

# MIPRO G2 Innovative Products



# Company Profile

## Foundation

In 1995, MIPRO was founded in Chiayi, Taiwan by founder K. C. Chang. Solomon Chang is the company president. They lead a team of specialized and seasoned R&D engineers, in designing, manufacturing and selling wireless pro-audio products based on the motto "innovation, quality and satisfied users".

## Development

In 1996, the founder purchased an urban area land of 5,000 m<sup>2</sup> in Chiayi to build a modern corporate headquarters and factory.

In 1997 new year, the headquarters and factory were completed and started.

In 1999, the Taipei showroom and office started operation.

In 2001, the headquarters and factory got 1st expansion, and were completed and started.

In 2006, the headquarters and factory got 2nd expansion, and were completed and started. The size of the headquarters and factory was expanded to 12,600 m<sup>2</sup> and a 10th-anniversary celebration was held.

Since 2007, adjacent land was purchased to anticipate future expansion needs. Today, MIPRO has an industrial land total area of 13,550 m<sup>2</sup>.

In 2020, MIPRO continues to develop and manufacture wireless audio products. MIPRO has developed hundreds of innovative wireless pro-audio products by a team of seasoned R&D engineers and 199 employees. MIPRO mass-produces all products under ISO-9001 and ISO-14001 standard, efficient production management system, and markets worldwide under the "MIPRO" brand at key pro-audio trade shows worldwide. For 25-year of steady growth, now MIPRO is the largest wireless audio products manufacturer in Taiwan.

## Background

1. The founder of MIPRO is a seasoned sound and wireless microphone engineer. He leads a team of professional electronics, mechanic and software engineers to develop and manufacture all products in the factory.
2. A microphone capsule is the "heart" of a microphone. The founder specializes in designing condenser microphone capsules, therefore all of MIPRO's vocal microphone capsules are designed and mass-produced in-house.
3. The R&D team includes seasoned engineers with Ph. D. degree of electronics and tens of years' experience engineers, who are in charge of designing innovative products.
4. Experienced pro-audio application engineers are responsible for technical support, such as application consulting, installation planning and seminars.
5. An after-service center provides trustworthy repairing service for worldwide customers.



MIPRO Founder & CEO: K.C. Chang



MIPRO President: Solomon Chang



New facility completed on 1st January 1997



Corporate headquarters and factory expanded twice to 12,600 m<sup>2</sup>

# Company Profile



Research and Development Team



Production line

## Awards

Since 2002, many outstanding products have been nominated in the TEC Awards' Wireless Technology category.

In 2006, MIPRO introduced industry's first digital wireless system and portable wireless PA systems, and won Taiwan Excellence awards.

In 2008, Gary Kaye, A/V consultant & educator, stated that MIPRO is one of the "TOP Six Brand in the World".

In 2012, won "National Invention & Creation Award - Contribution Award" and MIPRO's president, Solomon Chang, won the "National Executive Manager Award."

In 2013, received the prestigious "Rising Star Award."

In 2014, won the "Financial Times-Standard Chartered Taiwan Business Awards - Economic Contribution Award."

In 2016 and 2017, the portable wireless PA systems continuously won the German Red Dot Design Award.

In 2018, the plug-on transmitter was awarded "iF DESIGN AWARD."

In 2019, the digital wireless musical instrument series was awarded "Honourable Mention" in Red Dot Award: Product Design 2019.



Taiwan Business Award



Rising Star Award



National Invention & Creation Award



National Executive Manager Award



First Brand



Taiwan Gold Medal Quality Product



reddot design award winner 2017



TEC Award



TAIWAN EXCELLENCE 2015

## Prospect

MIPRO continues to develop the most advanced wireless audio products and all quality products are "Made in Taiwan" and marketed worldwide to become one of the industry's leading brands.



reddot award 2019 honourable mention

Wins prestige awards consecutively

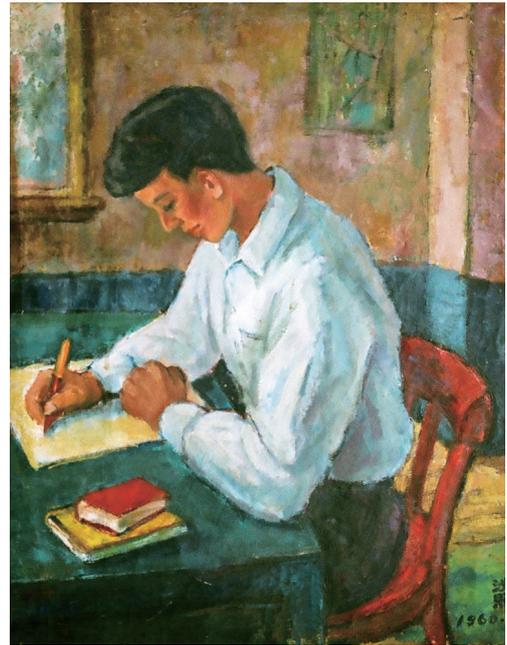
# Founder Profile

## Birth and Education

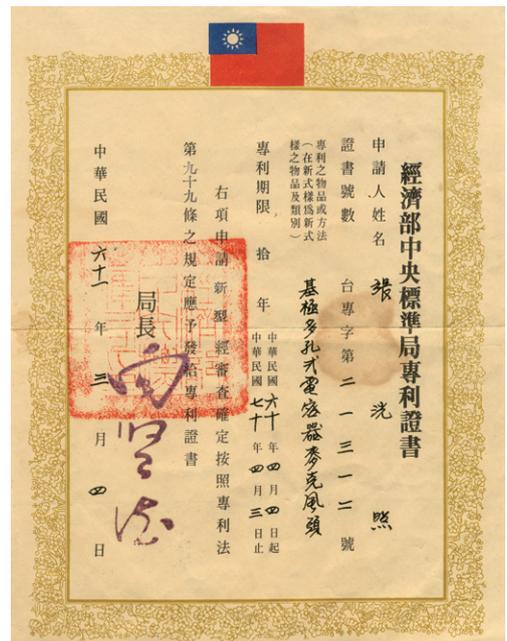
- In 1937, born in Chiayi city, Taiwan.
- In 1944, studied in Chiayi Tamagawa Elementary School (Japanese school, rename Chung-Wen Elementary School after World War II).
- In 1950, studied in the National Chiayi Senior High School.
- In 1956, studied in the Department of Arts at National Taiwan Normal University.
- In 1960, graduated from NTNU and returned to his hometown being a teacher and later created his own business.

## Entrepreneurship

- In 1962, opened the “Sue-Hai” radio and audio shop.
- In 1970, designed the first true condenser microphone capsule and obtained Taiwan’s first patent of the microphone (Taiwan patent No. 21312).
- In 1970, designed and produced the first FM wireless microphone to create a new generation of wireless microphones in Taiwan.
- In 1971, founded Chiayo Electronics Company, the first Class-A wireless electronics factory to legally manufacture and sell wireless microphone systems in Taiwan. He served as the president and chief engineer. After 24 years of management, the company's performance was ranked as one of the top 500 in Taiwan by the Ministry of Economic Affairs.
- In 1972, the first to research “Electret” technology and mass-produce Electret Condenser Microphone capsule in Taiwan.
- In 1975, designed the first wireless microphone to obtain Taiwan Telecom approval for legal commercial sales and applications in Taiwan.
- In 1981, designed the first VHF Quartz-control fixed frequency wireless microphone system in Taiwan.
- In 1983, the first wireless microphone made in Taiwan to obtain FCC approval to sell legally in the U.S. market.
- In 1989, the first designed and produced portable wireless PA system in Taiwan and won the “Taiwan Excellence Design Award”.
- Since 1991, he has led a team to exhibit at Frankfurt Prolight + Sound Exhibition for 30 consecutive years.
- In 1992, designed and produced the first UHF fixed frequency wireless microphone system in Taiwan.
- In 1995, sold the CHIAYO Electronic Company to his sister with emblematic price, the brand name, products technical and all sales market without charges.



A graduation work collected in NTNU Fine Art Museum



Utility patent (Taiwan patent No. 21312)

# Founder Profile

In 1995, established MIPRO Electronics Company by sole proprietorship and served as CEO.

In 1996, designed and produced the first UHF PLL 16-channel wireless microphone system in Taiwan.

In 2011, nominated and received distinguished 11th alumni awards by National Taiwan Normal University.

In 2012, nominated and received distinguished 6th alumni awards by National Chiayi Senior High School.

In 2014, based on his technical expert of the ECM capsule, he invested to develop vocal ECM capsule modules and mass-produce them in-house with modernized equipment.

In 2015, invested to develop vocal dynamic microphone capsule modules and mass-produce them in-house with modernized equipment.

In 2020, leads the seasoned R&D team to redesign and achieve the second-generation new models.



Taiwan first portable wireless PA system WM-505



Taiwan first VHF wireless microphone system Q-303



MIPRO's Tenth Anniversary



Founder of Chiayo Electronics, K. C. Chang



NTNU 11<sup>th</sup> Distinguished Alumni Award



Founder of MIPRO, K.C. Chang



National Chiayi Senior High School 6<sup>th</sup> Distinguished Alumni Award

# 2021 New Products

MIPRO has been manufacturing and marketing wireless microphone systems and wireless portable PA systems for 25 years. MIPRO CEO leads our seasoned R&D team to redesign both in appearance, circuitry and upgrading performance with the advanced technology this year, and provides the 2nd generation innovative products as below:

## 1. ACT-800 Series Digital Wideband New Receivers

The ACT-800 Series consists of ACT-848 1U quad-channel, ACT-828 1U dual-channel and ACT-818 1/2U single-channel digital wideband receivers with upgraded 72 MHz bandwidth for greatly improving the receiving range and increasing interference-free compatible channels. The receivers have the same metal chassis, VFD, control panel, operation and display mode. Dante interface is standard equipped and optional AVB interface is available. Compatible with ACT-800H and ACT-800T transmitters.



## 2. ACT-500 Series Analog Narrowband New Receivers

The ACT-500 Series consists of ACT-545 1U quad-channel, ACT-525 1U dual-channel and ACT-515 1/2U single-channel narrowband receivers with upgraded MIPRO's typical professional narrowband true diversity receiving circuit. The receivers have the same newly designed metal chassis, LCD, control panel, operation and display mode. Optional Dante or AVB network interface are available. Compatible with ACT-500H and ACT-500T transmitters.



## 3. ACT-300 Series Analog Narrowband New Receivers

The ACT-300 Series consists of ACT-343 1U quad-channel, ACT-323 1U dual-channel, ACT-312 1/2U dual-channel and ACT-311 1/2U single-channel narrowband receivers. Keeping the chassis of ACT-3 Series and equipped with professional narrowband diversity receiving circuit. Compatible with ACT-32H and ACT-32T transmitters. If the rechargeable models are needed, upgrade to ACT-500H and ACT-500T transmitters which accept either one lithium-ion battery or two AA batteries.



## 4. ACT-5800 Series ISM 5.8 GHz Digital New Receivers

The ACT-5800 Series consists of ACT-5814A quad-channel and ACT-5812A dual-channel receivers in 1U metal chassis with detachable antenna, and ACT-5802 dual-channel and ACT-5801 single-channel receivers in 1/2U metal chassis with built-in antenna, and equipped with 5 GHz band true diversity receiving circuit. The metal chassis, control panel are consistent with ISM series receivers. Compatible with ACT-580H and ACT-580T transmitters.



## 5. ACT-H Series New Handheld Transmitters

1. The new ACT-H Series consists of UHF ACT-800H digital wideband, ACT-500H analog wideband, and ACT-580H, ACT-240H ISM band digital handheld transmitters.
2. With the same full metal housing features an ergonomic and aesthetic design.
3. A patented power switch module.
4. The patented battery compartment can be inserted with AA batteries or lithium rechargeable battery, charging via USB Type-C.
5. A patented antenna shield cover houses a high-efficiency wideband transmitting antenna and USB Type-C charging socket.
6. Color-coded channel identification ring is put on the end of the housing.
7. Accepts all MIPRO new interchangeable microphone modules and some other brands' with similar specifications.



## 6. ACT-T Series New Bodypack Transmitters

1. The new ACT-T Series consists of UHF ACT-800T digital wideband, ACT-500T analog wideband, and ACT-580T, ACT-240T ISM band digital bodypack transmitters.
2. The patented battery compartment can be inserted with AA batteries or lithium rechargeable battery, charging via USB Type-C.
3. The audio input can be switched to low impedance Mic-in "MT" or high impedance Line-in "GT" for match up the input impedance.
4. A belt clip for easy wearing.



