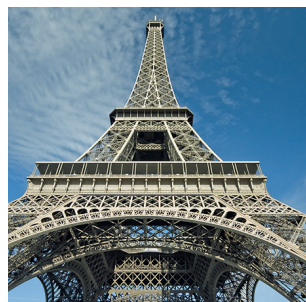
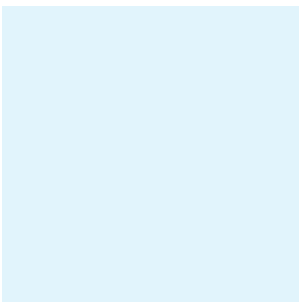


# User's Manual



*Products for tomorrow...*



## MEDER TravelGuide

UHF technology – tour guide and interpreter system

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## 2. Safety Information

Read the manual and keep it safe for later use. Always pass the devices to other users together with the manual.

Leave all maintenance to qualified service personnel. Maintenance must be performed when the devices have been damaged somehow.



**CAUTION!** *Danger of heat or fire, smoke and gas development, explosion, environmental damage*

Improper use of batteries may lead to leaking batteries and in extreme cases, cause serious damage. MEDER is in no way liable for improper use.

- Keep batteries out of reach of children.
- Pay attention to polarity.
- Do not heat above 70 ° C/158 ° F. Do not throw into fire.
- Do not expose to moisture.
- Do not short, disassemble or deform.
- Turn off equipment after use.
- Recharge batteries only at an ambient temperature of 10 ° C/50 ° F to 40 ° C/104 ° F.
- Do not mix charged batteries without separate packing.
- Immediately remove defective devices to stop the charging process.
- Batteries are recyclable. Please dispose of batteries via battery disposal container or retailers.

**CAUTION!** Risk from leaking batteries!

Non-rechargeable batteries that are charged in the charging cabinet/station/case can leak. Batteries may also leak through long disuse. The leaking electrolytes can cause damage to the equipment.

- Never put any devices equipped with non-rechargeable batteries in the charging cabinet/station/case.
- Remove batteries when not in use from the devices. Do not mix charged batteries without separate packing.
- If a battery leaked, avoid contact with the skin, eyes or mucous membranes. Affected areas should immediately be rinsed with clean water. Seek medical attention immediately.

### 3. Introductions

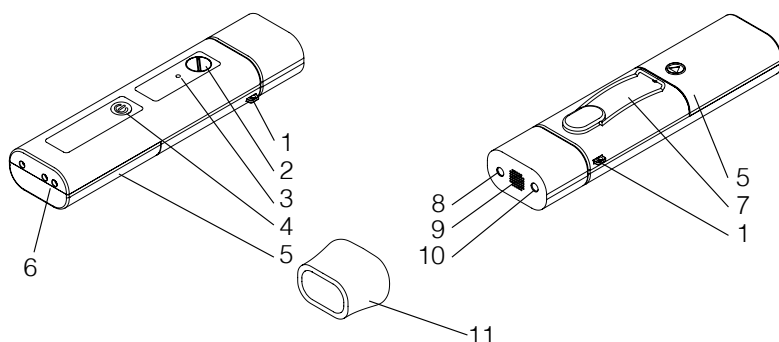
Thank you for the trust in our products. These products will satisfy you for many years with their reliability, efficiency and ease of use. The MEDER TravelGuide system allows wireless sound transmission at conferences and group tours, for example in factories or museums. The radio transmission signal allows free movement of all members of the group.

The main features of this system are:

- 15 channels
- Excellent sound quality
- Continuously adjustable microphone sensitivity
- Long battery life due to the low power consumption of the devices.
- Advanced charging system with  $-\Delta U$  detection. The trickle charge keeps all devices constantly ready for use. The battery lifespan is increased by this system. Thus it is environmentally friendly.
- Standard battery size (Mignon, AA) for easy exchange of batteries.
- Transmitter is automatically switched off when not in use.
- Made in Germany

