

# AKG ACOUSTICS

## HT 4000 / PT 4000



### Description

The AKG PT 4000 bodypack and HT 4000 handheld transmitters have identical transmission characteristics, with a **maximum radiated output power of 50 milliwatts**. Through special signal companding circuits (compression and expansion), dynamic range capability greater than 120 dB is delivered at the receiver's output. Audio bandwidth of the system is uniform from 35 Hz to 20 kHz. The usable distances between the receiver and transmitter can be 100 meters (330 ft) or more. Individual handheld microphone and bodypack transmitters are factory-matched to each receiver. Each system operates on a **30 MHz-wide UHF channel** and includes a set of **Presets** containing Intermodulation Free frequencies as well as a search tuning mode with access to up to 1,200 switchable **frequencies**. In the U. S., a total of three bands of 30 MHz channels may be selected. The user may expect a maximum of approximately 50 usable channels in a given locale (depending on the local TV channels and wireless frequencies used). In addition to the modulated audio signal, the transmitters send out a **data-encrypted PilotTone** (at 32,768 Hz) to send important information such as battery status, mute status and more to the system's receiver.

The HT 4000 handheld and PT 4000 bodypack transmitters can be powered by 2 AA batteries and normal **battery life of up to 15 hours** can be expected from standard 1.5-volt alkaline cells. An optional **BP 4000 rechargeable battery pack** is available, featuring Smart Battery Management System Software, and can provide battery life of up to 12 hours plus the remaining battery life can be monitored on the transmitter's & receiver's displays.

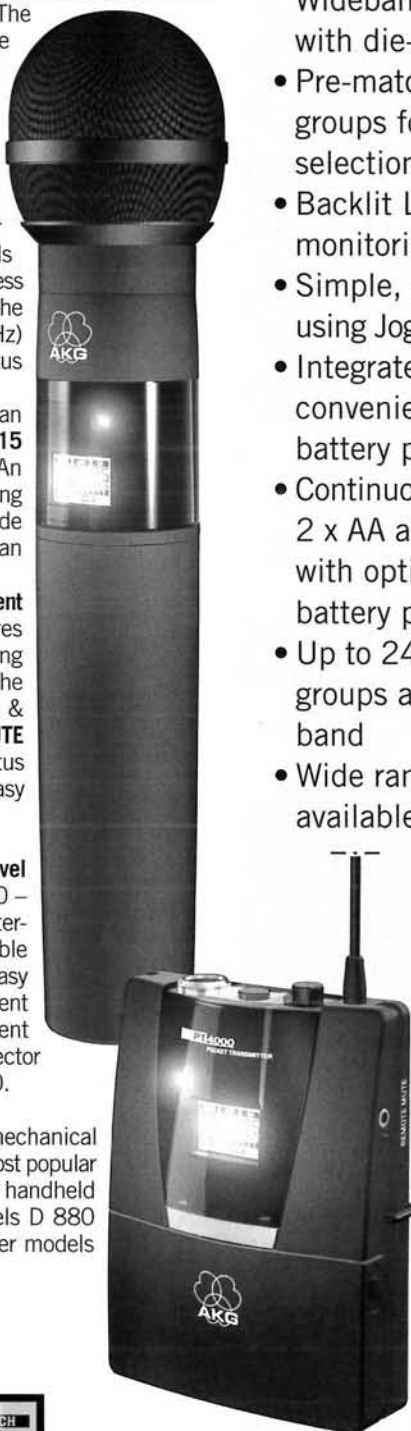
Both transmitters come with a **backlit display** and a **jog element** for easy setup and full status control. The display features information on selected frequency, gain setting, and remaining battery life in hrs. as well as LOCK and MUTE status. Beside the display and the jog element, the controls on the HT 4000 & PT4000 include **lockable ON/OFF** button and a separate **MUTE switch** whose position is easily distinguishable as well as a status indication LED. An **inscribable color code** facility helps easy channel recognition in multi-channel systems.

The PT 4000 bodypack accepts both **microphone and line-level input signals**, and the input sensitivity can be adjusted from 0 – 25 dB for optimum gain matching. The antenna is a quarter-wavelength type that affords easy concealment and comfortable wearing. A **lockable TA-3F Mini-XLR connector** is available for easy connection of a broad range of AKG headset, lavalier or instrument mics (e.g. MicroMic Series microphones) as well as instrument cables. The PT 4000 also comes with a 2.5-mm jack connector suitable for the optional **RemoteMuteSwitch** device RMS 4000.

The HT 4000 handheld transmitter comes with a rugged mechanical solution for **interchangeable microphone modules**. Six of AKG's most popular handheld "vocal" microphone head units are available for the handheld transmitter model. The microphones are the dynamic models D 880 WL1, D 3700WL 1, D 3800 WL 1 as well as the condenser models C 900 WL1, C 5900 WL 1, and C 535 WL 1.