## 7. ISM 5.8 GHz Extension Antenna and Booster

AT-58 ISM 5.8 GHz extension antenna and MPB-58 booster provide long distance reception.



# 2021 New Products

## 8. ISM Band Digital Tour-Guide System

ACT-24R miniature digital true diversity receiver operated in 2.4 GHz ISM band can be paired up with 2.4 GHz transmitters.



## 9. ISM Band Musical Instrument Wireless New Pedal Receiver

MR-58 wireless pedal receiver operated in 5 GHz ISM band can be paired up with various musical instrument transmitter sets.



## 10. Receiver Power Supply Storage Case

MPC-100 is a unique AC power supply storage case for rack-mount to simplify multiple receivers' power supply installation.



## 11. MA-II Series Portable Wireless PA Systems

1. The second-generation MA-II Series offers three new innovative wireless portable PA models: MA-929 Pro New Flagship, MA-828 New Flagship and MA-727 New Luxury.
2. Each innovative speaker cabinet with two-way MTM design has three built-in high-efficiency power amplifiers to drive 3 loudspeakers and deliver the most powerful and clear sound output.



## 12. MA-II Series Personal Wireless PA Systems

MA-II Series offers MA-300 personal wireless PA, MA-200 luxury personal wireless PA and MA-100 compact personal wireless PA.



## 13. New MU-Series Condenser and Dynamic Microphone Modules

The new MU-Series consists of MU-90A, MU-80A, MU-70A condenser and MU-59A, MU-39A dynamic microphone modules, and all are manufactured in-house to fit MIPRO's new handheld wireless microphones.



## 14. Measurement Microphone

MM-100 professional omnidirectional microphone is designed for sound field measurement in pro-audio installation, and can also be used for piano, chorus and musical instruments pick-up and recording.



## 15. Recording Microphones

MM-300 and MM-500 professional cardioid high sensitivity recording microphones are designed for live shows and musical instruments pick-up and recording.



MM-100 MM-300 MM-500

## 16. ISM 5.8 GHz Digital Stereo Wireless IEM System

The MI-58 Series consists of MI-58R stereo bodypack receiver, MI-58T stereo transmitter and exclusive noise-cancelling earphones. Designed for personal and professional stages monitoring and international conference language interpretation.



## 17. ISM 5.8 GHz Digital Plug-on Transmitter

The TA-58 ISM 5.8 GHz digital plug-on transmitter with balanced XLR mic input jack, designed for use with measurement microphones, zoom mic (shotgun), condenser / dynamic wired microphones, recording microphones and musical instrument microphones. Pairing with any ISM 5.8 GHz receiver for wireless transmission, the TA-58 solves the problem of cable tangling and keeps optimal sound reproduction.



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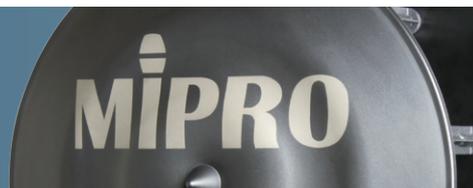
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# 1. Wireless Microphone Systems



# Wireless Microphone Systems

## Why Choose MIPRO Wireless Systems?

MIPRO founder has devoted to develop himself wireless microphones for more than 50 years and continue to lead a team of experienced engineers to design and manufacture in Taiwan with the advanced equipment and computerized production lines, continue to produce the most advanced products to provide a various series of models for large-scale live shows, pro audio installation and karaoke applications. MIPRO will also never OEM from other countries to provide low-price and low-end products.

## Why Choose Digital Wireless System?

The digital wireless system is a world trend and a major revolution in sound quality. It eliminates the phase distortion of high and low frequencies and compander noise that inevitably exist in analog systems, and improves sound quality which often deteriorates over distance and receiving signal strength. Thus it delivers the wireless sound quality almost the same as a wired system. Besides, digital encryption provides a secure audio transmission and prevents eavesdropping. Hence, a digital wireless microphone system can integrate with the modern digital audio professional equipment and possess natural sound.

## 2021 MIPRO Wireless Microphone Systems

1. ACT-800 Series UHF Wideband Professional Digital Wireless System
2. ACT-700 Series UHF Wideband Professional Analog Wireless System
3. ACT-500 Series UHF Narrowband Professional Analog Wireless System
4. ACT-300 Series UHF Narrowband Leading Analog Wireless System
5. ACT-5800 Series ISM 5 GHz Digital Wireless System
6. ACT-2400 Series ISM 2.4 GHz Digital Wireless System

## 1. ACT-800 Series UHF Wideband Professional Digital Wireless System

### Why Choose ACT-800 Digital Wireless Microphone System?

MIPRO took lead to introduce professional digital wireless systems in 2006 and became a pioneer of the industry. In 2020, the ACT-800 Series RF receiving circuitry design was transferred from the wideband professional analog ACT-700 Series. Therefore, ACT-800 Series has the same specifications as the analog ACT-700 Series in RF, signal stability, bandwidth, and interference-free multiple channels operations. However, it is noticeably superior to an analog system in sound quality. Therefore, choose ACT-800 Series to integrate with the modern digital pro audio equipment in any professional applications to achieve the most reliable performance and natural sound.

### ACT-800 Series Profile

1. In 2006, MIPRO launched the industry-leading ACT-8 Series digital wireless system which was nominated in the 23rd TEC Awards' Wireless Technology category in 2007.
2. In 2012, MIPRO launched the ACT-828 dual-channel and ACT-818 single-channel digital wireless systems which were awarded the 2015 Taiwan Excellence.
3. In 2020, MIPRO launched new ACT-848 1U quad-channel, ACT-828 dual-channel and ACT-818 1/2U single-channel wideband digital receivers. The receivers are paired with the latest ACT-800H handheld transmitter and ACT-800T bodypack transmitter. The ACT-800 Series is the most advanced digital wireless system in the market today.

# Wireless Microphone Systems

## ACT-800 Series Receivers



### Features

1. Share the EIA standard metal chassis, and a newly designed VFD screen, monitor headphone jack, rotary control knob and buttons are equipped on the control panel which is consistent with the same operations and display modes of the other series. The analog audio output, AES/EBU digital output, Dante or AVB network interface output and MIPRO RCS2.Net interface connectors on the rear panel.
2. Exclusive 72 MHz wideband digital diversity circuit greatly improves the reception range and increases interference-free compatible channels. Full-range sound quality is not affected by the strength of RF signals or operating distance.
3. Proprietary 256-bit encryption prevents eavesdropping.
4. MIPRO Auto Scan and ACT™ function provide the transmitter's frequency with precise and rapid sync to the receiver.
5. There are 7 preset groups with a total of 224 pre-saved channels. The user-defined group allows users to choose and save up to 16 channels from 2,881 available frequencies.
6. Each channel has separate audio output and 3 switchable levels, and the preset output level equals the sensitivity of the microphone capsule at 0 dB. All is to ensure the microphone operates within proper sensitivity and dynamic range, free from distortion.
7. The DSP audio processor and D/A converter make the sound quality almost the same as the wired microphone.
8. Equips the Dante or AVB digital network interface. Optional MIPRO RCS2.Net software connects to MIPRO DVU drive connector and allows real-time network remote-controlling and monitoring up to 64 channels. Additional new FSA software connects to MIPRO DVU drive connector and allows users to calculate interference-free compatible channels and link to the network.
9. Paired with ACT-800H handheld and ACT-800T bodypack transmitter.
10. Designed and made in Taiwan ensures high quality and value.

### Specifications

Model	ACT-848	ACT-828	ACT-818
Chassis	EIA-Standard 19" 1U metal chassis		EIA-Standard 1/2U metal chassis
Monitor Output	Monitor headphone jack with volume control		N/A
Network Interface	Dante or AVB (optional)		N/A
Display	A newly designed color VFD		
Frequency Range	UHF 480 ~ 934 MHz (country dependent)		
Bandwidth	72 MHz		
Receiving Mode	Digital diversity receiving		
Sensitivity	12 dB $\mu$ V @ S/N > 100 dB		
Audio Processing	DSP audio processor eliminates the compander noise that exists in analog systems.		
Frequency Response	20 Hz ~ 20 kHz (< -2 dB)		
Dynamic Range	> 120 dBA		
Latency	2.9 ms		
Audio Output	AES / EBU digital interface. Analog balanced output, +16 dB / 0dB / -6 dB switchable.		
EQ	Presets 10 digital audio and anti-feedback EQ		
PC Interface	USB interface. MIPRO ACT-BUS for remote-control of up to 64 channels. FSA compatible channels calculator software allows users to manually set compatible channels. (Sold separately)		
Antenna	Detachable. 50 $\Omega$ TNC female connector provides bias for the MIPRO antenna systems.		
Power Supply	External 100~240V AC switching power supply		
Note	Refer to the actual product in the event of product discrepancy.		

# Wireless Microphone Systems

## ACT-800H Handheld Wireless Microphone



### Features

1. The microphone with metal housing features aesthetically designed in the most elegant “Guanyin vase” shape and the most comfortable handheld size. The surface is special champagne gold color and presents the ultra-low handling noise and a luxurious professional appearance. (Customized matte black color is available)
2. The unique metal grille of the microphone capsule module can be divided into the upper grille and the lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an external thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.
3. The patented power switch module integrates mute, set buttons, LCD and power switch lock hook for convenience to operate and prevents the power switch from accidental operation.
4. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.



5. A color-coded channel identification ring is put on the end of the housing. A patented antenna cover on the bottom of the housing built in a high-efficiency wideband transmitting antenna and USB-C charging socket.
6. Pair with all MIPRO's new interchangeable microphone modules featuring high dynamic range for loud singing without distortion. Also accepts some other brands' microphone modules with similar specifications.



### Specifications

Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	72 MHz
RF Power Output	10 mW / 50 mW switchable (country dependent)
Transmitting Antenna	A wideband transmitting antenna is installed on the end of the housing.
Mic Capsule Modules	MU-90A condenser or MU-59A dynamic. Accepts some other brands' with similar specifications.
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## ACT-800T Bodypack Transmitter



### Features

1. Newly designed compact and lightweight housing for easy wearing.
2. The panel integrates a backlit LCD and setup buttons for easy operation and view of all operating information.
3. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.
4. The audio input can be switched to low impedance Mic-in "MT" or high impedance Line-in "GT" to match up the input impedance. The high dynamic range audio input prevents saturation distortion.
5. The input polarization can be selected for matching various capsules.
6. The world's first ACT™ function provides precise and rapid frequency sync to the receiver.
7. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.



8. A belt clip for easy wearing.

### Specifications

Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	72 MHz
Mic Capsule Modules	Paired lavalier mic MU-55L or optional other MIPRO's lavalier and headworn mic capsule modules.
Max. Audio Input	6.5 dBV
Input Impedance Setting	Low impedance Mic-in "MT" and high impedance Line-in "GT" are switchable.
RF Power Output	10 mW / 50 mW switchable (country dependent)
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

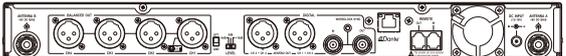
# Wireless Microphone Systems

## 2. ACT-700 Series UHF Professional Wideband Analog Wireless Microphone System

### ACT-700 Series Profile

1. ACT-7 Series is MIPRO's representative wireless system for professional live performance and has been highly appreciated and trusted by pro-audio experts for two decades.
2. In 2000, the ACT-7 Series professional analog wireless system with the industry's first ACT (Automatic Channel Targeting) function was launched.
3. In 2002, it is nominated in the 18th TEC Awards' Wireless Technology category.
4. In May 2004, MIPRO's ACT-7 Series wireless systems were unprecedentedly used on the Vienna Rathausplatz Culture Festival and performed flawlessly, the audio manager, Tucherl Toegel, said, "The audio quality and reliability of MIPRO's wireless systems are undoubtedly excellent."
5. In 2005, it is firstly equipped with a full-color VFD screen.
6. In 2008, MIPRO was reputed by Gary Kayye, A/V consultant & educator, as one of the "Top Six Brand to Watch."
7. In 2012, the wideband receiving circuitry greatly improved the reception range and the interference-free compatible channels.
8. In 2016, the Dante networking interface was added to avoid the issues caused by bulky and complicated cable transmissions.
9. In 2020, ACT-747 quad-channel and ACT-727 dual-channel receivers with newly designed chassis and receiving circuitry are launched. The receivers are paired with the new ACT-700H handheld transmitter and ACT-700T bodypack transmitter.

