

No Audio

1. Verify the power connection on the transmitter, your audio source and your receiver is on.
2. Try adjusting the audio input level on the transmitter. If that doesn't help, try adjusting the volume of your audio source.
3. Check your audio cable and make sure it is connected to the right audio source.
4. Check your frequency channel setting on your back side of the transmitter and receiver

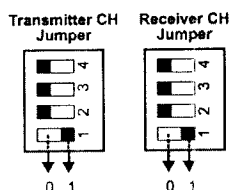
Avoiding Interference

The 2.4GHz transmitter/receiver are manual digital-switched frequency channels from 2.412 to 2.484 GHz, totally 8 RF digital channels. Our technology avoids any same radio frequency to interfere with your kits. In case your output receiver devices still have interference happened, please change the channel switching jumper setting on back side of transmitter and receiver from channel 1 to 8 as shown as below figure, until you find a appropriate channel to have a better receiving quality in your area.

Setting the channel

Note: Both the transmitter and any receiver you use:

1. Should be powered off before setting or changing the channel
2. Should be set to the same channel



Channel No.	Register	Format				
		MSB	LSB			
1 (U.S.A)	2412MHz	0	0	0	0	
2 (U.S.A)	2422MHz	0	0	0	1	
3 (U.S.A)	2432MHz	0	0	1	0	
4 (U.S.A)	2442MHz	0	0	1	1	
5 (U.S.A)	2452MHz	0	1	0	0	
6 (U.S.A)	2462MHz	0	1	0	1	
7 (Europe)	2472MHz	0	1	1	0	
8 (Japan)	2484MHz	0	1	1	1	

Orientation of the Antennas

Proper orientation of the antennas is important for good performance. You may find that the system works better with one or more of the antennas in the horizontal (flat) position. The receiver and transmitter tend to operate better in high locations, where the signal path is wider and stronger (on a shelf, for example).

Expansion of Output Receivers

One of the major feature of Mgear M36A is that one transmitter can digitally broadcast to many receivers (up to 100 receivers) at the same time, if user would add more expansion receiver sets, you can purchase more Mgear receiver sets and connect to expanded speakers or headphone for more persons' enjoyment.

Troubleshooting

Most problems you encounter with your M36A can be corrected by consulting the following troubleshooting list.

- Transmitter or receiver won't turn on: Make sure both the transmitter and receiver are plugged in.

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- Mgear troubleshooting contact: you can drop us a e-mail to mgear@parner.com.tw then our customer service staff will respond to you very soon

CARE AND CLEANING

CAUTION: Turn OFF your unit before cleaning. Keep the transmitter/receiver dry. If it gets wet, wipe it dry immediately. Use and store the transmitter only in normal temperature environments. Handle the transmitter/receiver carefully; do not drop it. Keep the transmitter/receiver away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the transmitter or receiver's internal components can cause a malfunction and might invalidate its warranty. If your transmitter/receiver is not performing as it should, take it to your local reseller store for assistance.

ELECTRONIC SPECIFICATION

Electronic Specification: Transmitter

Spec	Details
Frequency band	2400~2483.5GHz
Modulation	PI/4 DQPSK with DSSS
Channel number *	8
Channel spacing	10MHz
Transmission range	Above 100 meters clear line-of-sight (300 feet), indoor above 30 meters (100 feet)
Supply voltage	5 V
Current consumption	420 ± 30 mA (with load)
Operating temperature	-10 ~ +55°C
Channel switching	Controlled by microprocessor and changing sequentially by a tact switch (push button)
Audio Interface	Frequency stability
	TX output power
	Channel
	Input Level
	Resolution
Frequency response	Sampling rate
	Frequency response
	Dynamic range@1KHz
	Crosstalk@1KHz
	S/N ratio@1KHz
General certification	THD+N@1KHz
	General certification
	Dimension
	Connection ports

(Testing Condition: Supply voltage: 5V; Ambient Temperature: 25°C)

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don't have to worry about the units being close to each other. Other barriers in your house may affect the signal, so you may need to adjust the positions of the transmitter and receiver somewhat.

