MFP-8000N

GSM-E Arfcn 00011
Gain +15dB 45%
EDIT
ATT
VOL
ENTER
CHK
ANT

Locator
°E Accuracy: 14m
S
M
E
N
OFF
ERASER
ATT: +15
dB
UMTS
MAP
ARFCN: 10562

MFP-8000N is a pocket size eight RF band direction finder aimed to precisely detect the physical location of target cellular phone captured by IMSI and IMEI catcher, covertly operating at known dow ARFCN channel.

MAIN FEATURES

- Extended operating time (from 5 hours)
- Increased dynamic range:
  - 3G, LTE 115 dB
  - LTE 130 dB
  - 2G 130 dB
- RF sensitivity:
  - 2G, LTE -110 dBm
  - 3G -93 dBm
- Operates across GSM, UMTS, and LTE bands:
  - GSM-E 900-1800 MHz
  - GSM-A 850-1900 MHz
  - UMTS Bands: 1(2100),2(1900),4(1700-AWS),5(850),8(900),10(1700-AWS+)
- LTE bands:1(2100),2(1900),3(1800),4(1700),5(850),7(2600), 8(900),10(1700),12(700),20(800)
- Dimensions: 128x69x22 (mm)
- Antenna[1]:
  - Gain 3 dBi
  - HPBW 120 °

PRINCIPLE OF OPERATION

Hand-held finder is a compact and cost-effective radio direction-finding device for target mobile handset's location tracking when used in combination with GSM or catcher system when captured mobile stays with GSM, UMTS, LTE catcher system at known ARFCN uplink channel. This equipment can be used along with any known type of GSM, UMTS, LTE IMSI and IMEI catcher. Highly sensitive receiver module allows extending the search radius to 50...1000 meters[2]. Receive panel antenna is sized TBD mm. It can be placed covertly either under a suit or inside a small handbag/briefcase along with MFP-8000N receiver unit. The antenna is assembled in a waterproof case.Android smart phone is managing MFP-800N GSM, UMTS, LTE receiver over Bluetooth interface. Itprovides four types of feedback for the user: through a headset connected directly to the device viaBluetooth or wired, or through the built-in telephone speaker or its headset.

1 The parameters are guaranteed only when the antenna is mounted on the human body.
2 Depends on external conditions.

PARTS OF THE FINDER

1. Headphone jack.
2. SMA antenna connector.
3. USB-C Connector for charging and software updates.
4. Indicator of charging, discharged battery, errors.
5. Bluetooth indicator.
6. Down switch button.
7. Menu item switching button.
8. UP switch button.
9. The “Enter” button is designed to turn the device on and off, enter the menu and confirm the selected command in the device menu.

OPERATION PROCEDURE (OFFLINE, DEVICE ONLY OPERATION)

Hold down the “ENTER” power on/off button to activate MFP-8000N.

Press “ENTER” to enter the menu. Navigate through the “EDIT” menu. "ENTER" confirmation.

To change ARFCN press “EDIT” . Buttons “+” “-” change the value. Moving cursor

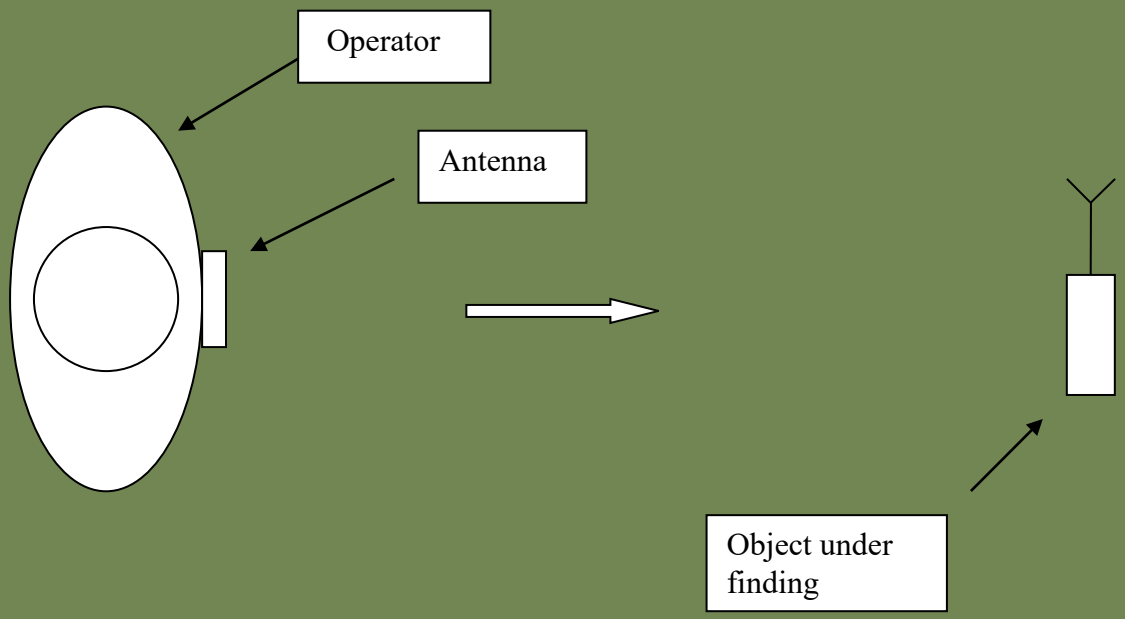
"EDIT" . Enter "ENTER".