### Comparison of front and rear panel of ACT-700 and ACT-800 Series

Model	ACT-700 Series	ACT-800 Series
Chassis and Front Panel	 Same as ACT-800 Series	 Same as ACT-700 Series
Rear Panel	 Only analog output, no digital output	 Both analog and digital outputs are available

### Why Phase-out ACT-700 Series?

A digital wireless microphone system is a world trend. MIPRO's leading introduction of digital ACT-800 Series has the same specifications and superior sound quality of analog ACT-700 Series, and can fully replace the system in the field of pro audio applications to perfectly deliver the wireless microphone nature sound.

# Wireless Microphone Systems

## 3. ACT-500 Series UHF Professional Narrowband Analog Wireless Microphone System

### Why Choose ACT-500 Series Wireless Microphone System?

In 2019, the ACT-500 Series RF receiving circuitry design was transferred from the narrowband professional analog ACT-7 Series and upgrades the ACT-500 Series to be the professional narrowband wireless system. All the operations and specifications are the same except for the front panel LCD. Paired with the latest ACT-500H handheld transmitter and ACT-500T bodypack transmitter, the value of the system greatly surpasses the original series.

The receiver chassis dimensions are the same as ACT-800/700 Series, it can be well-equipped in the same rack case and gets neat wiring in the rack case rear. This series offers affordable professional models with unsurpassed value for large-to-small live shows, karaoke and PA installation applications.

### ACT-500 Series Receivers



### Features

1. Share the EIA standard metal chassis, and a newly designed LCD, rotary control knob and buttons are equipped on the control panel which is consistent with the same operations and display modes of ACT-800 Series. The LCD screen automatically shifts colors to identify "Working" and "Standby" mode. An optional Dante network interface is available on the rear panel.
2. Inherited the most reliable 24 MHz narrowband true diversity receiving circuit from MIPRO typical professional ACT-7 Series, which ensures long-distance and stable reception without signal dropout, and greatly decreases intermodulation distortion and increases interference-free compatible channels.
3. Industry's first "PilotTone & NoiseLock" circuits and the RF interference warning indicator for proper adjustments of the SQ level to avoid interference.
4. MIPRO Auto Scan and ACT™ function provides the transmitter's frequency with precise and rapid sync to the receiver.
5. There are 7 preset groups with a total of 80 pre-saved frequencies. The user-defined group allows users to choose and save up to 16 channels from 961 available frequencies.
6. Each channel has separate audio output with 3 switchable levels and presets the output level equals the sensitivity of the microphone capsule at 0 dB. All is to ensure the microphone operates within proper sensitivity and dynamic range, free from distortion.
7. Optional MIPRO RCS2.Net software allows real-time network remote-controlling and monitoring up to 64 channels. Additional FSA compatible channels calculator software allows users to manually set compatible channels of any frequency band.
8. Paired with ACT-500H handheld and ACT-500T bodypack transmitter.
9. Designed and made in Taiwan ensures high quality and value.

### Specifications

Chassis	EIA-Standard metal chassis
Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	24 MHz
Receiving Mode	True diversity receiving
Sensitivity	6 dB $\mu$ V @ S/N > 80 dB
Frequency Response	50 Hz ~ 18 kHz
Dynamic Range	> 111 dBA
Audio Output	Balanced: +16dB / 0dB / -6dB, Unbalanced: +10dB / 0dB / -6dB
Network Interface	Optional Dante or AVB. (Except for ACT-515)
PC Interface	USB interface. MIPRO ACT-BUS for remote-control of up to 64 channels. FSA compatible channels calculator software allows users to manually set compatible channels. (Sold separately)
Antenna	Detachable. 50 $\Omega$ TNC female connector provides bias for the MIPRO antenna systems.
Power Supply	External 100~240V AC switching power supply
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## ACT-500H Handheld Wireless Microphone



### Features

1. The microphone with metal housing features aesthetically designed in the most elegant “Guanyin vase” shape and the most comfortable handheld size. The surface is special matte black color and presents the ultra-low handling noise and a luxurious professional appearance.
2. The unique metal grille of the capsule module can be divided into the upper and lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an external thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.
3. The patented power switch module integrates mute, set buttons and LCD for convenience to operate.
4. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
5. A color-coded channel identification ring is put on the end of the housing. A patented antenna cover on the bottom of the housing built in a high-efficiency wideband transmitting antenna and USB Type-C charging socket.
6. Pair with all MIPRO’s new interchangeable microphone modules featuring high dynamic range for loud singing without distortion. Accepts some other brands’ microphone modules with similar specifications.

### Specifications

Mic Capsule Modules	MU-80A condenser. Optional: MU-90A/ 70A/ 59A
Display	Green backlit LCD
Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	72 MHz
RF Power Output	10 mW / 50 mW switchable (country dependent)
Spurious Emission	< 4 nW
Gain Setting	0 dB = microphone capsule sensitivity
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## ACT-500T Bodypack Transmitter



### Features

1. Newly designed compact and lightweight housing for easy wearing.
2. The panel integrates a backlit LCD and setup buttons for easy operation and view of all operating information.
3. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.
4. The audio input can be switched to low impedance Mic-in “MT” or high impedance Line-in “GT” to match up the input impedance. The high dynamic range audio input prevents saturation distortion.
5. The world’s first ACT™ function provides precise and rapid frequency sync to the receiver.
6. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
7. A belt clip for easy wearing.

### Specifications

Mic Capsule Modules	Paired lavalier mic MU-55L or optional other MIPRO’s lavalier and headworn mic capsule modules.
Max. Audio Input	0 dBV
Display	Green backlit LCD
Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	72 MHz
Input Impedance Setting	Low impedance (Mic-in) and high impedance (Line-in) are switchable.
RF Power Output	10 mW / 50 mW switchable (country dependent)
Spurious Emission	< 4 nW
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## 4. ACT-300 Series UHF Analog Wireless Microphone System

### Why Choose ACT-300 Series Wireless Microphone System?

This series is the most popular system which adopts MCU controlled diversity receiving circuit to expand operating range and enhance signal quality. Since launched in 2011 and widely used in live shows, karaoke and PA installation due to its reliable performance.

The receivers are compatible with ACT-32H and ACT-32T transmitters. If the rechargeable models are needed, upgrade to ACT-500H and ACT-500T transmitters which accept either one lithium-ion battery or two AA batteries.

This series can be conveniently combined with MIPRO ISM band receivers to increase interference-free compatible channels and it is the best-selling series on the market.

### ACT-300 Series Receivers



### Features

1. EIA standard metal chassis equipped with a green backlit LCD screen and electronic buttons on the front panel. The LCD screen will automatically turn bright when receiving a signal to identify "Working" and "Standby" mode.
2. The most reliable 24 MHz narrowband high dynamic range receiving circuit greatly decreases intermodulation distortion and increases interference-free compatible channels.
3. Industry's first "PiloTone & NoiseLock" circuits and the RF interference warning indicator for proper adjustments of the SQ level to avoid interference.
4. MIPRO Auto Scan and ACT™ function provides the transmitter's frequency with precise and rapid sync to the receiver.
5. There are 7 preset groups with a total of 80 pre-saved frequencies. The user-defined group allows users to choose 8 working channels from 961 available frequencies.
6. Each channel has separate audio output with 3 switchable levels and presets the output level equals the sensitivity of the microphone capsule at 0 dB. All is to ensure the microphone operates within proper sensitivity and dynamic range, free from distortion.
7. Designed and made in Taiwan ensures high quality and value.

### Specifications

Chassis	ACT-343/323: EIA-Standard 19" 1U metal chassis ACT-312/311: EIA-Standard 19" 1/2 U metal chassis
Frequency Range	UHF 480 ~ 934 MHz (country dependent)
Bandwidth	24 MHz
Receiving Mode	MCU-controlled diversity receiving
Sensitivity	10 dB $\mu$ V @ S/N > 80 dB
Frequency Response	50 Hz ~ 18 kHz
Dynamic Range	> 106 dBA
Audio Output	Balanced: +16dB / 0dB/ -6dB; Unbalanced: +10dB / 0dB/ -6dB
Antenna	Detachable. 50 $\Omega$ TNC female connector provides bias for the antenna systems.
Power Supply	External 100 ~ 240V AC switching power supply
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## UHF Handheld Wireless Microphones



### Features

<ol style="list-style-type: none"> <li>1. Aesthetically designed rugged plastic housing features the most comfortable handheld size and presents MIPRO's unique style.</li> <li>2. The unique metal grille of the microphone capsule module can be divided into the upper grille and the lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an internal thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.</li> <li>3. An LCD on the housing displays the working channel, battery status and operating information.</li> <li>4. Powered by two AA alkaline batteries.</li> <li>5. Pair with MIPRO's capsules module featuring high dynamic range for loud singing without distortion.</li> <li>6. Patented capsule suspension design virtually eliminates vibration and handling noise.</li> <li>7. A color-coded channel identification ring is put on the end of the housing which has a built-in high-efficiency antenna.</li> </ol>	<ol style="list-style-type: none"> <li>1. The microphone with metal housing features the most elegant shape and the most comfortable handheld size. The surface is special matte black color and presents the ultra-low handling noise and a professional appearance.</li> <li>2. The unique metal grille of the capsule module can be divided into the upper and lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an external thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.</li> <li>3. The patented power switch module integrates mute, set buttons and LCD for convenience to operate.</li> <li>4. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.</li> <li>5. A color-coded channel identification ring is put on the end of the housing. A patented antenna cover on the bottom of the housing built in a high-efficiency wideband transmitting antenna and USB Type-C charging socket.</li> <li>6. Pair with all MIPRO's new interchangeable microphone modules featuring high dynamic range for loud singing without distortion. Accepts some other brands' microphone modules with similar specifications.</li> </ol>
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### Specifications

Model	ACT-32H	ACT-500H
Mic Capsule Modules	MU-70 condenser or MU-39 dynamic	MU-80A condenser or MU-59A dynamic, Optional MU-90A.
Display	Green backlit LCD	
Frequency Range	UHF 480~934 MHz (country dependent)	
Bandwidth	24 MHz	72 MHz
RF Power Output	10~30 mW (country dependent)	10 mW / 50 mW switchable (country dependent)
Spurious Emission	< 4 nW	
Gain Setting	0 dB = microphone capsule sensitivity	
Battery	Two AA alkaline	One 18500 lithium-ion battery or two AA alkaline
Charging Type	N/A	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.	

# Wireless Microphone Systems

## UHF Bodypack Transmitters



### Features

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Compact and lightweight rugged plastic housing for easy to wear.</li> <li>2. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.</li> <li>3. An LCD on the panel displays the working channel, battery status and operating information.</li> <li>4. Powered by two AA alkaline batteries.</li> <li>5. Innovatively designed battery cover allows easy access to operate buttons and prevent accidental operation.</li> <li>6. High/low impedance for microphone or guitar / line inputs. Five selectable gain settings with Auto Limiter to prevent distortion.</li> </ol> | <ol style="list-style-type: none"> <li>1. Innovatively designed compact and lightweight housing for easy to wear.</li> <li>2. The panel integrates a backlit LCD and set buttons for easy operation and displays all operating information.</li> <li>3. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.</li> <li>4. The audio input can be switched to low impedance Mic-in "MT" or high impedance Line-in "GT" to match up the input impedance. The high dynamic range audio input prevents saturation distortion.</li> <li>5. The world's first ACT™ function provides precise and rapid frequency sync to the receiver.</li> <li>6. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.</li> <li>7. A belt clip for easy wearing.</li> </ol> |
|--|---|

### Specifications

Model	ACT-32T	ACT-500T
Mic Capsule Modules	Paired lavalier mic MU-55L or optional other MIPRO's lavalier and headworn mic capsule modules.	
Max. Audio Input	0 dBV	
Display	Green backlit LCD	
Frequency Range	UHF 480 ~ 934 MHz (country dependent)	
Bandwidth	24 MHz	72 MHz
Input Impedance Setting	High impedance	Low impedance (Mic-in) and high impedance (Line-in) are switchable.
RF Power Output	10 mW / 50 mW switchable (country dependent)	
Spurious Emission	< 4 nW	
Battery	Two AA alkaline	One 18500 lithium-ion battery or two AA alkaline
Charging Type	N/A	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.	