Audio is distorted

Some audio sources output level is either too high or too low at the line out jack. If it is too high, the sound might be distorted. If it is too low, the sound might be too small. We suggest you can maximum your audio source volume (above 1/2 volume level) and adjust the volume level on your output device for your appropriate enjoyment.

Electronic Specification: Receiver

Spec	Details
Frequency band	2400~2483.5GHz
Modulation	PI/4 DQPSK with DSSS
Channel number *	8
Channel spacing *	10MHz
Supply voltage	5 V
Current consumption	290 ± 30 mA (with load)
Operating temperature	-10 ~ +55°C
Channel switching	Auto scanning with microprocessor and triggered by a tact switch (push button)
Sensitivity (BER=0)	± 82dBm
Audio Interface	Channel
	Output Level
	Resolution
	Sampling rate
Frequency response	20Hz ~ 20KHz
	Dynamic range@1KHz
	Crosstalk@1KHz
	S/N ratio@1KHz
	THD+N@1KHz
Digital amplifier (passive model)	10-Watt class-D amplifier
General certification	FCC, CE, EMI, EMS and specific country approvals
Dimension	L110×W70×H32mm weight 95g (main box)
Connection ports	AC/DC jack, Tact switch jumper port, audio jack

(Testing Condition: Supply voltage: 5V; Ambient Temperature: 25°C)

WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

WARNING

RISK OF ELECTRIC SHOCK DO NOT OPEN

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

To reduce the risk of electric shock, do not remove covers (or back). The user serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates important instructions accompanying the product.

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LIMITED WARRANTY

What your warranty covers:

Defects in materials or workmanship.

For how long after your purchase:

- 90 days from date of purchase - Unit repair or exchange, which includes parts and labor.
- 91 days to 1 year from date of purchase - Unit repair or exchange, which includes parts only; you pay the labor.

What we will do:

During the Initial 90 days:

Repair or exchange the defective portion of your M36A. If the unit is replaced it will be with a new or, at our option, refurbished unit.

After the 90 days and within one year:

Repair or exchange the defective portion of your M36A. If the unit is replaced it will be with a new or, at our option, refurbished unit.

We will charge you a flat rate to repair or replace a defective M36A. This charge covers the labor cost for its repair.

How you get service:

- Call your local reseller and have your unit's date of purchase and model/serial number ready. The model/serial number information is on your unit. Also, please prepare below document before your return to the reseller: Evidence of purchase date such as a bill of sale, a brief note describing your unit's problem, your name, address and phone number.
- Write a email to Mgear customer service at mgear@parner.com.tw, our representative will troubleshoot your problem over the e-mail.

What your warranty does not cover:

- Acts of nature, such as but not limited to lightning damage.
- Adjustment of customer controls.
- Damage from misuse or neglect.
- A unit that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- Shipping damage if the unit was not packed and shipped in the manner prescribed.

M.gear

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Web: <http://www.mgeartech.com/> E-mail: mgear@parner.com.tw

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The operating frequency channel will be restricted to the country user located by software before importing.



M36A- Wireless Digital 2.4GHz Audio Kits User Manual

INTRODUCTION

M36A is a state-of-the-art digital audio kits for transmitting your high-quality audio/music from your TV/LCD TV/DVD/CD/Game console/Media Music Player/PC to your home theater speaker/remote Hi-Fi speaker/headphone. With the versatile Mgear 2.4GHz digital audio signal transmitter and receiver kits, you can use and control your home stereo and theater components from any room of your home wirelessly-even an upstairs den, a basement recreation room or even on remote speaker in your garden. It eliminates the need to move cables from room to room and makes listening to audio music much more convenient. This system uses the 2.4GHz band to avoid interference from cellular/cordless phones, microwave and other wireless devices and to provide greater range.