## 4. Components and Devices

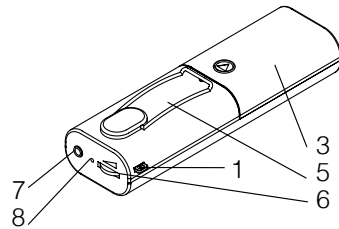
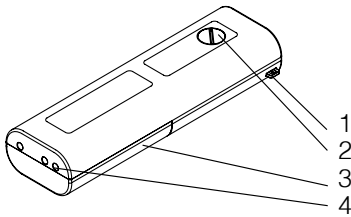
### Transmitter



1. Eyelet for neck strap
2. Channel selector switch
3. LED
4. "On/Off" button
5. Battery compartment
6. Charging contacts
7. Clip

8. Microphone jack for external microphone
9. Mikrofon
10. Microphone sensitivity selector
11. Wind screen

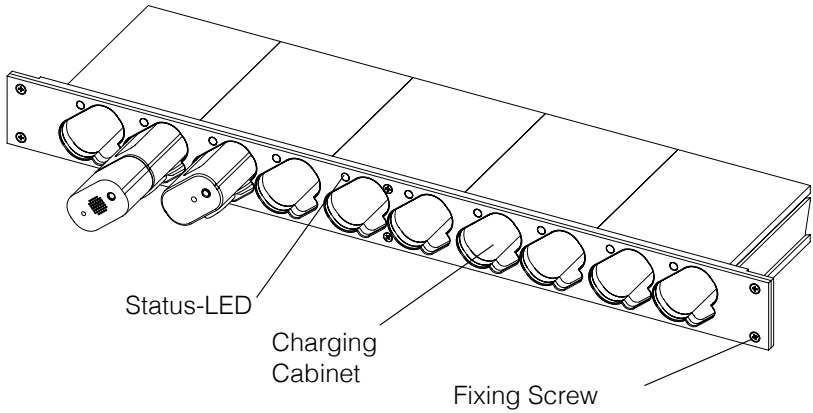
## Receiver



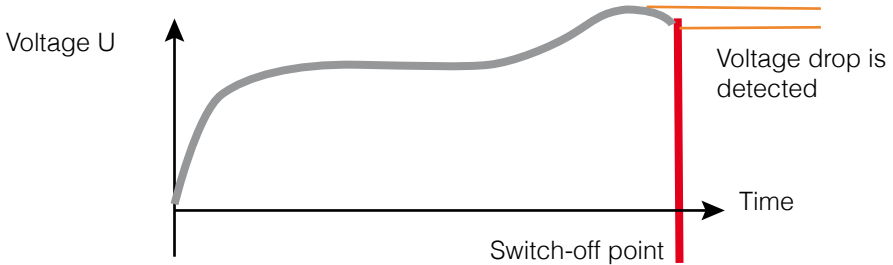
1. Eyelet for neck strap
2. Channel selector switch
3. Battery compartment
4. Charging contacts

5. Clip
6. Volume control dial
7. Earphone jack
8. LED

## Charging Cabinet/Station/Case



The MEDER charging technology charges the battery with a constant current. The voltage is monitored and shows the following pattern during a charging cycle:



When charging, the voltage of the battery continues to increase. If the battery is full, the charging voltage reaches a maximum and falls at further current flow slightly. This slight voltage drop (hence:  $-\Delta U$ ) is detected by the charging controller and it switches from rapid charge to trickle charge. Furthermore, the temperature range is monitored continuously during charging.



## 5. Storage, System Setup

### Component Storage

Store this equipment in a cool, dry place when not in use. The optimum temperature range when in storage is -10 ° C/14 ° F to 60 ° C/140 ° F. Improper storage can reduce equipment lifespan.

To properly store the devices:

1. Remove earphones or external microphones from the devices.
2. Charge rechargeable batteries. If non-rechargeable batteries are used, remove them as the batteries may leak over time. Rechargeable batteries can remain in the transmitters and receivers  
Note the safety information on Page 4.
3. Unplug the power cord.
4. Store the devices separately (e.g. in carrying and storage case) since the devices will self-discharge if they remain in the charging system without external power supply.
5. Devices are ready for storage.