# Wireless Microphone Systems

## 5. ACT-5800 Series ISM Digital Wireless Microphone Systems

### Why Choose ISM Digital Wireless Microphone Systems?

1. In recent years, telecom regulations are more and more restrictive for wireless microphone systems in UHF bands. Therefore, MIPRO has actively researched the ISM 2.4 GHz and 5 GHz bands for many years and developed MIPRO's RF technology to enhance the operating distance and signal stability. MIPRO has developed a leading series of 2.4 GHz models, widely used in live shows, public address, and music instrument performance.
2. The wireless system in the ISM band performs just as well as the UHF band. But, if there are hundreds of rooms in the same building, such as classrooms, karaoke, homes, etc., using the wireless systems at the same time, then, ISM band series is a better choice to avoid the adjacent room's signal interference than the UHF models.
3. To optimize the application of the ISM band, MIPRO has developed 5 GHz models since 2018, which can avoid the signal interference of UHF and 2.4 GHz communication products, Bluetooth, Wi-Fi, etc. Furthermore, they have more interference-free channels in one band and longer reception distance, wider frequency response and shorter latency, so that the sound quality is the best of all wireless microphone systems.

### ACT-5800 Series Profile

1. In 2018, MIPRO introduced ACT-5802 dual-channel and ACT-5801 single-channel receivers of industry-leading wireless systems operated in ISM 5.8 GHz. In 2019, MIPRO introduced ACT-5814A quad-channel and ACT-5812A dual-channel 1U receivers, and installed with AT-58 external antenna and MPB-58 booster for long-distance reception without signal drop-out.
2. This series has more compatible channels in one single frequency band and effectively avoids interference from the UHF and 2.4 GHz communication products. The receivers can pair with the ISM antenna system for a wider operating range and better signal stability. It can be widely applied in hotels, schools, commercial or home karaoke, musical instruments and the most popular live stream market.
3. MIPRO takes the lead to introduce ISM 5800 Series, including ACT-5800 Series wireless system, TA-58 digital plug-on transmitter, MI-58 in-ear monitoring system, MR-58 digital pedal receiver, and MRM-58 receiver module, which feature professional audio characteristics but affordable price. It is even superior to UHF digital or analog system and will gradually replace part of the entry-level market. This series will help pro-audio installation and application more flexible and complete, and thus stimulates the sales as it offers satisfying high quality / price ratio alternatives.

# Wireless Microphone Systems

## ACT-5800 Series Receivers



### Features

1. Quad-channel and dual-channel in 1U metal chassis with antenna connectors on the rear panel for connecting the external antenna system. Dual-channel and single-channel in 1/2U metal chassis with a built-in high-efficiency antenna in the front panel.
2. MIPRO's unique control panel equips a graphic OLED, providing a larger field of view without a blind angle.
3. Stable digital modulation circuitry. All frequencies are located in a single frequency band.
4. Dual tuner true diversity receiving ensures long reception distance and eliminates signal drop-out.
5. Effectively avoids the RF interference from UHF, Bluetooth, Wi-Fi and all 2.4 GHz communication products.
6. Presets Group A and B. Group A has less interference. Group B is recommended when more channels or shorter latency is required. Group A and B can't operate at the same time.

### Specifications

Model	ACT-5814A	ACT-5812A	ACT-5802	ACT-5801
Channel	Quad	Dual	Dual	Single
Chassis	EIA Standard 1U metal case		EIA Standard 1/2U metal case	
Antenna	Detachable, on rear panel		Built-in, front panel	
Display	Graphic OLED			
Frequency Range	ISM 5.8 GHz (5,725~5,850 MHz)			
Preset Channels	Presets 12 channels of interference-free operation in Group A and 24 channels of interference-free operation in Group B1 & B2. 64 ID codes and 1 specific ID are allowed to be set for each channel to prevent the same channel interfered on the same occasion.			
Receiving Mode	Dual-tuner true diversity receiving. MIPRO's ACT Sync channel set-up.			
Sample Rate	24-bit / 48 kHz			
Frequency Response	18 Hz ~ 23 kHz			
Latency	< 1.5 ms (Group B)			
Dynamic Range	> 120 dBA			
Output Connectors	Balanced XLR & Unbalanced Ø 6.3 mm, -10 ~ +20 dB adjustable range.			
Power Supply	External 100~240V AC switching power supply			
Note	Refer to the actual product in the event of product discrepancy.			

# Wireless Microphone Systems

## ACT-580H Handheld Wireless Microphone



### Features

1. The microphone with metal housing features the most elegant shape and the most comfortable handheld size. The surface is special matte black color and presents the ultra-low handling noise and a professional appearance.
2. The unique metal grille of the capsule module can be divided into the upper and lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an external thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.
3. The patented power switch module integrates an LCD for convenience to operate.
4. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
5. A color-coded channel identification ring is put on the end of the housing. A patented antenna cover on the bottom of the housing built in a high-efficiency wideband transmitting antenna and USB Type-C charging socket.
6. Pair with all MIPRO's new interchangeable microphone modules featuring high dynamic range for loud singing without distortion. Accepts some other brands' microphone modules with similar specifications.

### Specifications

Frequency Range	ISM 5.8 GHz (5,725~5,850 MHz)
RF Power Output	20 mW (country dependent)
Mic Capsule	MU-80A condenser or MU-59A dynamic modules.
Display	Green backlit LCD
Gain Setting	0 dB = microphone capsule sensitivity
Battery	One 18500 lithium-ion battery or two AA alkaline.
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## ACT-580T Bodypack Transmitter



### Features

1. Newly designed compact and lightweight housing for easy to wear.
2. The panel integrates a power switch and a backlit LCD to display all operating information.
3. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.
4. The audio input can match up low and high input impedance. The high dynamic range audio input prevents saturation distortion.
5. The world's first ACT™ function provides precise and rapid frequency sync to the receiver.
6. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
7. A belt clip for easy wearing.

### Specifications

Frequency Range	ISM 5.8 GHz (5,725~5,850 MHz)
RF Power Output	20 mW (country dependent)
Mic Capsule	Paired lavalier mic MU-55L or optional other MIPRO's lavalier and headworn mic capsule modules.
Max. Audio Input	6.5 dBV
Display	Green backlit LCD
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## 6. ACT-2400 Series ISM Digital Wireless Microphone Systems

### Why Choose ACT-2400 Series Wireless Microphone Systems?

In recent years, telecom regulations have become more and more restrictive for wireless microphone systems in UHF bands. Therefore, MIPRO has actively researched the ISM 2.4 GHz band for many years and developed MIPRO's RF technology to enhance the operating distance and signal stability. Then, MIPRO has introduced 2.4 GHz wireless microphone systems to the market, which are now widely used in live performance, public address and musical instrument applications.

### ACT-2400 Series Profile

1. In 2015, MIPRO introduced 1/2U ACT-2402 dual-channel and ACT-2401 single-channel receivers wireless systems operated in ISM 2.4 GHz that comply with international telecom regulatory compliance. In 2016, MIPRO introduced 1U ACT-2414A quad-channel and ACT-2412A dual-channel new receivers and installed with AT-24 external antenna and MPB-24 booster for long-distance reception without signal drop-out.
2. This series has many channels in one single frequency band and has different positioning with ISM 5800 Series. In this series are the most affordable entry-level models, including ACT-2400 Series wireless system, MI-24 in-ear monitoring system, MR-24 digital pedal receiver, and MRM-24 receiver module. They feature professional audio characteristics but affordable price and will gradually replace part of the entry-level market. When installed with the latest transmitters and ISM 2.4 GHz antenna systems, it is an ideal choice to avoid the interferences from UHF bands and thus offers satisfying performance in hotels, schools, karaoke, musical instruments and the most popular live stream applications.

# Wireless Microphone Systems

## ACT-2400 Series Receivers



### Features

1. Quad-channel and dual-channel in 1U metal chassis with antenna connectors on the rear panel for connecting the external antenna system. Dual-channel and single-channel in 1/2U metal chassis with a built-in high-efficiency antenna in the front panel.
2. MIPRO's unique control panel equips a graphic OLED, providing a larger field of view without a blind angle.
3. Stable digital modulation circuitry. 12 channels of interference-free operation are located in a single frequency band.
4. Dual tuner true diversity receiving ensures long-distance reception and eliminates signal drop-out.
5. Effectively avoids the RF interference from UHF communication products.

### Specifications

Model	ACT-2414A	ACT-2412A	ACT-2402	ACT-2401
Channel	Quad	Dual	Dual	Single
Chassis	EIA Standard 1U metal case		EIA Standard 1/2U metal case	
Antenna	Detachable, on rear panel		Built-in, front panel	
Frequency Range	ISM 2.4 GHz band (2,400~2,483.5 MHz)			
Preset Frequencies	12			
Receiving Mode	Dual-tuner true diversity receiving. ACT Sync channel set-up			
Sample Rate	24-bit / 44.1 kHz			
Frequency Response	20 Hz ~ 20 kHz			
Latency	< 4.0 ms			
Dynamic Range	> 117 dBA			
Output Connectors	Balanced XLR & Unbalanced Ø 6.3 mm, -10 ~ +20 dB adjustable range.			
Power Supply	External 100~240V AC switching power supply			
Note	Refer to the actual product in the event of product discrepancy.			

# Wireless Microphone Systems

## ACT-240H Handheld Wireless Microphone



### Features

1. The microphone with metal housing features the most elegant shape and the most comfortable handheld size. The surface is special matte black color and presents the ultra-low handling noise and a professional appearance.
2. The unique metal grille of the capsule module can be divided into the upper and lower grille. The upper grille can be detached for cleaning; the lower grille is connected with the housing by an external thread. The robust metal grille protects the capsule against impact, rolling and pop noise, ensuring clarity of sound.
3. The patented power switch module integrates an LCD for convenience to operate.
4. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
5. A color-coded channel identification ring is put on the end of the housing. A patented antenna cover on the bottom of the housing built in a high-efficiency wideband transmitting antenna and USB Type-C charging socket.
6. Pair with all MIPRO's new interchangeable microphone modules featuring high dynamic range for loud singing without distortion. Accepts some other brands' microphone modules with similar specifications.

### Specifications

Frequency Range	ISM 2.4 GHz (2,400~2,483.5 MHz)
RF Power Output	2 / 10 mW Switchable (country dependent)
Mic Capsule	MU-70A condenser or MU-39A dynamic module.
Display	Green backlit LCD
Gain Setting	0 dB = microphone capsule sensitivity
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## ACT-240T Bodypack Transmitter



### Features

1. Newly designed compact and lightweight housing for easy to wear.
2. The panel integrates a power switch and a backlit LCD to display all operating information.
3. On top of the housing is equipped with an antenna, mute button and mini XLR connector. The Mini XLR audio input connector accepts either a screw-lock or a TA4F quick-lock plug. A remote-control mute jack is for easy activation of the mute function.
4. The audio input can match up low and high input impedance. The high dynamic range audio input prevents saturation distortion.
5. The world's first ACT™ function provides precise and rapid frequency sync to the receiver.
6. The patented battery compartment can be inserted with two AA-type batteries or one rechargeable battery, charging via USB Type-C with the foolproof and safe charging circuit.
7. A belt clip for easy wearing.

### Specifications

Frequency Range	ISM 2.4 GHz (2,400~2,483.5 MHz)
RF Power Output	2 / 10 mW Switchable (country dependent)
Mic Capsule	Paired lavalier mic MU-55L or optional other MIPRO's lavalier and headworn mic capsule modules.
Max. Audio Input	6.5 dBV
Display	Green backlit LCD
Battery	One 18500 lithium-ion battery or two AA alkaline
Charging Type	USB Type-C with the foolproof and safe charging circuit.
Note	Refer to the actual product in the event of product discrepancy.

# Wireless Microphone Systems

## 7. MU-Series Microphone Capsule Modules

### Why Choose MIPRO Microphone Capsule Modules?

MIPRO condenser and dynamic microphone capsule modules are premium products designed by the professional seasoned engineer and mass-produced in-house after an extended time in investment and development, particularly the condenser microphone capsule is MIPRO's core technics, coming from the founder's 50-year technical expert to design and manufacture the vocal ECM capsules. For decades, they have been equipped on MIPRO handheld transmitters, featuring professional sound quality, ultra-low handling noise and aesthetic style, and have been used in live performance and public address, delivering high fidelity and clarity and admired by pro audio experts.

