



OPERATING INSTRUCTIONS

TG 1000

Digital Wireless System

1. Safety Instructions

General

- READ these instructions.
- KEEP these instructions.
- HEED all warnings.

Exemption from liability

- beyerdynamic GmbH & Co. KG will not be liable if any damage, injury or accident occurs due to negligent, incorrect or inappropriate operation of the product.

1.1 TG 1000 Receiver



The lightning flash within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the device that may be sufficient enough to constitute a risk of electric shock to users.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Location

- The equipment must be set up so that the mains switch, mains plug and all connections on the rear of the device are easily accessible.
- If you transport the equipment to another location take care to ensure that it is adequately secured and can never be damaged by being dropped or by impacts on the equipment.

Fire hazard

- Never place naked flames (e.g. candles) near the equipment.

Humidity / heat sources

- Never expose the equipment to rain or a high level of humidity. For this reason do not install it in the immediate vicinity of swimming pools, showers, damp basement rooms or other areas with unusually high atmospheric humidity.
- Never place objects containing liquid (e.g. vases or drinking glasses) on the equipment. Liquids in the equipment could cause a short circuit.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.

Connection

- The equipment must be connected to a mains socket that has an earth contact.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Lay all connection cables so that they do not present a trip hazard.
- Whenever working on the inputs and outputs of the equipment switch off power.
- Check whether the connection figures comply with the existing mains supply. Serious damage could occur due to connecting the system to the wrong power supply. An incorrect mains voltage could damage the equipment or cause an electric shock.
- Please note that different operating voltages require the use of different types of power cable and plugs.

Please refer to the following table:

Voltage	Power plug according to standard
110 - 125 V	UL817 and CSA C 22.2 no 42.
220 - 230 V	CEE 7 page VII, SR section 107-2-D1/IEC 83 page C4.
240 V	BS 1363 (1984): "Specification for 13A fused plugs and switched and un-switched socket outlets."

- If the equipment causes a blown fuse or a short circuit, disconnect it from the mains and have it checked and repaired.
- Do not hold the mains cable with wet hands. There must be no water or dust on the contact pins. In both cases you could receive an electric shock.
- The mains cable must be firmly connected. If it is loose there is a fire hazard.
- Always pull out the mains cable from the mains and/or from the equipment by the plug – never by the cable. The cable could be damaged and cause an electric shock or fire.
- Do not use the equipment if the mains plug is damaged.
- If you connect defective or unsuitable accessories, the equipment could be damaged. Only use connection cables available from or recommended by beyerdynamic. If you use cables you have made up yourself, all claim to warranty is null and void.
- In order to disconnect the receiver from AC power, switch it off and disconnect the power plug from the power socket.

Maintenance

- Only clean the equipment with a slightly damp or dry cloth. Never use solvents as these damage the surface.

Troubleshooting and servicing

- Do not open the equipment without authorisation. You could receive an electric shock. There are no user-serviceable parts inside.
- Leave all service work to authorised expert personnel.

1.3 TG 1000 Handheld and Beltpack Transmitters

- Protect the transmitter from moisture and sudden impacts. You could either injure yourself or others or damage the transmitter.
- Always switch off the transmitter before changing the battery.

Handheld Transmitter

- Do not blow into the microphone. In a condenser microphone this could damage the transformer. It is preferable to carry out a speech trial.

Beltpack Transmitter

- Clip-on microphones are often very compact. If they are accidentally swallowed there is a risk of choking. Always keep this type of microphone away from small children.

1.4 NiMH Rechargeable Batteries, Alkaline Batteries

- The handheld and beltpack transmitters of the TG 1000 system can only be powered with AA (LR6) Mignon alkaline batteries or equivalent NiMH rechargeable batteries.
- The normal commercial alkaline batteries can have a length tolerance of 2 - 3 mm. When changing the battery always ensure good contact.
- If the transmitter is not being used for weeks or months, please remove the batteries. Batteries can leak when not being used for a long time and corrode the conductor strips and components. Repair is not then possible. In this case all warranty claims are null and void. The description "leak proof" on batteries is no guarantee that they will not run out.
- Never take batteries apart yourself. The battery acid contained will damage skin and clothing.
- If abused or misused, rechargeable batteries may leak. In extreme cases, they may even present an explosion, heat, fire, smoke or gas hazard.

1.5 Disposal

- If you throw away the transmitter, please remove the batteries.
- Old batteries may contain substances that are harmful to your health and environment.
- Dispose used batteries always according to the applicable disposal regulations. Please do not throw used battery packs into the fire (danger of explosion) or your household rubbish, take them to your local collection points. The return is free and required by law. Please dispose discharged batteries only.
- For removing the batteries, please refer to chapter "How to insert/replace the batteries".
- All batteries are recycled to reclaim valuable material such as iron, zinc or nickel.
- This symbol on the product, in the instructions or on the packaging means that your electrical and electronic equipment should be disposed at the end of its life separately from your household waste. There are separate collection systems for recycling in the EU. For more information, please contact the local authority or your retailer where you purchased the product.



