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GSM Mobile Finder (MF)

User Manual

(Model No. 580 200 0008)

GSM Mobile Finder (GSM-MF)
User's Manual

1. General Description

In connection with the GSM mobile tracer & locator (GSM-MTL3), the GSM mobile finder (GSM-MF) enables pinpoint localization of mobile phones. The device provides 50 reception channels for selection of an unassigned frequency.

The wide range of its reception dynamics (-100 dBm to +7 dBm) ensures localization of both adjacent and distant mobile phones.
An especially designed aerial enables systematic direction detection and, thus, a rapid approach to the sought mobile phone.

The compact design of the device ensures concealed operation.
Absolute reception field strength of the respective channel is shown on a display (1 dB steps).
Relative field strength is signaled through changing tone pitch or intermitted sound.

2. Getting started

1. Secure power supply. Power supply occurs via a 9 V battery which has to be inserted into the battery case on the bottom side of the device.
2. Connect a suitable direction finding aerial (900 MHz range) - (aerial connection [7])
3. Connect headphones.

Use the ON/OFF switch [9] to switch on the GSM-MF. After a short initialization phase, the device will be ready for operation on the basis of the latest settings saved

3. Settings
Default settings of the GSM-MF are realized via the menu system.

Use the following keys:

[M]	Retrieve menu and submenus
[⋏]	Select menu functions or menu values
[⋎]	
[S]	Save and close menu

4. Direction finding
Select a free traffic channel and put the mobile device into transmission mode (e.g. silent call). This can be realized by means of the GSM Mobile Tracer & Locator GSM-MTL 3 or any other suitable device.
Adjust the selected traffic channel on the GSM-MF and localize the target through directing the aerial to the maximum signal level. Thereby the absolute reception field strength will be shown on the display. Relative field strength is signaled through changing tone pitch or intermitted sound (according to audio settings).

4.1 Mode menu

Manual mode (hand)
In manual mode, a reception level, which has to be within the preset range of the measuring window, corresponds to the respective audio signal or intermitted sound. Thus, increase and decrease in reception field strength can be discerned.

Automatic mode (auto)
In automatic mode, the strongest audio signal or intermitted sound is constantly synchronized on the highest reception level measured. Audio signals or intermitted sound will decrease at lower reception levels. Therefore, optimum position of the aerial has to be controlled constantly.

4.2 SET menu
Change of audio signal or intermitted sound is realized for one adjustable measuring window each. If the reception level is above or below the sensitivity level set for the measuring window, further changes of the signal will not occur. To continue direction finding, adjust settings for the measuring window accordingly.

Manual adjustment of measuring window (hand)
Press the "S" key [12] to select either the medium audio signal (manual mode) or the maximum value (automatic mode). Instead of the "S" key [12], the remote control, which is included in the scope of delivery, may be equally used.

Automatic adjustment of measuring window (auto)

In SET menu's automatic mode, the medium audio signal (manual mode) or the maximum value (automatic mode) is selected automatically, when the lower or upper limit set for the measuring window is reached.

4.3 Display
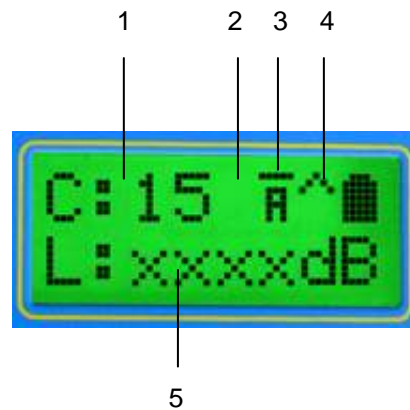
1	traffic channel
2	operating mode
3	set limit for measuring window
4	battery status
5	absolute reception field strength

5. Technical data

Frequency Range	GSM-Channel 1: 890.2 MHz (Steps of 200kHz) … GSM-Channel 50: 900.0 MHz
Sensitivity	approx. −100 dBm
Power Supply	9 V battery block

Scope of delivery: GSM-MF, LogPer-antenna HyperLOG 7025, GSM Body worn DF antenna, headphones, remote control unit, 9 V battery block, user's manual
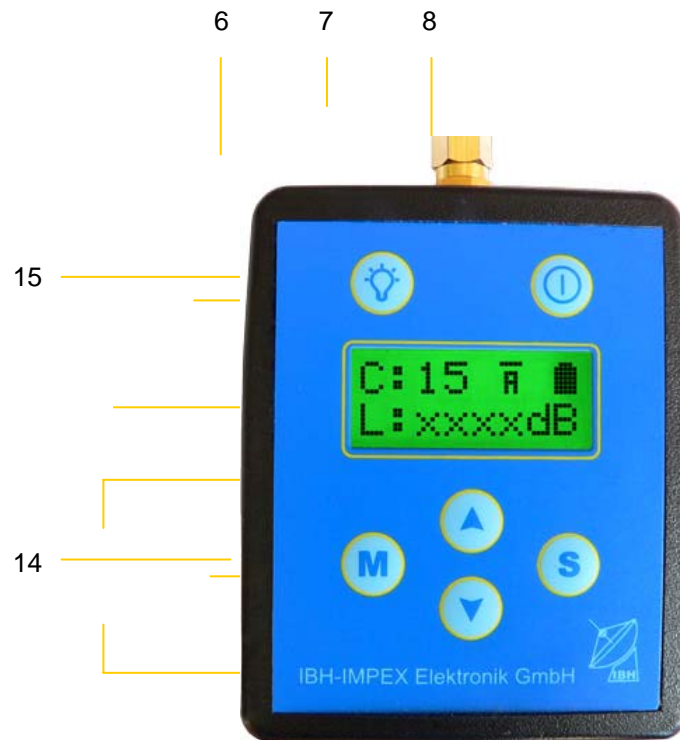
6. Appendix

6.1. Tools

fig. 1: tools

6	remote control connection
7	aerial connection
8	headphones connection
9	ON/OFF switch
10	display
11	volume control / menu select
12	SET / close menu
13	volume control / menu select
14	open menu
15	display lighting ON/OFF

6.2. Menu

	Menu	Submenu	Function
1	**TCH**		select traffic channel
2	**Audio**	*Sound*	signal field strength through audio signals
		Pulse	signal field strength through intermitted sound
3	**Mode**	*Hand*	reception level corresponds to respective signal
		Auto	set measuring window to maximum value automatically
4	**Range**	*Short*	set measuring window to approx. 15 dB
		Large	set measuring window to approx. 30 dB
5	**Speed**	*Slow*	change response speed of direction finding signal
		Fast	
6	**Set**	*Hand*	select medium audio signal (hand mode) or maximum value (auto mode) manually
		Auto	select medium audio signal (hand mode) or maximum value (auto mode) automatically, when reaching lower or upper limit set for the measuring window
7	**Contrast**		display settings
8	**Calibration**		reserved for default settings

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