GM Long-distance Wireless Sound Pick-up

The GM professional wireless audio frequency transport of GM Series is a wireless hearing-aid tool that can help you to hear distant sounds. It has characteristics as clear sound, far distance, small size and perfect functions, which using sophisticated high-tech devices, innovative circuit design, US ASIC and STD installation process. It is applicable to scene monitor and wireless audio transmission, such as Security Monitoring System, hidden interview, audio-visual education, tourism, amusement, field expedition, the industrial and mining enterprises, and so on.

Technique Parameter

1. **Frequency band**: ISM/UHF band. GM use fixed frequency point and GMDJ use broadband to transmit signal.

2. **Transmission distance**: 2800m (max 7km) in widen area, which is according to its using conditions.

3. **Power supply**: the monitor head uses a high energy Lithium battery witch can be used for 16 hours in total. The receiver uses two 7th batteries of 1.5V witch can be used for 24 hours in total.

4. **Sensitivity** (all directions) of sound picking up is better than 12dB. Differentiate rate is high within 200 square meters. Impedance of audio input circuitry is low.

Use Instructions:

1. Switch ON the monitor head JT to enter work state and place it at the position away from the main sound source of 1~5m with the antenna extended previously. Plug earphone into the hole marked with EAR of the receiver, and turn on the power switch (V0L/0FF) to a fit volume for hearing the scene sounds. GMDJ needs to rotate the tune button to receive the signal. The trumpet is to be used when the earphone is removed. If the monitoring distance is longer, please mount the rubber antenna to the receiver and rotate it gently to the end. Don’t screw down too much. When the distance is short, the rubber antenna may not be mounted.

2. A compatible cable can be used to connect the sound pickup with the secondary equipments such as recorders, amplifiers, stealth headphones, wire or wireless relays, etc. through inserting one end of the cable to the hole (3.5 mm) marked with A-OUT of audio output Regulating V0L can control the electrical level output. It can realize the second relay transmission to use with GMB.
3. The jack (3.5mm) of the monitor head can be input all kinds of audio signals wireless, which can be regulated for a loud and distortionless sound.

4. The monitor head will be auto power off when the electric energy has been used up. Please charge in time with the charger of 5Vdc and 300mA. When charging, the power switch should be turned off. The charger can be used as an external power under the state that the electric energy has been charged enough (the green light die out). There may be light AC noise that would be reduced or disappear when expanding the receiving distance.

5. When the monitoring distance is longer, please carefully adjust the direction and position of the receiver to keep its best receiving state. There will be blind spots (some closer points have weaker signals) in dense buildings area because of signals have been greatly changed by being obstructed and multiple reflections. It is particularly important how to choose a suitable receiving point and position for the monitor-head, and the receiver should be as high as possible or in an open space. The monitor-head should be near the window when used in a room. The fewer the building obstructs are between the receiver and the monitor-head, the farther the transmission distance is.

6. Transmission distance is deeply affected by use environment and climatic conditions, such as, the higher place is better than the lower place, the widen area is better than the building dense area, the suburb is better than urban area, the evening is better than daytime, and signal is stronger in the direction parallel to the antenna. Users can use the sound pickup and the receiver according to foresaid points.

Notes:

1. Please use high quality alkaline batteries and do not use 1.2V recharging batteries for the receiver. Please cut off the power supply in time after use and pay attention to the polarity of the batteries to avoid damaging the product. Please take out the batteries if the product is not in use for a long time. The sounder should be stored after it has been charged full and recharged once every two months.

2. Don’t use the trumpet to listen in but use the earphone to improve its monitor sensitivity if the transceivers are in the same room. The transceivers should be used assorted.

3. Recharge the monitor head when it was auto powered off (continue to charge for an hour or more after the green light black out.) and thus can maximize the stored electric energy and extend the lifetime of the batteries.
4. The distance between the sound pickup and the sound source decides the clarity and the differentiate rate of the sounds. It will cause sound distortion and injury to the hearer’s eardrum to speak loudly to the sound pickup.

5. It is not appropriate to use the product in locations where radio interference is serious and background noise is loud. The quieter the environment is, the better the results of pickup are. The less the interference is, the farther the transmission distance is.

6. Don’t place the sound pickup near the home appliances in use, such as the computer, the TV and the reading lamp whose light can be adjusted to avoid interference. And also don’t place it in the metal structures, floors, walls and basements, otherwise the pickup distance will be seriously affected. It’s normal there is echo monitoring in closed room.

7. This product is only for legitimate use. It is strictly prohibited to violate others’ rights. The users are responsible for any results caused by violation.

**Index Test Explanation:**

This product has been tested with special instruments before leaving factory, and all indexes have met the requirements.

**Pickup sensitivity:** Normal human ear can hear the voices of 5dB ~ 25dB (decibels). Pickup sensitivity of this product is equivalent to hearing whispers and breathing two meters away in a quiet room. For the high pickup sensitivity and whole direction pickup, as well as that the seemingly quiet environment often has more than 20db noise of natural, therefore, it was recommended to use the product in quiet locations to increase its signal-to-noise ratio and differentiate rate.

**Transmission distance:** This index is deeply affected by use environment, radio interference and climatic conditions. The factory standard test conditions are a widen area without near frequency interference in daytime, the height is not less than 8 meters, the effective sight distance of transmission is 3000 meters. The signal quality is better than 56 grades when testing between braes of 150 meters high about that has two times of the sight distance namely six kilometers about.