You can transmit high-quality audio signals to rear side speakers of your home theater system or your Hi-Fi stereo headphone anywhere in your house or office, or even transmitting to another room's powered speakers in your home, or even to your garden area for broadcasting speakers while working or playing in the backyard. You just connect the output (stereo audio signal RCA jacks) of your audio sources (TV/ DVD/ PCs/Game console/music player) to the 'transmitter' kit audio-in port, the remote 'receiver' kit to catch the signals and output the received audio to your powered home theater speakers ("active" model receiver connects active speaker that is included amplifier, "passive" model receiver connects passive speakers that is without amplifier but receiver do include one class D amplifier), remote Hi-Fi speaker or your personal headphone (connect active receiver), you also can extend more receivers to receive in every area. It's simple wireless high-quality audio solution to broadcast your audio to speaker systems and sounds great!

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Typical uses for the M36A include: TV/LCD TV, DVD/CD players, Game console/ PS2, Xbox, Media Music Player, Portable Digital Audio players (MP3 player, iPod/iPod... jukebox,), tape player, Mini-disc players, Laptop, Desktop Computers, Cellular phone or PDA with MP3/line-out jack, and Satellite Radios. The M36A is not only compatible with every audio player, but it will wirelessly transmit to receiver and powered speakers or headphone applications for better audio enjoyment.

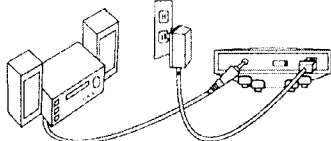
CONNECTIONS AND OPERATION

Audio Transmitter Setup

Connecting the M36A Transmitter to your Audio Source

1. Connect the 2-meter long audio cable (either standard audio terminal or RCA terminal cable depends on your audio source interface) to your audio device in following configurations. Please see below figure to install and make sure your audio device volume is at appropriate volume level.
 - From your TV/LCD TV set: Connect the audio cable to the line-out headphone jack or audio-out RCA ports of the TV, then open your TV program on.
 - From your CD/DVD player or speaker amplifier: Connect the audio cable to the line-out RCA jacks, then play your CD content
 - From your Game Console player: Connect the audio cable to the line-out RCA jacks or audio-out jack, then play your DVD program
 - From Digital audio player (MP3 player/Jukebox): Connect the audio cable to the line-out jack or headphone jack of the MP3/jukebox player. Then start playing songs in your MP3 or jukebox player.
 - From your computer: Connect the audio cable to the headphone jack or audio output of the computer's sound card. Then playback your computer's audio file
 - From your cellular phone or PDA handheld or Satellite Receiver device: Connect the audio cable to attach to headphone jack of your cellular phone and PDA device (depends on your phone and PDA models to have the function), then playback of your music file
2. Insert your home power adapter plug properly and connect to the AC/DC jack of audio transmitter, the power on LED light indicator is illuminated on the cover of the box
3. Make sure the radio frequency jumper is the same with receiver jumper (factory default tune is okay to transmit, but settings can be configured to suit in the event of interference)
4. If there is any noise caused by other radio interference to transmitter, press the auto button on top of transmitter for better receiving audio quality if needed
5. Raise the antenna on the front of the unit so it is straight up.

6. Warning: This device has shut down during +8kV air discharge, but it can be recovered by manual, as the events disappear, so please remove the device once such condition happened.



Audio Receiver Setup

Connecting the M36A Receiver to your Powered Output Source

1. The receiver has two models, one is "active" model receiver and the other is "passive" type which is marked on back side label of the receiver.
2. Connect the 3.5mm stereo audio cable (either standard audio terminal or RCA terminal cable) to your audio output jack of receiver, and the other side can be configured with the following output options.

