	MODE / option 2	[*]	Multi functional keys
[3]	RADIO SET / option 3	[#]	Enter
[4]	FREQ SET / option 4		

Frequency Step Setting Menu - key[1]



Frequency Step : Select the frequency tuning step
Press key [1]-[9] to choose the desired step. The step value changes with the selected receive mode.
Press key [D] to Exit menu

Modulation Mode Setting Menu - key[2]



Mode menu: used to set the receiving mode

Press key [1]-[8] to select the desired demodulation mode. [9] SAMtype is valid only when [6] SAM mode is selected.Press [9] to switch between SAM, SAMU, and SAML.

Press key [D] to Exit menu

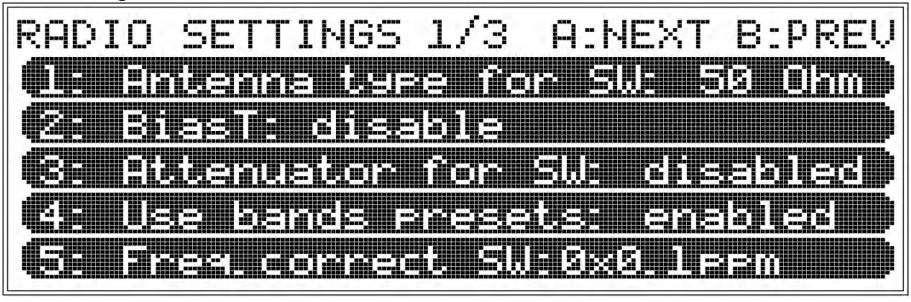
* Changing the demodulation mode will not alter the receiving frequency. To select a different channel, refer to page 12, page 20-23.
* WFM can be selected only when the frequency is between 65 and 108 MHz.

Radio Setting Menu - key[3]

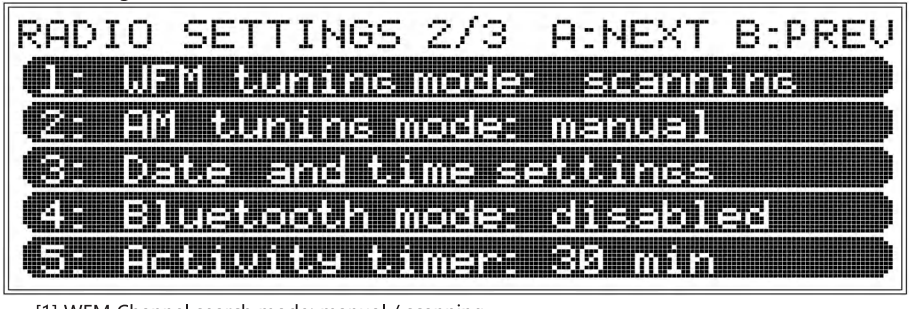
Press key [A] / [B] to change interfaces (3 page)

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

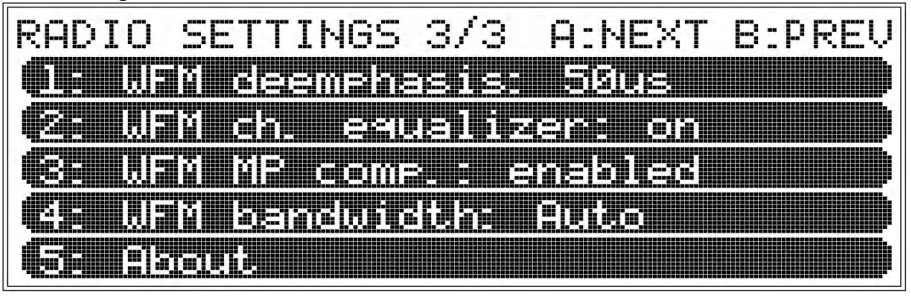
Press key [D] to Exit menu



- [1] select input antenna impedance for SW: 50 Ohm / HiZ
- [2] External Antenna Bias-T : disable / enable
- [3] Shortwave Attenuator (ATT) : disabled / 6 -36
  * Rotate [knob] to adjust the ATT value(dB)
- [4] Band-Mode Preset: enabled / disabled
  * Auto-selects the preset demodulation mode when a frequency is manually entered. Each band has a default mode; see band list P20–P23.
- [5] Frequency offset correction
  * Rotate [knob] to adjust the frequency offset (+- 0.1 ppm)