### Handheld Microphone Capsule Modules Profile

1. The specific three-layered rugged metal grille is assembled by the upper and lower grilles and can be separated for cleaning and hygiene practices. In 2019, the mechanic design for the lower grille of the second-generation capsule modules is modified and can be directly installed on MIPRO's new wireless handheld microphones as well as other brands' with similar specifications.
2. The condenser microphone capsules feature clear and bright sound, accurate sound image, low handling noise and can sustain high SPL without distortion. Ideal for vocalists and singers to use in live performances.
3. Featuring flat and wide frequency range, high dynamic range, fast transient response, they are suitable for capturing the sound of percussion instruments or higher frequency string/wind instruments and achieve natural sound reproduction, especially in concert halls, theaters and studios with low noise floor.
4. Featuring precise and clear tone, powerful sound without a "box tone" effect, they are ideal for public address application.
5. The dynamic microphone capsules have a slower transient response and the sound is soft and mellow, which will soften the original sound. High dynamic range characteristic makes them suitable for rock-n-roll, karaoke or outdoor environments with loud background noise.

### MU-Series New Condenser Microphone Capsules



### Features

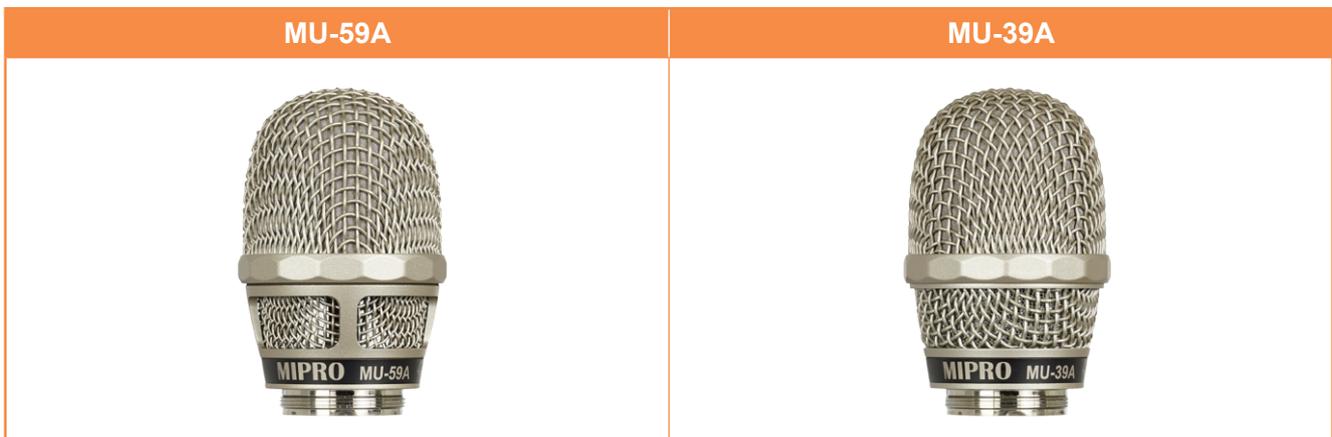
1. The coupled capsule circuit features a high S/N ratio, low noise, and is able to isolate high-frequency digital noise.
2. High separation, full-range directionality and superb feedback suppression.
3. Precise sensitivity -53 dBV.
4. With the patented shock absorber, it features ultra-low handling noise and resistant to impact.
5. Presents a high dynamic range, wide frequency response, high fidelity, rapid transient response and low feedback for bright and detailed sound quality. Ideal for vocalists or singers.

### Specifications

Model	MU-90A	MU-80A	MU-70A
Capsule Unit	ECM-20	ECM-20a	
Polar Pattern	Supercardioid	Cardioid	
Upper Grille	Detachable multi-layered anti-pop metal grille with a flat top.		
Lower Grille	The metal grille of the semi-sphere structure with four air chambers.		Dual-layer metal grille
Inner Grille	Dual-layer metal grille		
Middle Ring	Anti-rolling design	Anti-rolling design with a color ring	
Sensitivity	-53 dBV/ Pa		
Max. SPL	150 dB	149 dB	
Frequency Response			
Note	Refer to the actual product in the event of product discrepancy.		

# Wireless Microphone Systems

## MU-Series New Dynamic Microphone Capsules



### Features

1. Patented shock absorber and suspension design for ultra-low touching noise.
2. Features a unique anti-pop multi-layered metal grille and presents a high dynamic range, wide frequency response and low feedback for softer, mellower and misty sound quality.

### Specifications

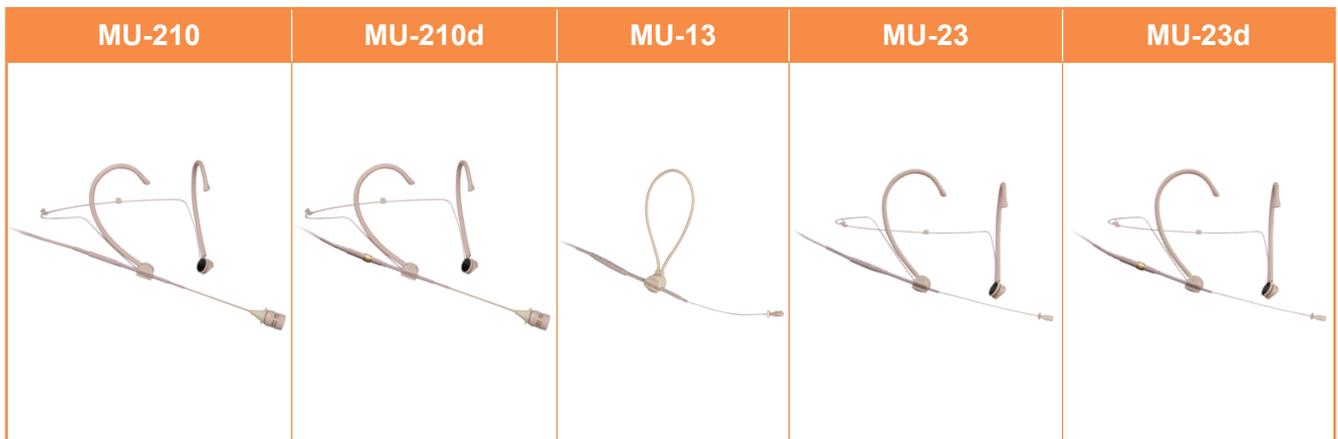
Model	MU-59A	MU-39A
Capsule Unit	DM-59	DM-39
Polar Pattern	Supercardioid	
Upper Grille	Detachable multi-layered anti-pop metal grille with a round top.	
Lower Grille	The metal grille of the semi-sphere structure with four air chambers.	Dual-layer metal grille
Inner Grille	Dual-layer metal grille	
Middle Ring	Anti-rolling design	
Sensitivity	-53 dBV / Pa	
Frequency Response		
Note	Refer to the actual product in the event of product discrepancy.	

## New / Previous Microphone Capsule Modules Comparison



# Wireless Microphone Systems

## MU-Series Headworn Microphones



### Features

1. With a compact ear-hook design, headworn mics are available in three ear-hook sizes for a secure, comfortable and ideal fit.
2. Detachable or fixed microphone boom options. The microphone boom can be worn on the left or right and the detachable boom can be detached for replacement or servicing. Resistant to moisture, perspiration and salts.
3. The detachable boom can connect to the cables with various connector types. Soft yet flexible thin boom with swivel angle of 120° and the holder can be rotated for adjusting the microphone position.

### Specifications

Model	MU-210	MU-210d	MU-13	MU-23	MU-23d
Connector Type	Fixed	Detachable	Fixed	Fixed	Detachable
Capsule	Ø 10 mm unidirectional		Ø 3 mm omnidirectional		
Sensitivity	-46 dBV / Pa		-56 dBV / Pa		
Color	Beige				
Frequency Response					
Max. SPL	142 dB		138 dB		
Sound Features	Clear and brilliant. High fidelity, wide frequency response, high dynamic range, rapid transient response for true natural sound reproduction.				
Note	Refer to the actual product in the event of product discrepancy.				

# Wireless Microphone Systems

## MU-Series Headworn Microphones



### Features

1. Flexible and durable frame with comfortable, soft ear hooks that require no adjustment for optimum comfort.
2. Featuring a high dynamic range and able to withstand 142dB SPL without distortion.
3. The capsule module and cable are easily detached from the frame and can be worn on the left or right side of the frame to suit personal preferences.
4. The very thin capsule-shaft mount is fully rotatable.
5. The capsule-shaft allows for adjustments in length, direction and angle for precise and optimum capsule positioning in relation to the speaker's mouth.
6. Fold-flat design for easy storage.
7. MIPRO Mini XLR plug or TA4F, other plug types can also be specified.

### Specifications

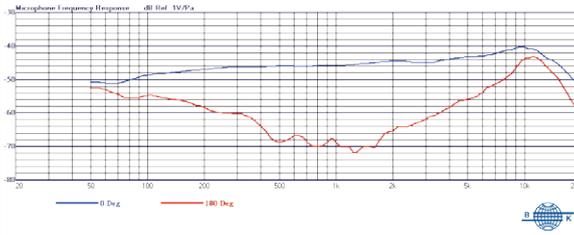
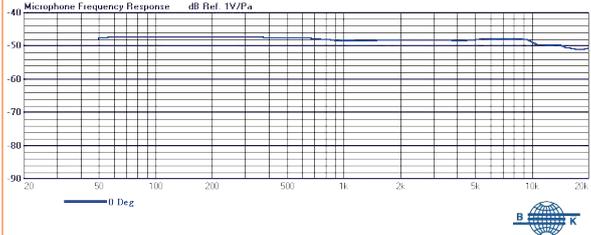
Model	MU-53HN	MU-53HNS	MU-55HN	MU-55HNS
Capsule	Ø 10 mm unidirectional		Ø 4.5 mm omnidirectional	
Frequency Response	50Hz ~ 18 kHz 		40 Hz ~ 20 kHz 	
Sensitivity	-46 dBV / Pa		-49 dBV / Pa	
Max. SPL	142 dB		135 dB	
Capsule Shaft holder	Dual-left and right side			
Plug	4-pin mini-XLR plug or TA4F			
Cable Length	150 cm			
Color	Black	Beige	Black	Beige
Note	Refer to the actual product in the event of product discrepancy.			

# Wireless Microphone Systems

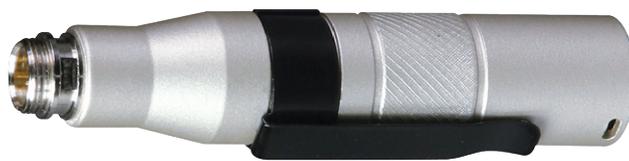
## MU-Series Lavalier Microphones



### Specifications

Model	MU-53L	MU-53LS	MU-55L	MU-55LS
Color	Black	Beige	Black	Beige
Connector	Fixed			
Capsule	Ø 10 mm unidirectional		Ø 4.5 mm omnidirectional	
Sensitivity	-46 dBV / Pa		-49 dBV / Pa	
Frequency Response				
Max. SPL	142 dB		135 dB	
Sound Features	Clear and brilliant. High fidelity, wide frequency response, high dynamic range, rapid transient response for true natural sound reproduction.			
Note	Refer to the actual product in the event of product discrepancy.			

## 8. MJ-53 Condenser Microphone Adaptor



### Features

1. The MJ-53 enables a condenser microphone with a Mini XLR plug to connect directly to the XLR jack input of a mixer which provides 12 ~ 48 V DC phantom power.
2. Balanced output transforms the high output impedance of a condenser microphone to a wide frequency response, high dynamic range, high S/N ratio and low output impedance at about 200 Ω . It prevents noise interference in long-distance transmission. Its rugged metal housing ensures long operating life and its belt clip provides for easy wearing.

### Specifications

Frequency Response	80 Hz (-3dB) ~ 20 kHz (0dB) @ 94 dB SPL
Output Impedance	200 Ω @ 1 V / 1 kHz (Balanced)
Max. Output Voltage	2.52 V @ 1.0% T.H.D. 1 kHz
Dynamic Range	120 dB (A-weighting)
Power Supply	Phantom Power: 12 ~ 48 V DC   Current Drain: 2.0 mA
Note	Refer to the actual product in the event of product discrepancy.