8. Technical Specifications

Digital UHF Diversity Receiver

Operating principle	Digital UHF true diversity receiver
Frequency range	
Region A	470 – 789 MHz
Region B	470 – 698 MHz without 608 - 614 MHz (US TV channel 37)
Region C	690 – 720 MHz
Region D	470 – 628 MHz 710 – 716 MHz
Frequency response	20 – 20,000 Hz
Dynamic range	110 dB (122 dB with -12 dB level decrease in the beltpack transmitter)
Output level	max. + 18 dBu balanced (XLR and jack output) 0 to 30dB digital gain + 12dB analogue boost
Headphone output	switchable with volume control
Latency	2.1 ms (overall latency from transmitter to receiver)
Encryption &	
Audio CODEC	switchable, proprietary 16-bit encryption; "Triple-Play" CODEC with low latency and high error resilience
Display	OLED
Mains connection	100 V – 240 V AC
Power consumption	12 W (typ.)
Ambient temperature	0 to +55 °C
Weight	3200 g
Dimensions	420x242x43 mm
Antenna connection	2 x BNC input/2 x BNC output

Digital UHF Handheld Transmitter

Operating principle	Digital UHF handheld transmitter
Frequency range	
Region A	470 – 789 MHz
Region B	470 – 698 MHz without 608 – 614 MHz (US TV channel 37)
Region C	690 – 720 MHz
Region D	470 – 628 MHz 710 – 716 MHz
Frequency response	20 – 20,000 Hz
Encryption &	
Audio CODEC	switchable, proprietary 16-bit encryption; "Triple-Play" CODEC with low latency and high error resilience
Transmitter power	10mW („RF Power Standard“)/ 50 mW („RF Power High“)
Display	OLED
Transmission range	up to 300 metres under optimal conditions
Operating time	approx. 8 hrs. (NiMH 2100 mAh, RF Power Standard)
Weight	115 g without batteries and microphone capsule
Dimensions	Length 200 mm / Ø 36 mm

Digital UHF Beltpack Transmitter

Operating principle	Digital UHF beltpack transmitter
Frequency range	
Region A	470 – 789 MHz
Region B	470 – 698 MHz without 608 – 614 MHz (US TV channel 37)
Region C	690 – 720 MHz
Region D	470 – 628 MHz 710 – 716 MHz
Frequency response	20 – 20,000 Hz
Antenna connection	SMA
Encryption &	
Audio CODEC	switchable, proprietary 16-bit encryption; "Triple-Play" CODEC with low latency and high error resilience
Transmitter power	10mW („RF Power Standard“)/ 50 mW („RF Power High“)
Display	OLED
Transmission range	up to 300 metres under optimal conditions
Operating time	approx. 8 hrs. (NiMH 2100 mAh, RF Power Standard)
Input level	max. + 18 dBu
Weight	102 g without batteries
Dimensions	94x59x26 mm
Pin assignment of 4-pin connector	Pin 1 = ground, pin 2 = IN1, pin 3 = IN2, pin 4 = +5 V

WA-AS6 6-way Wideband Antenna Splitter

Frequency response 470 – 789 MHz
Connections Input/output BNC socket
Weight 1116 g
Dimensions 484x90x44 mm

WA-AMP Wideband Antenna Amplifier

Frequency response 470 – 789 MHz
Connections Input/output BNC socket
Switchable amplification . . . 5/10/15/20 dB
Supply voltage 8 volts
Power consumption 70 mA
Weight 40 g
Dimensions 76x25x19 mm

10. Licensing

In most countries around the world, wireless systems must be approved for use by the authorities and it may be necessary to obtain a licence to use it legally. Your local beyerdynamic dealer will be able to give you details on wireless system regulations for your area.

The components of the TG 1000 system are approved according to the EU directive R&TTE 99/5/EEC:

TG 1000 Beltpack Transmitter
TG 1000 Handheld Transmitter

under the CE 0682 (i) identification.

FCC Regulation

FCC ID: **OSDTG1000B for TG 1000 Beltpack Transmitter**
 OSDTG1000H for TG 1000 Handheld Transmitter

Canada IC: **3628A-TG1000B for TG 1000 Beltpack Transmitter**
 3628A-TG1000H for TG 1000 Handheld Transmitter

NOTE: *This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:*

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTICE:

Changes or modifications made to this equipment not expressly approved by beyerdynamic GmbH & Co. KG may void the FCC authorization to operate this equipment.

NOTICE:

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- (1) *this device may not cause harmful interference, and*
- (2) *this device must accept any interference received, including interference that may cause undesired operation.*

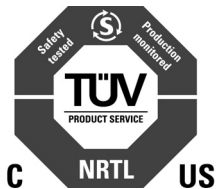
NOTICE:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For USA:

OPERATION OF WIRELESS MICROPHONES IN THE 700 MHZ BAND IS PROHIBITED AFTER JUNE 12, 2010.



CONSUMER ALERT

Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device.

Purchasers should also be aware that FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change. For more information, call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at www.fcc.gov/cgb/wirelessmicrophones.

EC-DECLARATION OF CONFORMITY

**Application of
Council directive:**

99/5/EC
R&TTE Directive

2004/108/EC
Electromagnetic Compatibility

2006/95/EC
Low Voltage Directive

**Standards to which
Conformity is Declared:**

EN 301 489-1/-9: 2000	EMC
EN 300 422-2: V1.3.1	Radio Spectrum
EN 60 065:2002 +A1+A11+A2+A12	Safety

Manufacturer's Name:

beyerdynamic GmbH & Co. KG

Manufacturer's Address:

Theresienstraße 8, 74072 Heilbronn, Germany

Type of Equipment:

Digital Wireless Microphone System
"TG 1000"

Model Numbers:

TG 1000 Dual Receiver
TG 1000 Handheld Transmitter
TG 1000 Pocket Transmitter

I, the undersigned, as an employee of beyerdynamic, hereby declare that the equipment specified conforms to the above Directive and Standards.

Manufacturer's Signature:



Date:

1st September, 2012

Full Name:

Ulrich Roth

Position:

Director of R&D

CE 0682 !

beyerdynamic))))

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