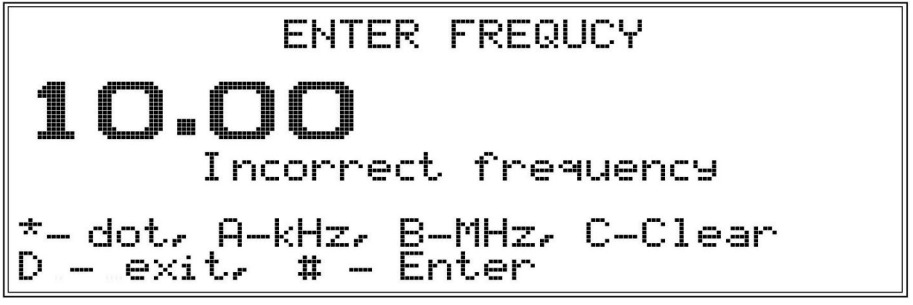
- [1] WFM Channel search mode: manual / scanning
- [2] AM Channel search mode: manual / scanning
  * In scanning mode, return to the main interface.
    Rotate [knob] forward or backward to search for channels up or down
- [3] Date and time settings
  * 1 . Time setting<HH : MM> [0]-[9] keys to enter
  * 2 . Date setting<DD : MM : YYYY> [A] Save, [D] Back
- [4] Bluetooth function: disable / enable
  * Enable Bluetooth on the MLite-880 (auto-search starts).
  * Set your Bluetooth device to pairing mode.
  * MLite-880 connects automatically when found; Bluetooth LED turns on.
  * Restart Bluetooth when replacing other Bluetooth device.
- [5] Activity timer : disabled / 5min - 240min
  * Rotate [knob] to set auto power off time



- [1] WFM deemphasis: disabled / 50us / 75us
- [2] WFM ch. equalizer: disabled / on
- [3] WFM MP comp: enabled / disabled
- [4] WFM bandwidth: Auto / 56K - 311K
- [5] Device info :

* WFM DE-emphasis time constant
* WFM channel equalizer
* WFM multi path suppression mode
* IF Filter Bandwidth
* Software version and device ID

Manual Frequency Setting Menu - key[4]



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

  * Example: target frequency 10.00MHz, you may input [1], [0], [*], [0], [0], [B

Visual Setting Menu - key[5]

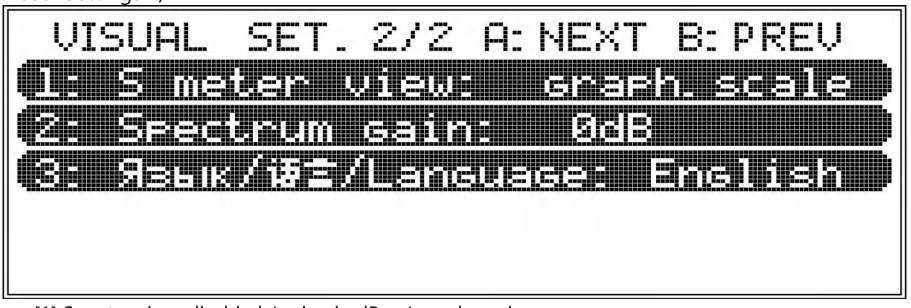
Press key [A] / [B] to change interfaces (2 page)
Press key [1] - [5] to select configuration item
Press key [D] to Exit menu

Visual Settings 1/2



- [1] LCD brightness level: maximal / middle / minimal / night
  * 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] Spectrum average: 50 - 99
  * Rotate [knob] to adjust spectrum average to control display responsiveness. Higher values slow down trace movement.
- [4] Frequency spectrum curve fill: disable / enable
  * Display spectra in line or color form
- [5] RDS View : disable / enable
  * Display RDS information on the screen in FM mode

Visual Settings 2/2

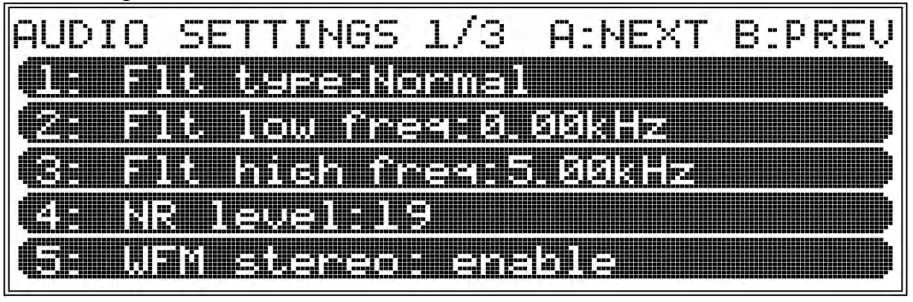


- [1] S meter view: disabled / value in dBm / graph. scale
  * Graphically or numerically indicating signal strength. (Invalid in FM mode)
- [2] Frequency spectrum gain: -20 to 20dB
  * Adjust the Y-axis scale value of the spectrum curve
- [3] Language: English / русский / 中文