### Setting up Charging Station/Cabinet/Case

#### Setup

All charging systems will be delivered pre-configured by MEDER. The charging cabinet consists of a 19" cabinet, which contains the charging slots. In a charging cabinet, up to 200 devices can be charged simultaneously. The stackable charging stations are designed for smaller systems.

The mobile version is the charging case with removable lid. It employs the same technology in a mobile unit. With the charging case you can take advantage of rechargeable battery operation everywhere. The use for all 3 variants is identical. For good air circulation temperature-controlled fans are installed. Because of this the noise level may vary.

**CAUTION!** *fire hazard*

The charging station/charging cabinet/charging case and the batteries of the transmitter and receiver heat up during charging. The charging station/charging cabinet/charging case were designed for ambient temperatures of 10 °C/50 °F to 40 °C/104 °F during operation.

- Ensure good air circulation.
- Do not block the ventilation openings.
- Do not expose the charging systems to heat sources or direct sunlight.

**CAUTION!** *Fire, electric shock!*

Due to the high power consumption of the charging cabinet, cables or fuses could overload. The power consumption is about 36 W per 10 charging slots.

- Make sure the outlet is suitable for this load. Especially if many other power-intensive devices are connected in the room, the total load on the related fuse should be considered.
- If you use an extension cord, it must be suitable for the desired power.

If you want to set up the charging station/charging cabinet/charging case in a different place, you should proceed as follows:

1. Remove transmitters and receivers during transport from the charging system as the devices could fall out. Only in the charging case can the devices be transported in the charging slots.
2. Put charging system on a flat, horizontal surface. Ensure adequate ventilation.
3. Connect the equipment to the power supply.
4. Open charging case. The charging cabinet can also be closed during operation.

## **First use / Maintenance of transmitter and receiver**

### ***First use***

The devices are delivered completely assembled.

If used with rechargeable batteries, the devices must be charged before first use. When used with alkaline batteries tours can be started immediately.

### ***Changing batteries***

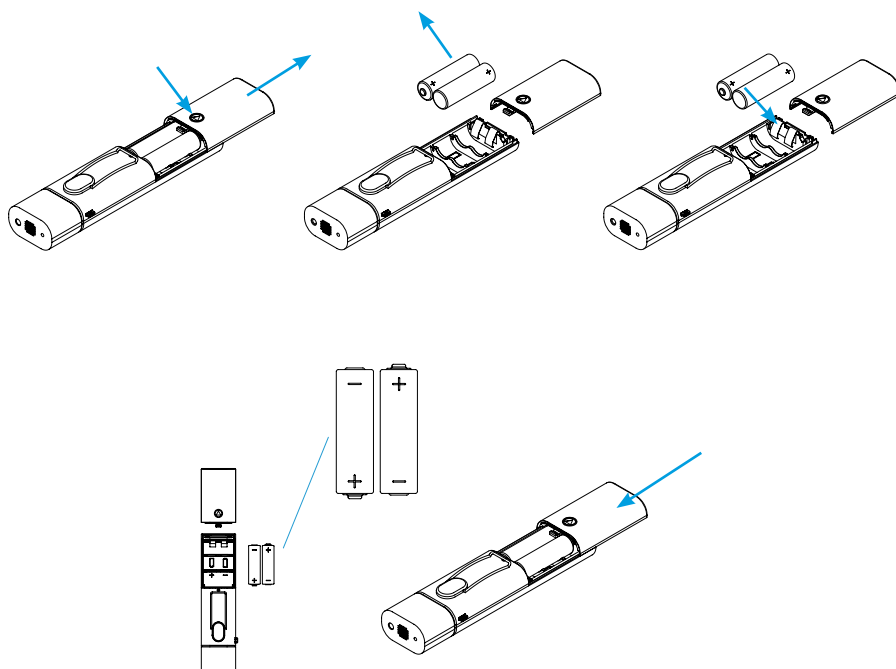
If the batteries have reached the end of their lifespan, they have to be replaced.