### Features

- Wideband UHF handheld transmitters with interchangeable acoustics
- Wideband UHF pocket transmitters with die-cast metal housings
- Pre-matched, optimized frequency groups for quick, easy frequency selection (Presets)
- Backlit LCD Displays for easy status monitoring
- Simple, fool-proof setup procedure using Jog element for quick navigation
- Integrated charging contacts for convenient recharging of optional battery pack
- Continuous operation of >15 hrs. with 2 x AA alkaline batteries or > 12 hrs. with optional BP 4000 rechargeable battery pack
- Up to 24 intermodulation-free preset groups available on each frequency band
- Wide range of optional accessories available for system customization



Battery Status



Auto Gain



Preset Frequencies



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## Specifications

### PT 4000 Bodypack

**Audio Bandwidth:** 35 – 20,000 Hz  
**Carrier Frequency Range:** 650 – 680, 680 – 710, 720 – 750, 760 – 790, 790 – 820, 835 – 863 MHz  
**Carrier Frequencies:** up to 1,200  
**Modulation Method:** FM  
**Rated Deviation:** ±20 kHz nominal  
**S/N Ratio (A-weighted):** > 120 dB(A)  
**Radiated RF Power:** 50 mW ERP  
**Audio Input:** Mini XLR, 3 pin  
**Current Consumption:** < 135 mA  
**Power Requirement:** 2 AA 1.5-V batteries or BP 4000 rechargeable pack  
**Typical Battery Life:** Alkaline batteries, 15 hours; BP 4000: 12 hrs.  
**Size:** 2.8 x 3.5 x 1 in. (70 x 90 x 25 mm)  
**Net Weight:** 11.3 oz. (320g) without batteries

### HT 4000 Handheld

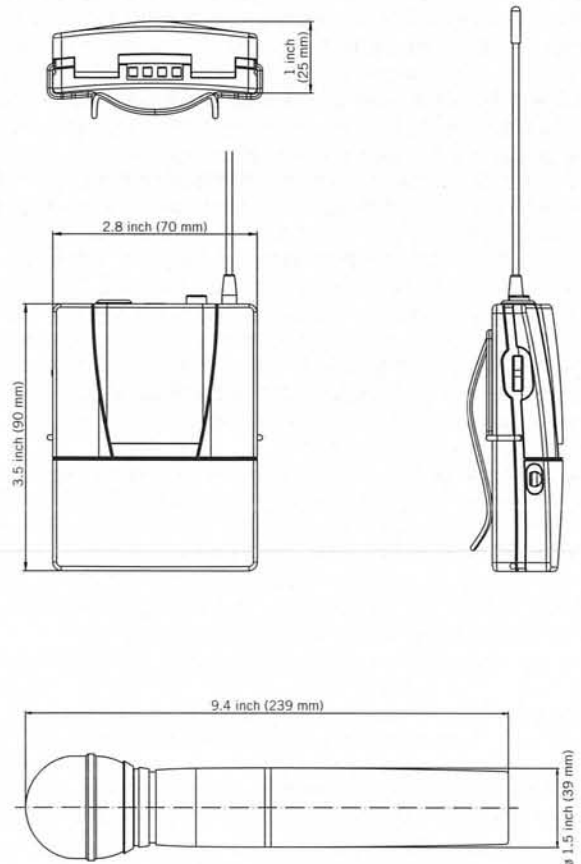
**Audio Bandwidth:** 35 – 20,000 Hz  
**Carrier Frequency Range:** 650 – 680, 680 – 710, 720 – 750, 760 – 790, 790 – 820, 835 – 863 MHz  
**Carrier Frequencies:** up to 1,200  
**Modulation Method:** FM  
**Rated Deviation:** ±20 kHz nominal  
**S/N Ratio (A-weighted):** > 120 dBA  
**Radiated RF Power:** 50 mW ERP  
**Input Level:** 140 dB-SPL @ nominal deviation  
**Current Consumption:** < 125 mA  
**Power Requirement:** 2AA 1.5-V batteries or rechargeable pack BP 4000  
**Battery Life:** Dry batteries, 15 hours, BP 4000: 12 hrs.  
**Size:** length: 9.4 in. (239 mm); diameter: 1.5 in. (39 mm)  
**Net Weight:** 11.3 oz. (320g) without batteries

### Architects and Engineers Specifications

The wireless system shall operate over a 30 MHz UHF frequency range in one of 6 bands from 680 to 863 MHz, with a wide range of possible frequency settings. The wireless microphone system shall incorporate factory-optimized sets of both transmission and receiving frequency modules that are programmed into both transmitters and receivers. Each frequency set shall comprise a 30 MHz UHF band and offer up to 1,200 discrete operating frequencies within that band, with transmitter power not exceeding 50 milliwatts. Both handheld and bodypack type transmitters shall be provided. The bodypack transmitter shall accommodate both microphone and line level inputs. The transmitters shall operate with a companding system that is complemented by the receiver, providing an A-weighted system dynamic range in excess of 120 dB. The transmitters shall indicate input overload via an LED indicator and on a backlit display battery lifetime shall be displayed in hours as well as the transmitting frequency. Handheld transmitters shall have a maximum diameter of 39 mm and a length, including antenna, no greater than 239 mm. The wireless microphone system shall be the AKG Acoustics Model WMS 4000.

### Line Drawings

(us standard and metric measures)



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For detailed information on WMS 4000 and other products from AKG contact your dealer or visit [www.akg.com](http://www.akg.com)  
Specifications subject to change without notice.

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