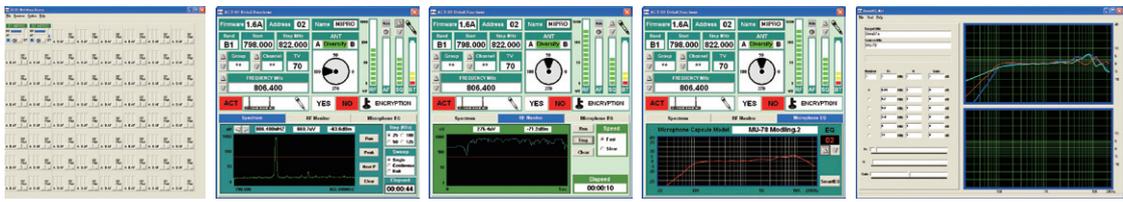
# Wireless Microphone Systems

## 9. ACT-BUS PC Management Software

### ACT-BUS Profile

1. In 2003, MIPRO launched MIPRO ACT-BUS, an advanced PC interface management program for ACT Series receivers. The interface provides real-time monitoring and capable of remote controls up to 64 receiver modules simultaneously from distances up to 300 meters away from the PC. It has a built-in high-performance spectrum analyzer and the software is multi-functional and easy to use.
2. In 2013, the latest MES-100 bridge server allows the MIPRO ACT-BUS interface to be remotely controlled via web browsers.

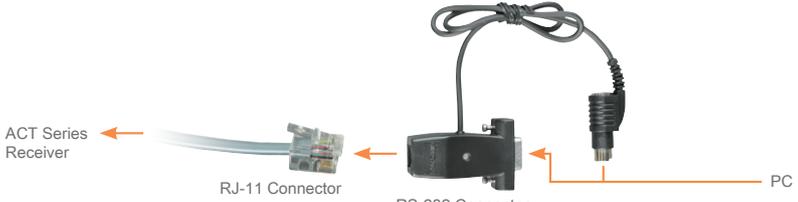
### ACT-BUS PC Management Software Models

<p><b>ACT-8D</b></p>	 <p>Master Window      Frequency Scanner Window      RF Signal Strength Window      Frequency Response Window      Smart EQ Window</p>
<p><b>ACT-707SD</b></p>	 <p>Control &amp; monitor up to 64 receiver channels.      Master Window      Detailed Channel Window</p>

### Features

1. This software is an advanced and user-friendly PC interface management program. The interface links a PC to the receiver via the MIPRO DVU USB connector or DVJ RS-232 connector. The interface provides real-time monitoring and capable of remotely controls up to 64 receiver modules simultaneously from distances up to 300 meters away from the PC.
2. The management software has a built-in high-performance spectrum analyzer that allows direct setup of non-interference channels and monitors wireless environment for all operating channels and interference signals. The software is also capable of monitoring transmitter battery status, AF/RF and Antenna A/B strength.
3. Additional features include a signal dropout recording system where the history of the signal path can be traced for analysis, real-time program editing, multi-function and status display for your convenience.

### Accessories

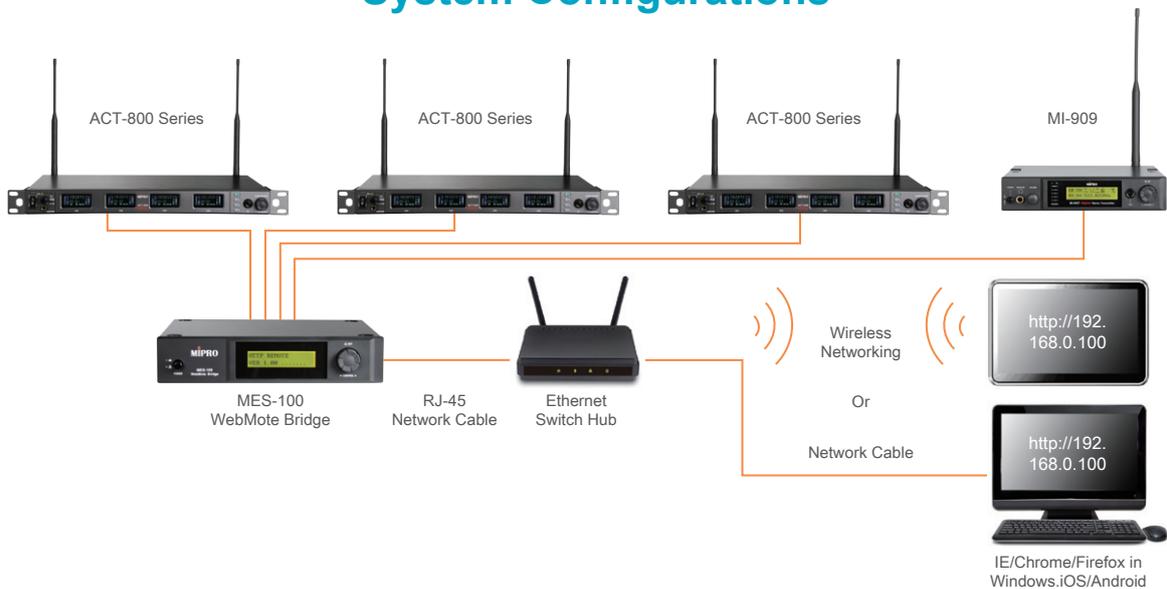
<p><b>MIPRO DVU Network Connection</b></p>	 <p>ACT Series Receiver      RJ-11 Connector      USB Connector      PC</p>
<p><b>MIPRO DVJ Network Connection</b></p>	 <p>ACT Series Receiver      RJ-11 Connector      RS-232 Connector      PC</p>
<p><b>Network Cable</b></p>	

# Wireless Microphone Systems

## MES-100 WebMote Bridge



## System Configurations



## Features

1. MIPRO ACT-BUS interface allows remote monitoring of ACT series receivers and can now be connected to the newly developed MIPRO MES-100 bridge server, providing remote monitoring and control using any web browser.
2. MIPRO MES-100 supports web-based monitoring and remote control for smartphones, tablets, PCs and laptops over a variety of operating systems, such as Windows, iOS, Android or Linux, etc. without the need for special software to remotely monitor and control all parameters. The MES-100 provides a solution for the incompatibility issues between the operating systems and monitoring software.

## Comparison of MIPRO Software

Model	ACT-8D	ACT-707SD	MES-100
Name	MIPRO Digital Receiver PC Management Software	MIPRO Analog Receiver PC Management Software	WebMote Bridge
Functions	Monitoring and remote control of ACT-800 Series receivers	Monitoring and remote control of ACT-500 Series receivers.	Improve the transmission efficiency of ACT-BUS. Supports web-based monitoring and remote control for smartphones, tablets, PCs and laptops to remotely monitor and control all parameters. The MES-100 provides a solution for the incompatibility issues between the operating systems and monitoring software.
Accessories	USB connector or RS-232 connector for network connection. RJ-11 connector for the receiver end.		
Note	Refer to the actual product in the event of product discrepancy.		

# Wireless Microphone Systems

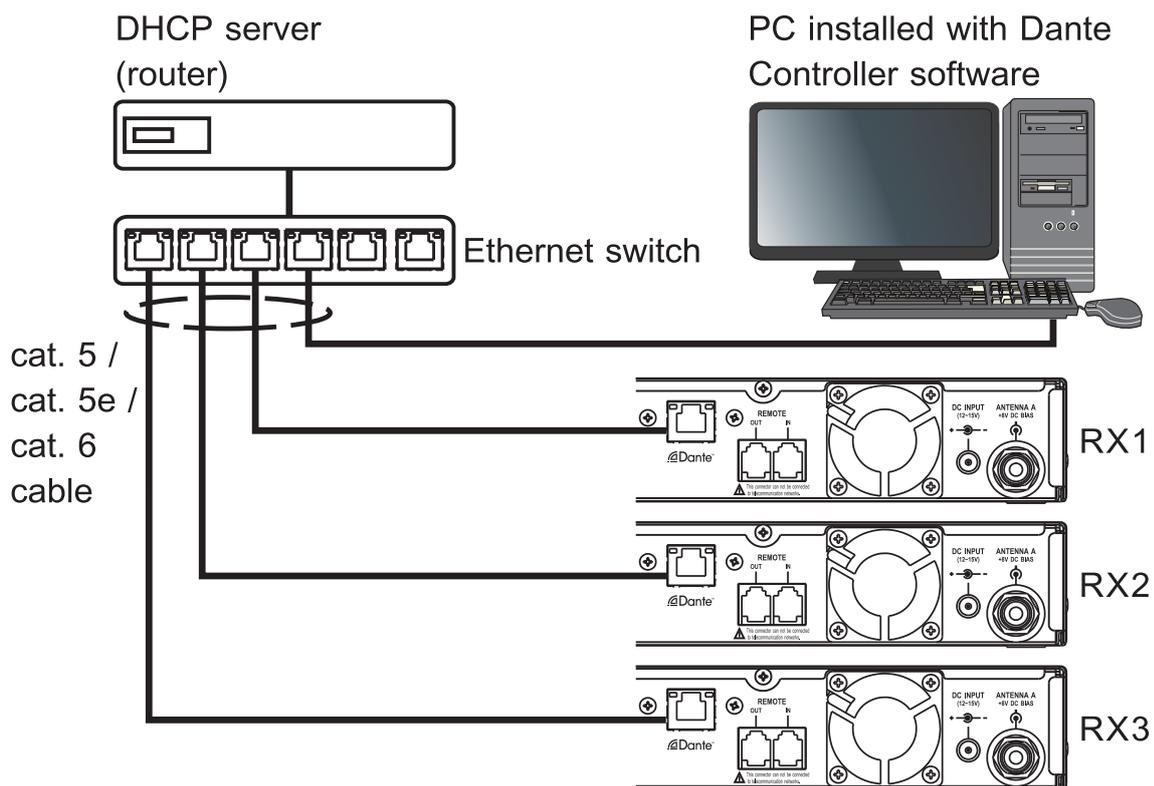
## 10. Wireless Microphone Systems Accessories

### Dante Interface Module

MIPRO's digital ACT-828 / 848 and analog ACT-727 / 747 receivers are now standard equipped with Dante interface, and optional for ACT-525 / 545 receivers. Digital transmission ensures less environmental interference and less signal attenuation due to distance makes Dante the most popular Ethernet-based digital audio transmission interface in the audio industry. Using a 100 Mb/s cable can transmit maximum distance of 100 meters, and, through packet and TDM technology, a single network cable can now transmit multiple channels of the audio signal. Besides, with a Dante Controller, audio stream routing and monitoring is now an easy task.

### Dante Network

Connecting cat. 5, 5e, or 6 network cable to an Ethernet switch as illustrated below.



Note: Ethernet switch must have DHCP function or should connect to an external DHCP server, e.g. Wi-Fi router.

### Audio Stream Routing and Monitoring

Routing and monitoring of audio streaming can be easily achieved by using a Dante Controller. For downloading instruction on the Dante Controller, please refer to the following link:  
<https://www.audinate.com/products/software/dante-controller>

# Wireless Microphone Systems

## 11. MPC-100 Receivers Power Supply Storage Case



MPC-100 installed with PSU of the receivers.



### Key Function

When a sound engineer is installing multiple wireless systems in a fixed or portable rack case, the most troublesome job is to organize and fix both the power supply unit (PSU) and power cords in the back of a rack case. The MPC-100 allows engineers to pre-install the original PSU of the wireless system into the cabinet. By doing so, you have the benefit of using one power cord for the whole rack as all PSU and their power cords will be safely and neatly stored within the garnering case which is connected to an extension power cord and only the DC output cables connect to the receivers.

### Specifications

The MPC-100 uses an EIA standard 1U metal case where the front panel has a power indicator and the rear panel has one AC input socket and 5 DC output jacks. In addition, there is a bracket that holds 5 PSUs and screws are provided to attach the bracket to the bottom of the garnering case.

# Wireless Microphone Systems

## 12. Accessories

### MS Series Microphone Stands

Model	MS-80	MS-50	MS-20	MD-20
Photo				
Type	Tripod Stand	Desktop Microphone Stand		Microphone Holder
Features	Robust design with a stable base. Heights and angles are adjustable. Durable, dependable performance.		MD-20 is required for operation.	MS-20 or any microphone stand is required for operation.

