FCC ID: E9MHT60A

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Parts 74, 15, and 90 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 the 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.

Shielded cables and I/O cords must be used for this equipment to comply with the relevant FCC regulations.
Changes or modifications not expressly approved in writing by AKG Acoustics may void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. 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.

Introduction

Thank you for selecting the WMS 61 wireless microphone system from AKG. Please take the time to read through this Manual. It contains information on how to make optimum use of your equipment. Have fun!

2. Precautions

2.1. Spill no liquids on the equipment and do not drop any objects through the ventilation slots in the equipment.

2.2. Do not place the equipment near heat sources such as radiators, heating ducts, or amplifiers, etc. and do not expose it to direct sunlight, excessive dust, moisture, rain, mechanical vibrations, or shock.

2.3. Be sure to dispose of used batteries as required by local waste disposal rules. Never throw batteries into a fire (risk of explosion).

The WMS 61 Systems

two different WMS 61 Systems are available:

3.1. Handheld System

1 SR 61 Receiver
2 receiving antennas
1 AC power adapter for 11.7 VAC
1 RMU 61 19" rack mounting kit for 2 SR 61 receivers
1 BP 61 blank panel
1 screwdriver
1 HT 61 Handheld Transmitter
2 AA size 1.5 V dry batteries
1 SA 43 stand adapter
1 adjustable protective ring for controls

3.2. Bodypack System

1 SR 61 Receiver
2 receiving antennas
1 AC power adapter for 11.7 VAC
1 RMU 61 19" rack mounting kit for 2 SR 61 receivers
1 BP 61 blank panel
1 screwdriver
1 PT 61 Bodypack Transmitter
1 belt clip
2 AA size 1.5 V dry batteries

Check that the package contains all the parts listed above for your system. If anything is missing, please contact your AKG dealer.

3.3. Optional Accessories

PS 61 power splitter for remote antennas
RA 61 remote antenna
PSU 61/81 central power supply unit for multichannel systems
CH 61/81 plastic carrying case for one complete WMS 61 system.
Color Coding Kit: Set of rings (for the HT 61) and platelets (for SR 61 and PT 61) in various colors for identifying the individual channels of a multichannel system.

4. SR 61 Receiver

The SR 61 is a stationary True Microcontrolled Diversity receiver for use with WMS 61 transmitters. The SR 61 operates in a subband up to 4 MHz wide of the 138 MHz to 250 MHz VHF carrier frequency range. The SR 61 can be switched to a maximum of 15 different carrier frequencies depending on local frequency allocations.

4.1. Controls

4.1.1. Front Panel

The lettering of the front panel controls is protected against scratching by a protective film. To remove the film, just peel it off.

1a POWER: Switches the power to the SR 61 ON and OFF.

1b VOLUME: The VOLUME pot matches the SR 61's output level to the input sensitivity of your mixer or amplifier.

1c SQUELCH: The automatic squelch circuit mutes the receiver if the received signal is too weak or the transmitter switched off, effectively suppressing the audible noise caused by an excessive drop in received signal strength. The squelch circuit is controlled by a pilot frequency in the transmitter signal and therefore needs no user-adjustable control.

1d CHANNEL: This rotary switch selects the desired carrier frequency or its alternative frequencies.

1e BATTERY HI, MID, LO: These three LEDs indicate the current status of the transmitter batteries (dry batteries only):
HI (green) lighting constantly indicates the batteries will last for

HT/PT61 and HT/PT81 subprint (converts a 60 or 80 unit to a to 61 or 81)

T900 and T901 forms a low power oscillator to generate the pilottone. Its frequency is determined by Q900, a 32,767 kHz crystal. The oscillator is designed to produce a sine-wave at the output. T902 acts as an AM- stage where the pilottone is amplitude-modulated by the controller (located on the base-print). R909 and C907/C906 reduce the slewrate of the digital input from the controller. T902 operates as a shunt-switch with R908 and R911 to produce the amplitude modulation. C909 couples the modulated pilot-tone to a bandpassfilter, which eliminates audible interferences. The bandpass is formed by U900 and T903 and is adjusted with R920 to 32,767 kHz. C915 removes the DC-voltage and with R923 the pilottone is added to the audio-signal.
For an improved battery-indication U951 contains an EEPROM (U952 is the electrically identical alternative to U951 in an S0 8 package). Here the controller stores data for programm running. The transfer is organized by IIC-bus protocoll. U950 and R951-C951, R952, C953 and R957 form a battery-change-indicator. When the batteries are changed, the controller reads this information on portpin BAT_EN.
U950 and its passive parts are the battery checking unit, T950 and R955 bypass the battery (for 0.3sec.) to increase the current to determine the type of battery inserted (NiCd or NiMH or alkaline).

"HT61"