Use two 1.5 V mignon batteries (AA, LR6 batteries or compatible rechargeable batteries). Suitable replacement batteries or rechargeable batteries can be obtained at our Service Center. If you wish to change over from rechargeable battery to non-rechargeable battery operation (or vice versa), please call our Service Center. However, in case of necessity batteries / rechargeable batteries can be exchanged at any time thanks to standard batteries (Mignon, AA). But there may be inaccuracies in the battery status indicator.

The battery compartment cover is secured with a screw when used with rechargeable batteries. With single-use batteries the cover has no screw.

To exchange batteries:

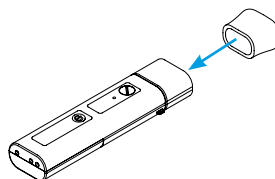
1. Remove screw (if present).
2. Remove battery compartment cover.
3. Remove old batteries.
4. Put in new batteries. Pay attention to the polarity. The correct orientation is imprinted on the bottom of the battery compartment. Wrong insertion will damage the device.
5. Close the battery compartment cover, if necessary reattach the screw.
6. The device is now ready for use.



### *Installing the windscreen*

On the microphone of the transmitter a windscreen can be installed. The windscreen is made of foam rubber and prevents wind noise or breathing to adversely affect the quality of transmission. The appropriate windscreen can be found in our accessories catalog. The windscreen should be replaced regularly for hygienic reasons.

1. Remove old windscreen if present
2. Mount new windscreen on the microphone by pushing it over the top of the device.



## ***Attaching devices to clothing***

The TourGuide's slender design allows it to be easily carried in a pocket or simply attach it to your clothing with the convenient belt clip.

Lastly, attach a lanyard to the eyelet located in the upper corner of the device and carry it around the neck. Fold the eyelet out by moving the device, then attach lanyard's carabine hook.

The use of the lanyard is recommended, as experience has shown us that unpracticed attaching to clothing increases the risk of devices being dropped.

## ***Cleaning and maintenance***

Transmitter, receiver and earphones can be cleaned with a damp cloth. No solvents should be used, because the plastic could be damaged.

For reliable cleaning of the earphones MEDER recommends a disinfectant cleaning spray.

This spray (see accessories catalog) can be ordered at our Service Center.

## 6. Operation

### TravelGuide Charging Cabinet/Station/Case

#### *Checking charging status, recharging of the devices*

The charging status of each receiver may be checked at any time through the red LED at the top of the device. When the device is turned on the LED lights up briefly. If the current charge level of the battery drops under a threshold the LED lights up permanently.

The receiver then has another 2 h operating time remaining.

In contrast, the LED on the transmitter displays the charge level with three traffic light colors from green (full) to yellow and finally red (empty).

Recharge your equipment regularly. The charging systems equipped with intelligent charging technology designed to maintain perfect battery condition and to ensure a long battery life. Once charged, the trickle charge will ensure that your devices are always ready for use.



#### **CAUTION!** Risk of battery leak or explosion

Non-rechargeable batteries that are charged in the charging cabinet/station/case can leak. The leaking electrolyte can damage the equipment.

- Never put any devices equipped with non-rechargeable batteries in the charging system. The leaking electrolyte can damage the equipment.

To recharge the devices:

1. Unplug earphones and/or external microphone from the device (if any).
2. Remove any dirt or metal particles which may have stuck to the built-in magnet on the bottom of the device then place the devices into the charging slots.
3. Once the device is in the charging slot, a LED will illuminate providing the status of the device.

Status LED	Function
<b>RED</b>	Device is charging.
<b>RED FLASHING</b>	Error: defective battery, battery is not inserted properly.
<b>YELLOW</b>	Error: temperature too low (below 10 °C/50 °F).
<b>GREEN</b>	Fully charged, trickle charge is being performed

4. Charging begins when there are no errors. A completely discharged device will take about 2-3 hours to become fully charged.
5. If necessary, a partially charged device can be removed from the charging system. The removal is detected and the charging slot will automatically be switched off. MEDER recommends fully recharging the devices. Charged devices can remain in the charging slot without any problems, because the intelligent charging technology switches to trickle charge after the rapid charging process is complete.