### FB Series 19-inch Rack Mount Kits

Model	FB-70	FB-71	FB-72
Photo			
Name	Front-to-Rear Antenna Kit	Rack Mount Kit	Rack Mount Kit
Compatible Models	EIA standard rack case	One 1/2 U receiver alone (1-pair)	One 1 U receiver alone (1-pair)

### Antenna & Instrument Cables

Model	FAU-10	FAU-20	FAG-10	FBC-71	FBC-72	MU-40G	MJ-10E	MJ-10A	MJ-70
Photo									
Name	Antenna Cable (10 m)	Antenna Cable (20 m)	Antenna Cable (10 m)	Rear-to-Front Cables		Guitar Cable	Electric Guitar Cable	Acoustic Guitar Cable	Remote Mute Switch
Compatible Models	AT-70W, AT-90W, AT-100, MPB-30, AT-24, MPB-24	AT-70W, AT-90W, AT-100, MPB-30, MPB-24	AT-24, MPB-24, AT-58, MPB-58	UHF ACT Series receivers	ISM ACT Series receivers	All bodypack transmitters	MT-58GE electric guitar transmitter sets	MT-58GA acoustic guitar transmitter sets	ACT Series bodypack transmitters

### Others

Model	ASP-30	RH-77a	SW-20
Photo			
Name	Sports Pouch	Multi-Colored Rings	Foam Windscreens
Compatible Models	Bodypack transmitters	Handheld transmitters (set of 10 colors)	Handheld transmitters (5 color options)

## 2. Antenna Systems



# Antenna Systems

## 1. AT Series Antennas

### Why Choose MIPRO Antenna Systems?

The transmitting and receiving signals are both using antennas. Correct design and installation of antenna systems will greatly increase the signal stability and transmission range. MIPRO offers a complete range of antennas, antenna dividers, combiners, boosters and wideband RF amplifiers that deliver the best antenna system equipment for professional sound engineers to set up the best wireless transmission projects.

### MIPRO Antenna Systems Profile

1. In 1997, MIPRO introduced the AT-20 VHF and the AT-70 UHF extension antenna.
2. In 2008, the second-generation AT-90 UHF multi-function extension antenna was introduced into the market.
3. In 2011, the third-generation AT-90W wideband multi-function directional extension antenna and AT-70W wideband multi-function omnidirectional extension antenna were introduced into the market.
4. In 2012, MIPRO developed the patented AT-100 wideband multi-function directional extension circularly polarized antenna providing the most reliable transmitting and receiving signal quality and optimal efficiency.
5. In 2014, all the built-in boosters were upgraded as the "gain-adjustable" boosters.
6. In 2016, MIPRO introduced the AT-24 quasi-circularly-polarized extension antenna with a built-in booster for 2.4 GHz long-distance reception.
7. In 2019, MIPRO introduced the AT-58 extension receiving antenna with a built-in booster for 5 GHz long-distance reception.

### AT-Series

Attachment Antenna		Extension Antenna				
AT-10 Whip Antenna	AT-20 Coaxial Antenna	AT-70W Wideband Multi-function Omnidirectional Antenna	AT-90W Wideband Multi- function Directional Antenna	AT-100 Wideband Multi- function Directional Circularly Polarized Antenna	AT-24 Directional Quasi-Circularly Polarized Antenna	AT-58 Multi-function Directional Antenna
						

### Features & Application

A 1/4 wave single rod antenna features wideband, omnidirectional reception. Directly mounts on the receiver and paired with metal chassis to work as a dipole antenna.	A 1/2 wave coaxial antenna features wideband, omnidirectional reception. Directly mounts on the receiver for increasing sensitivity and operating range.	A wideband multi-function omnidirectional antenna, with a "TX/RX" connector and an "RX Only" connector, provides omnidirectional high-efficiency transmission and reception range.	A wideband multi-function directional antenna, with a "TX/RX" connector and an "RX Only" connector, provides directional high-efficiency transmission and reception range.	A wideband multi-function circularly polarized antenna, with a "TX/RX" connector and an "RX Only" connector and its front area is the main focus of antenna direction for either vertical or horizontal polarization, provides long-distance transmission and reception in a complicated environment and can reduce the polarization loss of the antenna.	Its built-in booster can increase the antenna gain levels for effectively compensating the signal loss of the coaxial cable. Provides an optimized signal transmission in long-distance for the ISM 2.4 / 5 GHz frequency band.
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### Specifications

Model	AT-10	AT-20	AT-70W	AT-90W	AT-100	AT-24	AT-58
Frequency Range	UHF 620 ~ 960 MHz	UHF 480 ~ 960 MHz				ISM 2.4 GHz	ISM 5 GHz
Antenna Gain	2.15 dBi		2 ~ 4 dBi	4 ~ 6 dBi	6 ~ 8 dBi	10 dBi	
Built-in Booster	N/A		0 ~ 12 dB gain controllable booster			12 dB	20 dB
Connectors	TNC male		TNC female × 2			TNC female	TNC female × 2
Power Supply	Not required		8 ~ 15 V DC bias supplied from receiver antenna connector.			10 ~ 24 V DC	
Impedance	50 Ω						
Note	Refer to the actual product in the event of product description discrepancy.						

### MS-90 Wall Mount Kit

	Wall-mount kit for AT-70W, AT-90W, AT-100, AT-24, AT-58.
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## 2. AD Series Antenna Dividers

### Why Choose MIPRO Antenna Dividers?

1. MIPRO antenna divider provides multi-channel diversity receivers to operate with just a pair of antennas. It is the most essential device to greatly simplify the antenna installation, increase the receiving range, and eliminate intermodulation interference in the multi-channel receiving system.
2. The antenna input connector of the divider provides bias for the boosters. Industry's first automatic gain-controllable function can precisely compensate for the loss of antenna cables to keep the antenna system at the ideal gain level and eliminate the intermodulation distortion.

### MIPRO Antenna Dividers Profile

1. In 1997, MIPRO firstly introduced the AD-20 VHF 4-channel antenna divider.
2. In 1998, the AD-80 UHF 4-channel antenna divider was introduced into the market.
3. In 2002, the AD-707 UHF 4-channel antenna divider was introduced into the market.
4. In 2011, the industry's first AD-707a UHF wideband 4-channel antenna divider was introduced.
5. In 2014, the industry's first AD-708 UHF wideband 4-channel with auto gain controller antenna divider and the AD-702 wideband single-channel auto booster gain controller.

Models	
AD-708 UHF Wideband 4-channel Auto Gain Control Antenna Divider	AD-702 UHF Wideband Single-channel Auto Booster Gain Controller
	

### Features & Application

<ol style="list-style-type: none"> <li>1. Optimized in the 470 ~ 850 MHz frequency range and complies with FCC and EU telecom regulations. Output gain is about 1 dB. The antenna connector supplies bias for boosters. Designed with high dynamic, low noise components and an ultra-wideband circuit, it features ultra-low intermodulation and insertion loss and can eliminate the multi-channel spurious interference. Bright LED indicators on the panel are designed for correctly identifying if the antenna cable is connected and the status of booster compensation.</li> <li>2. Pairing with an MPB-30 gain-controllable antenna booster, the AD-708 can detect the cable loss, automatically adjust the booster to precisely compensate for the loss, and eliminate the intermodulation distortion.</li> </ol>	<ol style="list-style-type: none"> <li>1. The aluminum casing provides superb heat dissipation characteristics and a bright LED indicates the antenna cable status and the detection result.</li> <li>2. Automatically detects the cable loss between the receiver and the built-in booster of the antenna and then adjusts the gain of the booster to precisely compensate for the cable loss and eliminate the intermodulation distortion.</li> </ol>
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### Specifications

Model	AD-708	AD-702
Frequency Range	UHF 470 ~ 850 MHz	
Signal Loss Detection	Detects the cable loss for automatic gain adjustment of antenna booster.	
Input / Output Gain	1 dB $\pm$ 1 dB	-1 dB $\pm$ 0.5 dB
Input / Output Connectors	2 sets of 1-to-4 active divider outputs; 2 sets of 1-to-1 active outputs. TNC female. 50 $\Omega$ Impedance.	1-to-1 input/output. TNC female. 50 $\Omega$ Impedance.
Antenna Input Bias	8.3 V DC, 230 mA	The bias of the power supply (8 ~ 15 V DC)
Power Supply	12 ~ 15 V DC	8 ~ 15 V DC
Dimensions	420 $\times$ 44 $\times$ 180 mm (W $\times$ H $\times$ D)	114 $\times$ 24 $\times$ 41 mm (W $\times$ H $\times$ D)
Note	Refer to the actual product in the event of product description discrepancy.	

## 3. AD-Series Antenna Combiners

### Why Choose MIPRO Antenna Combiners?

MIPRO AD-Series antenna combiner can combine multiple transmitters' antenna outputs to one antenna, thus this implementation not only simplifies the antenna installation but greatly eliminates intermodulation distortion of the transmission signal.

Models	
AD-808 UHF 4-channel Transmitting Antenna Combiner	AD-12 UHF Passive Antenna Divider / Combiner
	

### Features & Application

Introduced in 2005, the AD-808 features 3rd order IM < -57 dBc under full band performance at +15 dBm two-tone test. Designed for combining the signal outputs of 2 to 4 MI-909T transmitters into 1 signal output and transmitting by one antenna to simplify the antenna system installation and greatly eliminate intermodulation distortion, the AD-808 is an essential device for professional stages.

First introduced in 2005, the AD-12 adapts an isolated grounding design to eliminate power noise from the multi-receiver operation. It can either divide an RF signal into 2 signal outputs or combine 2 signals into 1 signal output. Simultaneously, it links up bias voltage to external boosters. It is an essential device for antenna system installation.

### Specifications

Frequency Range	UHF 470 ~ 960 MHz	UHF 470 ~ 1000 MHz
Gain	0 dB ± 2 dB	Attenuation 3.5 dB (typ.)
Max. RF Input Power	20 dBm (100 mW)	30 dBm (1 W)
Intermodulation Distortion	< -57 dBc	N/A
Input Connectors	TNC female × 4	TNC female × 1
Output Connectors	TNC female × 1	TNC female × 2
System Impedance	50 Ω	50 Ω
Note	Refer to the actual product in the event of product description discrepancy.	

## 4. MPB Series Antenna Boosters

### Why Choose MIPRO Antenna Boosters?

MIPRO MPB-Series antenna boosters are designed for amplifying the antenna signal. Its gain-controllable feature can precisely compensate for the cable loss over a long distance, increase reception distance and improve signal quality.

### MIPRO Antenna Boosters Profile

1. In 1997, the AB-20 VHF booster & the AB-80 UHF boosters were introduced.
2. In 2012, the MPB-20 UHF booster with a built-in power supply was introduced.
3. In 2014, the industry's first MPB-30 UHF gain-controllable booster was introduced.
4. In 2019, the industry's first MPB-24 ISM 2.4 GHz antenna booster and MPB-58 ISM 5 GHz antenna booster were introduced.

Models		
MPB-30 UHF Gain-Controllable Antenna Booster	MPB-24 2.4 GHz Antenna Booster	MPB-58 5 GHz Antenna Booster
		

### Features

<ol style="list-style-type: none"> <li>1. It is optimized in the 470 ~ 960 MHz frequency range to amplify the antenna signal. It is designed for pairing with the AD-708 antenna divider to detect the cable loss and automatically adjust the gain of the booster output between 0 ~ 14 dB to compensate precisely for the cable loss to obtain the optimal signal quality.</li> <li>2. The antenna booster can be powered by the bias of the receiver's antenna connector or by an external power supply, allowing longer antenna cables can be connected with more boosters.</li> <li>3. With an aluminum casing, it features superb heat dissipation and waterproof.</li> </ol>	<ol style="list-style-type: none"> <li>1. It is optimized in the ISM 2.4 GHz / 5 GHz band to amplify the antenna signal, offering 20 dB gain to compensate for signal loss over long antenna cables and to increase the reception range and signal stability.</li> <li>2. The antenna booster can be powered by the bias of the receiver's antenna connector or by an external power supply, allowing longer antenna cables can be connected with more boosters.</li> <li>3. With an aluminum casing, it features superb heat dissipation and waterproof.</li> </ol>
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### Specifications

Model	MPB-30	MPB-24	MPB-58
Frequency Range	UHF 470 ~ 960 MHz	2.4 GHz	5 GHz
Gain	Variable 0 ~ 14 dB ± 1 dB	Fixed, approx. 20 dB	
Input / Output Connectors	1-to-1 TNC. 50 Ω Impedance.	1-to-1 TNC. 50 Ω Impedance.	
Input Power	12 ~ 24 V DC / 350 mA	10 ~ 24 V DC	
Regulated Power Output	8 V DC / 250 mA	Equals to the bias	
Note	Refer to the actual product in the event of product description discrepancy.		