Audio Setting Menu - key[6]

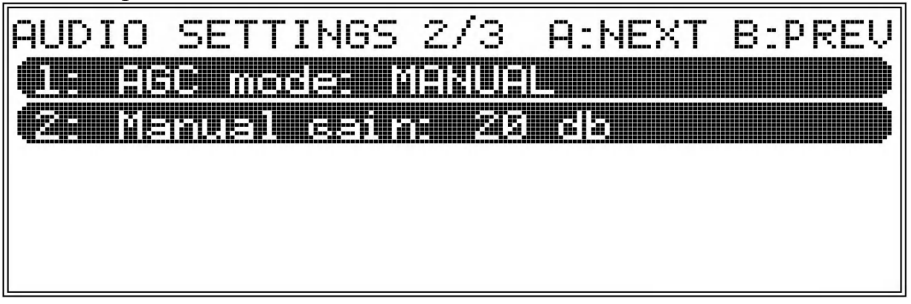
Press key [A] / [B] to change interfaces (3 page)
Press key [1] - [5] to select configuration item
Press key [D] to Exit menu

Audio Setting 1/3



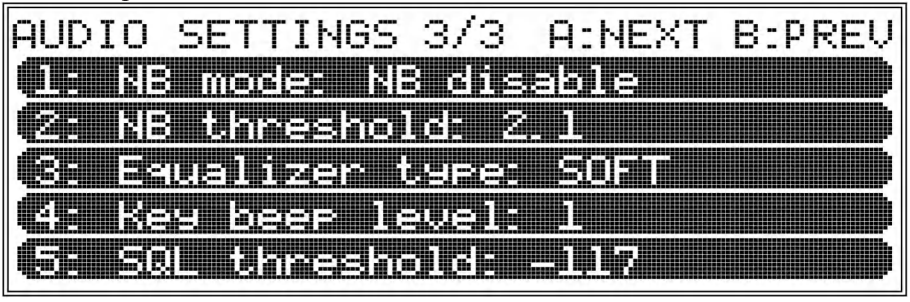
- [1] Filter type: Narrow / Normal / Wide
  * Rotate [knob] to set the audio filter type
  * Default threshold for narrow band : 0.00Hz - 8.00Hz
  * Default threshold for normal band : 0.00Hz - 12.00Hz
  * Default threshold for wide band : 0.00Hz - 15.00Hz
  * The threshold can be manually adjusted and saved in the corresponding filter type
- [2] Low threshold setting : 0.00Hz - 3.00Hz
- [3] High threshold setting :0.10Hz - 15.00Hz
- [4] NR level : 0 - 30
  * Press key [4] to toggle NR on/off. Rotate [knob] to set the NR threshold
- [5] WFM Stereo : disable / enable
  * FM stereo output (via the audio jack or Bluetooth with external earphones/speakers)

Audio Setting 2/3



- [1] AGC mode: MANUAL / FAST / MIDDLE / SLOW / LONG
  * Controls the response speed of AGC; FAST suits rapidly changing signals; MIDDLE is general-purpose; SLOW and LONG reduce gain variation on voice peaks.
- [2] AGC limit: 40 - 90(dB)
  * Maximum gain ceiling for AGC
- [3] AGC gain: 0 - 60(dB)
  * Controls AGC target level
  * Rotate [knob] to set the AGC mode and AGC threshold

Audio Setting 3/3



- [1] NB mode: NB disable / 1 / 2 / 3
  * pulse suppression mode , Noise blanker
- [2] NB threshold: 2.1 - 20.0
  * threshold of activation of the pulse suppressor
- [3] Equalizer type: EQ disabled / SOFT/ LIVE / CLUB / ROCK / BASS / JAZZ / POP / VOICE
  * Select an EQ preset to fine-tune audio tone and listening experience
- [4] key beep level: key beep off / 1 - 20
  * Key Beep Volume Control
- [5] SQL threshold: -120 dBm to - 30 dBm
  * Squelch Open Threshold
  * All settings above: rotate [knob] to adjust