Rechargeable batteries age over time and lose some of their charge capacity. In general, batteries have to be replaced after about 1.5 years. Clues that may indicate old or defective batteries:

- Short charging time, even though the device was empty before charging.
- Short lifetime of battery during use.

If an empty device finishes recharging after a few minutes, it was possibly deeply discharged. Remove the device from the charging slot and start a new charge cycle. If this does not help even after several repetitions, the battery is defective and must be replaced.

## TravelGuide Receiver

### Switching on/off and connecting earphones

The receiver is switched on by plugging in the ear-phones.

1. Plug the earphone plug completely in the earphone jack of the receiver.
2. The LED at the top of the unit flashes briefly. If the battery charge is low, the LED lights up continuously. This indicates that there is approximately 2 h of battery life left.
3. The device is ready.

By unplugging the earphones the receiver is turned off. When not in use the earphones should always be unplugged to conserve battery life.

### Adjusting volume and putting on earphones



#### **CAUTION!** Risk of hearing damage

High volume can cause hearing damage.

- Adjust the volume to low value before putting on the earphones.

To avoid ear damage:

1. Adjust the volume using the volume control dial to a low value.
2. MEDER uses ergonomic earphones, which are suitable for both ears. Put the supplied headphones on the ear so that the cable points backwards.
3. Check the volume on the earphones and adjust the volume with the “volume control dial” so that you can understand the speaker clearly.



## Setting a channel

To set the channel proceed as follows:

1. Check the channel at the transmitter.
2. Set the desired channel on the receiver. Set the channel by using the channel selector switch.

## TravelGuide Transmitter

### Switching on / connecting microphone

1. Switch the transmitter on with the “On/Off” button. If no sound is received by the microphone for 6 minutes the transmitter will switch off automatically.
2. The LED flashes 3 times. The color indicates whether the device is in battery mode (red) or rechargeable battery mode (green).
3. The LED lights up permanently. The LED shows the charging status in three colors from green (full) to yellow and finally red (empty). When the light turns red, about 15 minutes of operation remain.

### Connecting external sound source to transmitter

Alternatively, the transmitter can also playback external audio material.

1. Remove any existing external microphone and/or windscreen if present.
2. Connect sound source to the microphone jack. The sound is fed in via the microphone jack. Once an external microphone or sound source is connected, the built-in microphone automatically shuts off.
3. Start playback on an external device, pay attention to the volume.

### ***Setting the channel***

The TravelGuide System has 15 channels, allowing many groups to use the TourGuide simultaneously.

1. Turn the device on
2. Select the desired channel with the channel selector switch.

### ***Setting of microphone sensitivity***

The proper adjustment of the microphone sensitivity provides a good hearing impression for the listeners. A second person, a receiver with earphones and a small screwdriver are required.

1. Switch the transmitter on.
2. Switch the receiver on and put on the earphones.
3. Set the volume of the receiver to the middle.
4. Speak into the microphone. Do not adjust the receiver volume.
5. Using the screwdriver, adjust the microphone sensitivity. Carefully insert the screwdriver into the opening at the microphone sensitivity control and adjust sensitivity by turning the screwdriver.
6. Readjust until the receiver has a pleasant listening experience.
7. The sensitivity is now set correctly.

## 7. Troubleshooting

Error	Problem	Solution
No function at Device, light emitting diode does not flash when earphone is plugged in.	Dead batteries or rechargeable batteries	Change or recharge battery (see p.11)
	Blown fuse, when batteries were installed with wrong polarity	Send the device to our Service Center
No reception, Display shows settings	No signal, transmitter and receivers set to different channels	Re-set channels (see p.16).
	No signal, transmitter out of range	Reduce distance
Reception too quiet / too loud	Incorrect setting of Sensibility (microphone sensitivity)	Correct setting (see p.19)
Operating time of batteries is too short	Natural aging of the batteries	Replace batteries
Signal is lost from time to time	Distance too large	Reduce distance
	Loose connection of the earphones	Try another earphone, replace if defective
	Unknown interfering signal.	Try another channel (see p.16 to p.17)
Interference (noise, crackling noises, whistles)	Transmitter and receiver are too close to each other.	Increase distance between transmitter and receiver (>10 m).
	Two transmitters are set to the same channel.	The use of two transmitters on the same channel simultaneously is only possible with an adapter. Please call our Service Center.