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FCC/CE STATEMENT

This device complies with Part 15 of the FCC and CE Rules basically, other countries' approval is to be added before entering into the market place. 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

The operating frequency channel will be restricted to the country user located by software before import

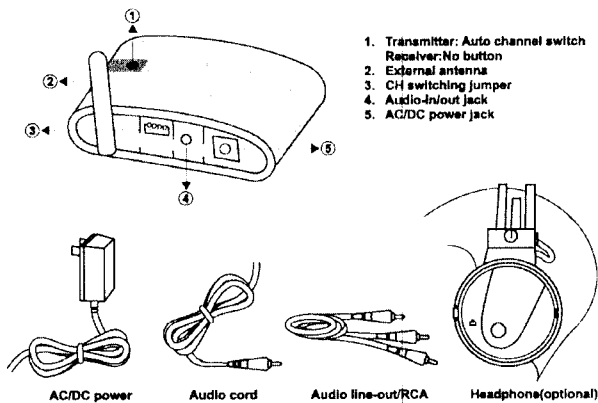
Warning:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded cables must be used with the unit to ensure compliance with the Class B FCC and CE limits.

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

PACKAGING & COMPONENT DETAILS

Transmitter kit, Receiver kit (Active model or Passive model, see back side label marking), 2 Home power adapters, 2-meter audio cable, 2-meter audio-in RCA cable, 3-meter audio-out RCA cable, User manual, Hi-Fi full-range stereo headphone (optional)

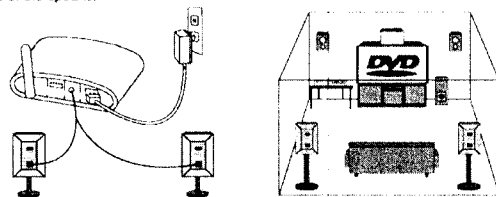


COMPATIBILITY

One of the many unique features of the M36A is that it was designed to work with any audio source devices (TV/LCD TV/DVD/CD/Game console/Media Music Player/PC) that uses a standard RCA line-out jack or 3.5mm headphone or line-out jack. This means that no matter what audio devices you may have, the M36A is compatible and will be able to broadcast to your powered outputs of speaker or headphone.

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2-1. To your Home Theater Rear/Front/Subwoofer Speaker: Connect the 3-meter RCA audio cable to the audio-in ports of the speakers, if your speakers are passive type (that means no amplifier inside of your speaker), you have to use M36A receiver with Class-D amplifier model to drive your speaker (otherwise, your passive speaker won't have a loud output). Please see below figure of normal home theater configuration. If your powered speakers are active speakers (that means there is amplifier inside of your speaker), you can directly connect to audio-out cable to your M36A normal receiver. Then turn on your speaker set power. Note: If your speaker audio connector is metal-pin contact, you have to cut RCA connector by cutting tool and remove the insulation cover of audio cable, then pull the metal-pin to attach your back side of the speaker



2-2. To your Remote Hi-Fi Speaker Indoor/outdoor: Connect the 3-meter RCA audio cable to the audio-in ports of the speakers, if your speakers are passive type (that means no amplifier inside of your speaker), you have to use M36A receiver with Class-D amplifier model to drive your speaker (otherwise, your passive speaker won't have loud output). If your remote speaker is active speakers (that means there is amplifier inside of your speaker), you can directly connect to audio-out cable to your M36A normal receiver. Then power on your speaker set. Note: If your speaker audio connector is metal-pin contact, you have to cut RCA connector by cutting tool and remove the insulation cover of audio cable, then pull the metal-pin to attach your back side of the speaker

- 2-3. To your Hi-Fi Headphone:** Directly connect your audio cable plug of headphone to the receiver audio-out jack
3. Insert your home power adapter plug properly and connect to the AC/DC jack of audio receiver the power on LED light indicator is illuminated on the cover of the box
 4. Make sure the radio frequency jumper is the same with transmitter jumper (factory default tune is okay to receive, but setting can be configured to suit in the event of interference)
 5. Raise the antenna on the front of the unit so it is straight up.

ADDITIONAL INFORMATION Tips To Make It Work Better

Location

Optimum placement for the transmitter/receiver are away from other relevant digital 2.4GHz RF transmission electronic devices. The higher the transmitter is located the better audio receiving quality. Keep metal objects away from the external embedded antenna.

To get the best signal reception, the transmitter/receiver units should face each other using an imaginary "line of sight." You can place the transmitter and receiver in separate rooms, separate floors of your house, or even in your front/back yard garden to enjoy output enjoyment. So you

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