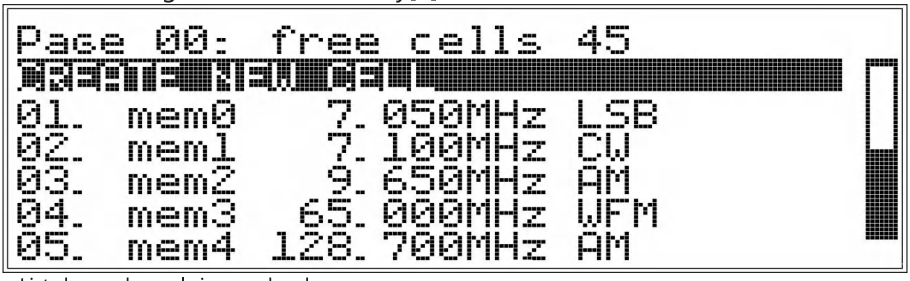
Record Menu - key[7]



A memory card must be installed to enable the recording function.
Set the target channel first, then press key [7] to enter the recording menu, [D]Exit.

- [1] START
  * Rotate [knob] to adjust the audio gain level when recording
  * The recording indicator should be approximately at the level of half to 3/4 of the scale
- [2] STOP
  * Stop recording and return to the record list
  * A new file is created and added to the list automatically.
- [3] PLAY
  * Rotate [knob] to select a file, [3]play, [2]Return to List
  * Press key [knob key] to switch betweent adjust position / adjust volume
  * Rotate [knob] to adjust position / volume
- [4] PAUSE *[2] Return to List
- [5] DELETE *Need to press key [5] again to confirm deletion

Channel Storage/Recall Menu - Key[8]



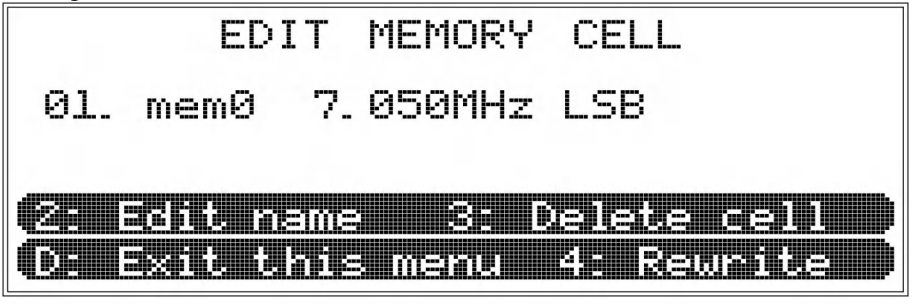
List shows channels in saved order.

Save: highlight "CREATE NEW CELL", press [*] to save current channel (with signal settings).

Recall: Turn the knob or enter a sequence number to browse the list; the channel switches to the highlighted item at the same time.

- [#] press [#] to confirm and jump to it
- [0] press [0] to return to the original channel
- [A] / [B] switch pages.
  * 10 pages (Page 00–09), 50 per page, 500 channels max.
- [*] Edit: select a saved channel, press [*] to edit.
- [D] Exit menu