<b>Error</b>	<b>Problem</b>	<b>Solution</b>
Crackling noises when pressing buttons on the transmitter	Switching noises (On/Off or changing channels) are received by receiver.	This is due to the transmission principle. Switch on transmitter first, then switch on the receivers.
Other signal is heard.	Receiver has the same channel as the undesired transmitter.	Try another channel (see p. 16 to p. 17).
	The used channels are adjacent channels (e.g., channel 2 and 3).	Increase channel spacing (i.e., channel 1, 3, 5 rather than channel 1, 2, 3) and / or increase the distance between the transmitter and receiver (>10 m).

Call the MEDER Service Center if a problem occurs not covered in this troubleshooting guide or if the problem persists following the proposed solutions.

## 8. Manufacturer's Declaration

### Warranty

We provide a 5 Year factory warranty for all electronic components and all accessories of our TravelGuide system.

If in spite of our careful quality control defects should occur, the devices can be returned to our Service Center. The warranty includes the removal of material or production defects and is free of charge. The choice of repair or replacement of parts or the entire device remains at MEDER.



Excluded from the warranty:

- Batteries and rechargeable batteries (They have a shorter lifespan which also depends on the individual frequency of use).
- Damage caused by leaking batteries (due to operating errors).
- Inappropriate usage (e.g. operating errors, mechanical damages, incorrect operating voltage).
- Defects due to natural wear

Please use the return form, which is available for download at [www.meder-funk.de](http://www.meder-funk.de).

The warranty period begins from the date of purchase. Please send a copy of the proof of purchase with the products and the form.

The warranty is void if the product is manipulated by non-authorized personnel.

### Batteries and Rechargeable Batteries

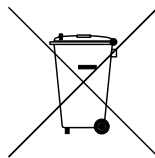
The supplied batteries are recyclable. Please dispose of them by using special battery bins or your local dealer.

## WEEE-Statement

Your MEDER devices were made of high quality materials and components that are recyclable.

Electrical and electronic equipment must be disposed of at the end of their lifespan separately from household waste.

Please dispose of this equipment at your local waste collection or recycling center. Please help to protect our environment.



## Declaration of Conformity

These devices meet the essential requirements and other relevant regulations of the European Union.

The conformity to the following standards was tested by the notified body CETE-COM ICT Services GmbH (identification number 0682):

ETSI EN 301 489-1 v1.8.1  
ETSI EN 301 489-9 v1.4.1  
ETSI EN 300 422-1 v1.3.2  
ETSI EN 300 422-2 v1.2.2



The complete declaration can be downloaded free of charge from our website [www.meder-funk.de](http://www.meder-funk.de)

In the frequency range 863 - 865 MHz (Channels 1-15) you can use this equipment license-free in following countries: A, B, BG, CH, CY, CZ, D, DK, E, EST, F, FIN, FL, GB, GR, H, HR, I, IRL, IS, L, LT, LV, M, N, NL, P, PL, S, SK, SLO, TR.

## 9. Technical Data

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### Charging Cabinet/Station/Case

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Dimension	Cabinet: according to customer specifications Station: according to customer specifications Case: 85 x 53 x 23 cm
Weight	Cabinet: according to customer specifications Station: according to customer specifications Case: ohne Geräte ca. 11 kg
Power supply	230 V, Schuko-plug
Power consumption	Up to 800 W for the charging cabinet with 200 charging slots It corresponds to about. 3.6 W per charging slot
Charging slots	Cabinet: up to 200 Station: up to 44 Case: 32
Operating conditions	from 10 °C/50 °F to 40 °C/104 °F
Storage conditions	from -10 °C/14 °F to 60 °C/140 °F
Charging current per slot	800 mA