The position of the attenuator is changed using the “+” “-” buttons.

To change the volume level, press and hold the “+” “-” buttons.

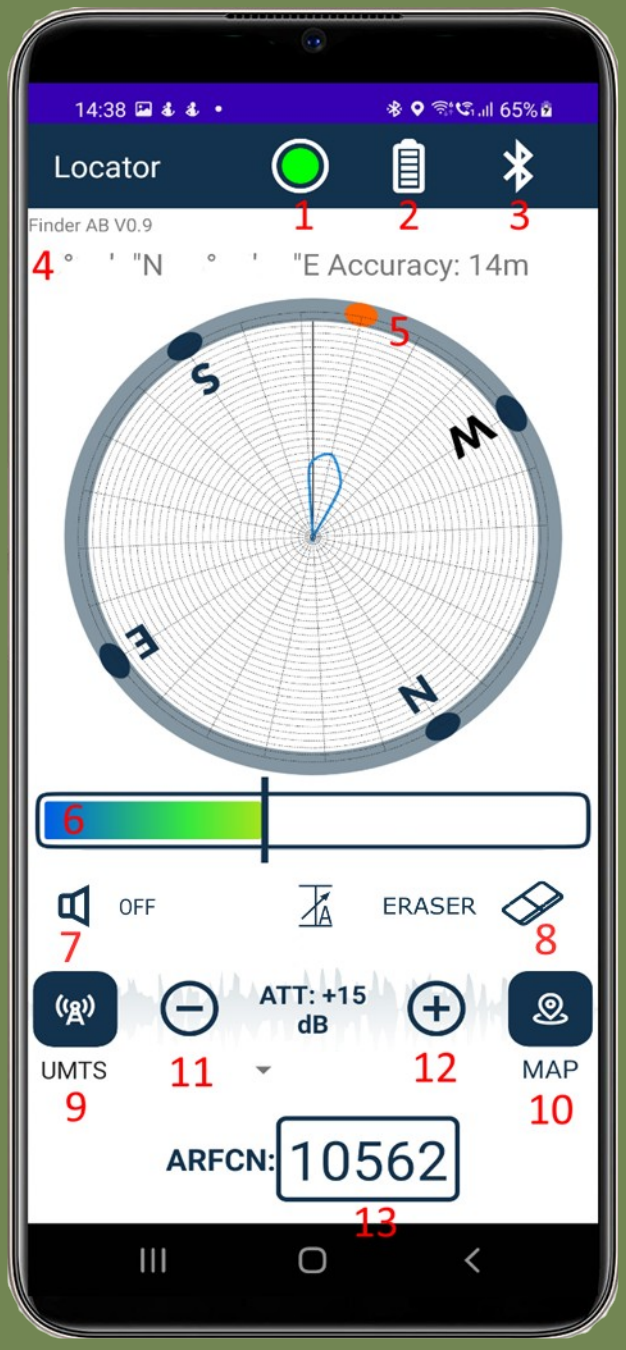
Place the MFP-8000N and antenna in any suitable way, maximum sensitivity

Place GSM receiver and antenna in any appropriate way, the maximum sensitivity of the antenna is achieved when it is pointed to the expected or assumed target direction. For this turning to the left or to the right achieve maximum readings of the signal levels of the receiver indicator or maximum volume level in headsets. In this case the direction just in front of an operator corresponds to the direction to the object under finding (see Fig.).



Use an attenuator if the signal is too big or too small.

PARTS OF THE APP

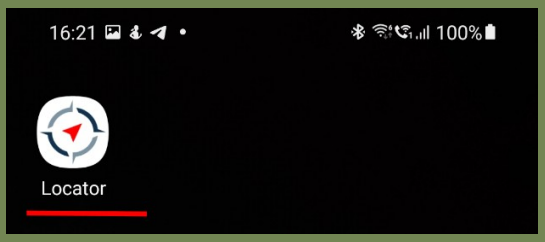


1. Connection button\indicator.
2. Battery indicator.
3. Go to Bluetooth setting button.
4. GPS position and accuracy indication.
5. Max level indicator.
6. Level indicator.
7. Sound mode switch/indicator, possible modes: OFF, TONE, BEEP.
8. Erasing the directional diagram button.
9. Network type change button (RAT change).
10. Map/Compass mode switch.
11. Attenuator down button.
12. Attenuator up button.
13. ARFCN input field.