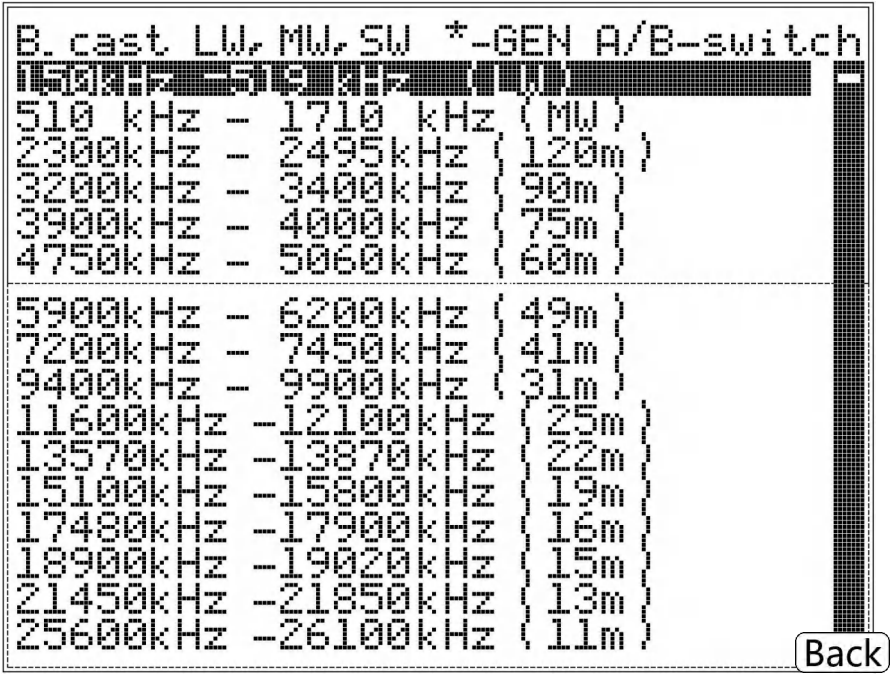
Edit Page

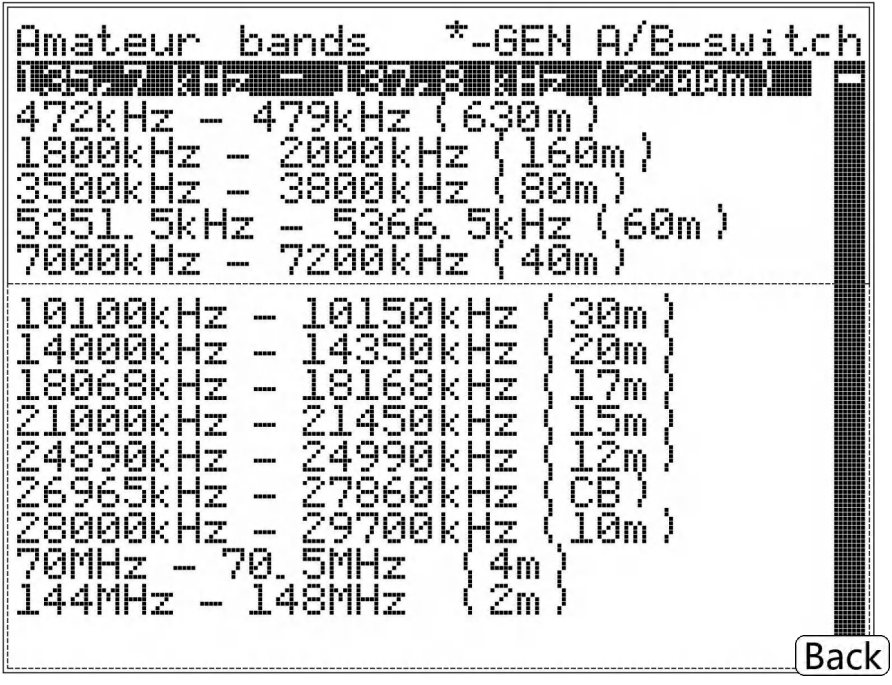


- [2] Edit name: Press [A] / [B] to move the cursor
  Turn the knob to select letters, numbers, or symbols. (Maximum 8 characters)
  -[A] Next -[B] Prev -[*] Restore text
  -[D] Return to previous menu (Save and return)
- [3] Delete cell
- [4] Rewrite: Overwrite-save as the currently playing channel
- [D] Exit menu

Preset bands - Key[0]

Press [A]/ [B] to switch pages(4 page): 1-Broadcast / 2-Amateur / 3-FM & VHF bands / 4-Other bands
* Rotate [knob] to Select frequency band
press key [#] to enter and return to the main interface
press key [D] to Exit menu


B.cast LW, MW, SW *-GEN A/B-switch
510 kHz - 1710 kHz (MW)
2300kHz - 2495kHz (120m)
3200kHz - 3400kHz (90m)
3900kHz - 4000kHz (75m)
4750kHz - 5060kHz (60m)
5900kHz - 6200kHz (49m)
7200kHz - 7450kHz (41m)
9400kHz - 9900kHz (31m)
11600kHz -12100kHz (25m)
13570kHz -13870kHz (22m)
15100kHz -15800kHz (19m)
17480kHz -17900kHz (16m)
18900kHz -19020kHz (15m)
21450kHz -21850kHz (13m)
25600kHz -26100kHz (11m)


Amateur bands *-GEN A/B-switch
472kHz - 479kHz (630m)
1800kHz - 2000kHz (160m)
3500kHz - 3800kHz (80m)
5351.5kHz - 5366.5kHz (60m)
7000kHz - 7200kHz (40m)
10100kHz - 10150kHz (30m)
14000kHz - 14350kHz (20m)
18068kHz - 18168kHz (17m)
21000kHz - 21450kHz (15m)
24890kHz - 24990kHz (12m)
26965kHz - 27860kHz (CB)
28000kHz - 29700kHz (10m)
70MHz - 70.5MHz (4m)
144MHz - 148MHz (2m)
Back

3-FM & VHF bands



4-Other bands



Firmware update:

You need to turn off the device first.
Press and hold button [1] while turning on the device, then release button [1].
The screen illuminates and prompts that the device is in DFU mode.
Connect the device to the computer by Type-C cable and update firmware.
Our website offers a convenient upgrade method. Download the latest firmware from the website.

https://www.elecevolve.com