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**TravelGuide System**

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Dimensions	Transmitter: 168 x 42 x 25 mm Receiver: 138 x 42 x 25 mm
Weight incl. Batteries	Transmitter: 38 g Receiver: 72 g
Power consumption	Transmitter: 80 mA Receiver: 70 mA
Power supply	two 1,5V mignon batteries (AA) or rechargeable AA
Number of channels	15
Modulation	F3E
Frequencies	863 – 865 MHz (Channel 1-15)
HF output power	< 10 mW
Sound transmission range	30 – 7500 Hz
Range	200 m (free field)
Battery charging time	2-3 h
Operation time	Battery: 35 h Rechargeable: 30 h
Operating Temperature	from -10 °C/14 °F to 60 °C/140 °F
Signal noise ratio	> 70dB
Distortion factor at 1 kHz	< 1%
Headphone	Impedance 16 Ohm, max. 100 mW

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## 10. Accessories

Description	Item No.
Windscreen for handheld transmitter TourGuide / TravelGuide	1010201040
Headset microphone	IM-606-06/2000
Windscreen for Headset Microphone	700011
Clip microphone	23.0340/2000
Throat microphone	71-02-03901
Earphone	ES-240
Earphone with cable rewriter	SK3018A
Dual earphones with neck strap	11830
Noise canceling headphone	4004300007
Induction loop for hearing aid behind the ear	1954
Walkman earphone	27095
Stainless Steel Ring (for carrying earphones)	10025427
Metal belt clip	MED2010CLP1000
Battery cover	Yellow: MED2010BFD1000 Blue: MED2010BFD1010 Black: MED2010BFD1020
Lanyard	4004644351
Carrying and storage case TourGuide / Travel- Guide for 20 receivers plus accessories	4004640531
Carrying and storage case TourGuide / Travel- Guide for 40 receivers plus accessories	4004640530
Messenger Bag TourGuide / TravelGuide for 30 receivers plus accessories	4004640529
Foam rubber insert for up to 80 devices	4004649330
Rechargeable battery AA	1512251
Battery AA	4003003960
Disinfectant cleaning spray	GR 510

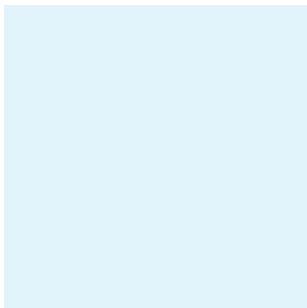
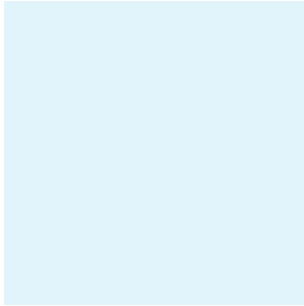
<b>Description</b>	<b>Item No.</b>
Manual TravelGuide (all languages)	2010202040
Short Manual TravelGuide transmitter and receiver DE	2010400430
Short Manual TravelGuide transmitter and receiver EN	2010400431
Short Manual TravelGuide transmitter and receiver FR	2010400432
Short Manual TravelGuide transmitter and receiver ES	2010400433
Short Manual TourGuide/TravelGuide charging station DE	1020400450
Short Manual TourGuide/TravelGuide charging station EN	1020400451
Short Manual TourGuide/TravelGuide charging station FR	1020400452
Short Manual TourGuide/TravelGuide charging station ES	1020400450

Get free advice. Call our Service Center.

## 11. Imprint

MEDER Funk GmbH  
Robert-Bosch-Str. 4  
78224 Singen, Germany  
Tel: +49 (0)7731 8399 0  
Fax: +49 (0)7731 8399 30  
[www.meder-funk.de](http://www.meder-funk.de)

This document can be downloaded at:  
[www.meder-funk.de](http://www.meder-funk.de)



**MEDER Funk GmbH**  
Robert-Bosch-Straße 4  
78224 Singen / Htwl.  
Germany

Tel.: +49 (0) 7731 83 99 - 0  
Fax: +49 (0) 7731 83 99 - 30  
info@meder-funk.de  
www.meder-funk.de