OPERATION PROCEDURE (SMARTPHONE AND DEVICE OPERATION)

All further actions and controls will be carried on using the control smart phone.

Install “Locator.apk” file on the cell phone or tablet running on Android 6.0 Marshmallow or later. After the installation “Locator” icon will appear on a screen.



Activate Bluetooth on your cell phone or tablet.

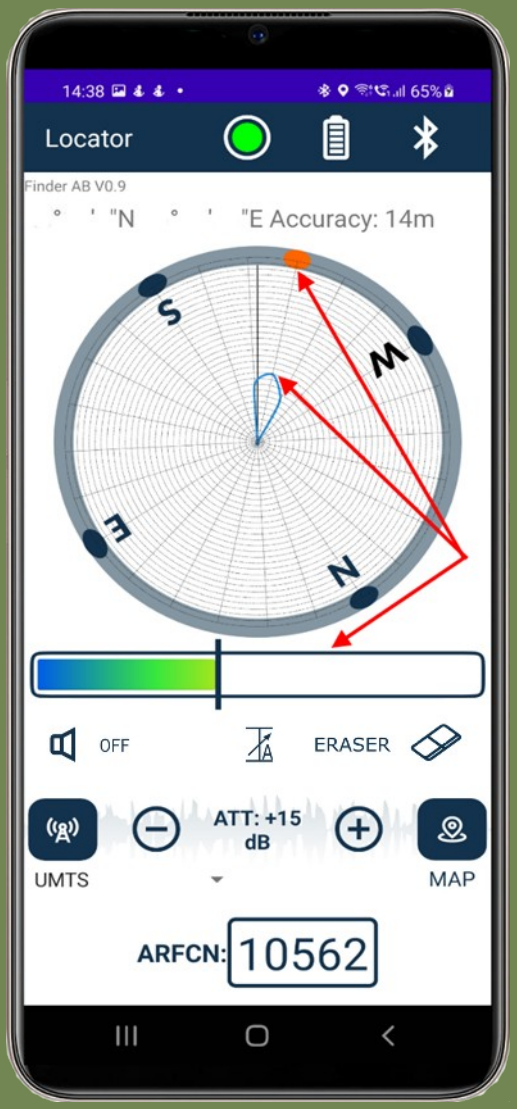
Enter the MFP-8000N “ENTER” menu. Select "BLUETOOTH" "EDIT" . Press "ENTER".

Connect to the MFP-8000N GSM, UMTS, LTE receiver using the button with a red circle . The circle will change from red to green .

Select the band using the “Network” button.

Enter the ARFCN using the “ARFCN” field and press “OK”.

The setting is complete, be guided by the maximum of the signal on the diagram, in addition to it is indicated by an orange oval.


14:38
65%
Locator
Finder AB V0.9
° ' "N ° ' "E Accuracy: 14m
S
M
E
N
OFF
ERASER
ATT: +15 dB
UMTS
MAP
ARFCN: 10562

For Reference

Supported channels within standards (RX)

- **A-GSM:**
  - 128-251
  - 512-810
- **E-GSM:**
  - 0-124
  - 975-1023
  - 512-885
- **UMTS:**
  - 10562-10838
  - 9662-9938
  - 412-687
  - 1537-1738
  - 1887-2087
  - 2937-3088
  - 3112-3388
  - 3412-3687
  - 4357-4458
  - 1007-1087
- **LTE:**
  - 0-599
  - 600-1199
  - 1950-2399
  - 2400-2649
  - 1200-1949
  - 2750-3449
  - 3450-3799
  - 4150-4749
  - 5010-5179
  - 6150-6449

PREPARATION

Start the web server using the command:

./server target_power_level

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where target_power_level is the power level of the target in **mW**. if you want the server to continue working after the session ends, click ctrl+Z and enter the following commands:

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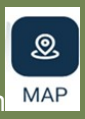
dh

disown

OPERATION

Switch to map mode using the button 

The application screen will change to:

1) An agent with whom the connection is lost or who receives a signal level that is **too low**, in this case its last «normal» level is displayed, and the border color changes to **red**.
2) «Operator circles», their diameter is inversely proportional to the signal level.
3) Target point, displayed only when the location can be calculated and shows the location where the target is approximately

SEARCH PROCEDURE

1) Drive towards the operator with the smallest circle diameter. Rotate 360 periodically to check the maximum signal level.
2) When the target point appears, check it for authenticity: if it is far from all operators, perform an additional 360 rotation, if you are sure of the authenticity of the point, go to it.