## 5. AD-90S Wideband RF Power Splitter

### Why Choose MIPRO Wideband RF Power Splitter?

MIPRO AD-90S RF power splitter allows dividing 1 transmitter output into 4 transmitting antennas without power loss for covering a large and multiple-direction area of long-distance wireless transmission.

### AD-90S UHF Wideband RF Power Splitter



### Features & Application

Firstly introduced into the market in 2006, the AD-90S was designed to provide MIPRO's MI-909T stereo in-ear monitoring transmitter, MT-92A wireless interlinking transmitter or MTS-100 digital stationary transmitter to divide its output power into 4 transmitting antennas without power loss. Each channel has a maximum output level of +26 dBm (0.4 W).

### Specifications

Frequency Range	UHF 470 ~ 960 MHz
System Gain	0 ~ 2 dB
Connectors	TNC female (1 input, 4 outputs)
Max. RF Output Power	26 dBm
Power Supply	12 ~ 15 V DC
Note	Refer to the actual product in the event of product description discrepancy.

## 6. AD-90A Wideband RF Power Amplifier

### Why Choose MIPRO Wideband RF Power Amplifier

MIPRO RF power amplifier is primarily used to increase the power output of a transmitter, providing long-distance and optimal, reliable RF transmission signal quality. Its output can be directly connected to AT-Series extension antennas. It is ideally suited for complicated environments at outdoor installation or different stories in large buildings requiring audio wireless transmission.

### AD-90A UHF Wideband RF Power Amplifier



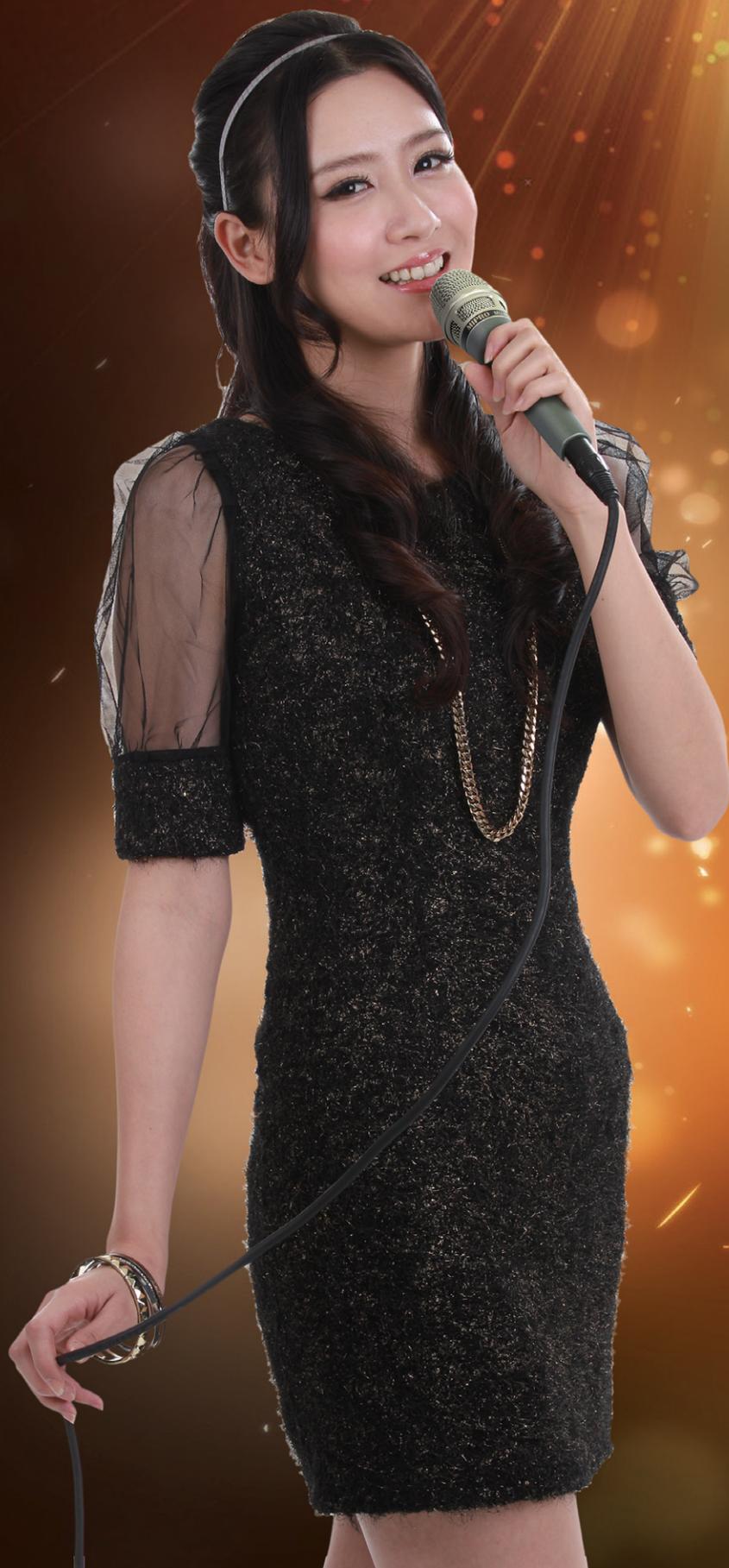
### Features & Application

Firstly introduced in 2006, the AD-90A is designed to boost signal strength for MI-909T, MT-92A, MTS-100 transmitters and the AD-90S splitter. Connect it to AT-70W, AT-90W, and AT-100 external antennas to obtain longer signal transmission distance and optimal RF reception quality.

### Specifications

Frequency Range	UHF 470 ~ 960 MHz
System Gain	8 ± 1 dB
Connectors	TNC female (1 input, 1 output)
Max. RF Output Power	1 W
Power Supply	12 ~ 15 V DC
Note	Refer to the actual product in the event of product description discrepancy.

### 3. Wired Microphones



# Wired Microphones

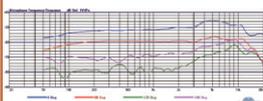
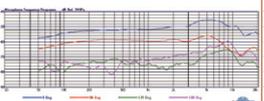
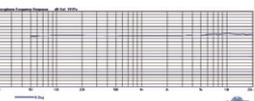
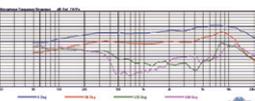
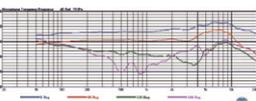
## Why Choose MIPRO Microphones?

1. For decades, MIPRO has invested heavily to develop and mass-produce the professional condenser and dynamic microphone capsule modules in-house to install on MM-Series microphones, presenting unique appearance and premium sound quality, and the most popular brands are no longer monopolizing the limelight.
2. The microphone capsule modules use multi-layer anti-popping inner and exterior metal grilles to replace the easy-rotted sponge. The exterior grille can be detached for cleaning and hygiene purpose.
3. MIPRO condenser microphones feature excellent sound quality as they have wide frequency response, high dynamic range, rich, bright and clear sound effects, rapid transient response and are close to natural sound. They are the best choices for picking up and recording percussion instruments or higher frequency string and wind instruments, also in concert halls, theaters, studios with low noise floor and other occasions requiring optimal sound quality.
4. MIPRO dynamic microphones equip the latest dynamic capsule units, featuring wide frequency response, high dynamic range, wider directionality, excellent feedback suppression and ultra-low handling noise. Thus, they are the best choices for live shows.
5. The microphone housing accepts MIPRO interchangeable microphone capsule modules or others with the same specifications.

## 1. MM-Series Condenser Microphones Profile

1. In the beginning, MM-Series condenser microphone capsules were exclusively supplied by RET Electronics, the earliest manufacturer of professional vocal ECM capsules for the broadcast industry in Japan.
2. In 2012, MIPRO developed MU-89 true condenser microphone capsule and audio professionals are quickly fond of its quality.
3. Since 2014, the vocal ECM capsule modules have been mass-produced in-house with modernized equipment.
4. MIPRO microphone capsule modules have a unique aesthetic style and can be easily installed or detached from the housing, and feature ultra-low handling noise and durability.
5. In 2018, MIPRO introduced the MM-100 omnidirectional measurement microphone and MM-300 / 500 professional high sensitivity recording microphones, featuring a flat and wide frequency response. It's ideal for sound field frequency response measurement as well as piano or various musical instruments pick-up and recording.
6. In 2019, a model number ring was added on the mic capsule module.

## MM-Series Condenser Microphones

MM-90 Supercardioid Vocal Microphone	MM-80 Cardioid Vocal Microphone	MM-100 Omnidirectional Measurement Microphone	MM-300 Cardioid Recording Microphone	MM-500 Cardioid Recording Microphone
				
				

# Wired Microphones

## Features

MM-90	Equips an MU-90 premium supercardioid condenser capsule module and features superb directionality and feedback suppression. Sustains excessive volume without distortion. It is ideal for professional singers in large live shows or those fields requiring optimal sound quality.
MM-80	Equips an MU-80 premium cardioid condenser capsule module and features superb directionality and feedback suppression. Sustains excessive volume without distortion. It is ideal for most singers in live performances or most people in the KTV.
MM-100	Equips a precision omnidirectional capsule and features flat and wide frequency response, high sensitivity and ultra-low noise and is ideal for sound field measurement and pick-up of various musical instruments.
MM-300	Equips a precision cardioid high sensitivity capsule and features wide directionality, low feedback and high dynamic range. It's ideal for live shows and musical instruments pick-up and recording.
MM-500	Equips a precision cardioid high sensitivity capsule and features wide directionality, low feedback and high dynamic range. It's ideal for live shows and musical instruments pick-up and recording.

## Specifications

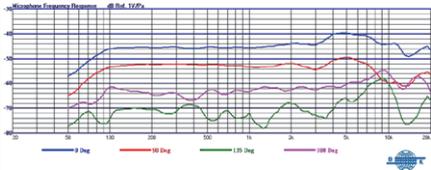
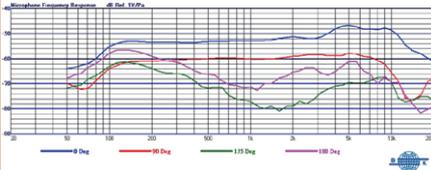
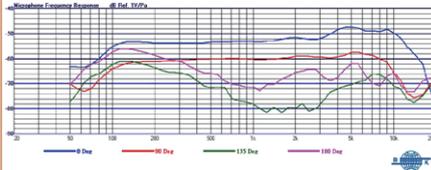
Model	MM-90	MM-80	MM-100	MM-300	MM-500
Capsule Module	MU-90	MU-80	Fixed capsule unit		
Polar Pattern	Supercardioid	Cardioid	Omnidirectional	Cardioid	
Capsule Installation	Interchangeable		Fixed		
Housing	Die-cast zinc alloy		Stainless steel	Aluminum alloy	
Sensitivity	-46 ± 3 dBV / Pa (balanced)		-36 ± 2 dBV / Pa	-43 ± 1.5 dBV / Pa	
Frequency Response	50 Hz ~ 20 kHz		20 Hz ~ 20 kHz	50 Hz ~ 20 kHz	
Self-Noise	< 17 dBA SPL		< 18 dBA SPL	< 17 dBA SPL	
S/N Ratio	> 78 dB , at 94 dB SPL		> 75 dB , at 94 dB SPL	> 78 dB , at 94 dB SPL	
Max. Input SPL	149 dB		138 dB	149 dB	
Dynamic Range	132 dB		120 dB	132 dB	
Power Supply	External phantom power 24 ~ 48 V DC				
Current Consumption	2.0 mA				
Output Impedance	200 Ω				
Dimensions(mm)	Ø 51 × 202	Ø 51 × 202	Ø 19 × 168	Ø 21 × 160	Ø 23 × 180
Weight	Approx. 233 g	Approx. 228 g	Approx. 109 g	84 g	125 g
Note	Refer to the actual product in the event of product description discrepancy.				

# Wired Microphones

## 2. MM-Series Dynamic Microphones Profile

1. The MM-Series dynamic microphones equip the latest in-house developed and manufactured dynamic capsule units with multi-layer anti-popping metal grilles and feature superb directionality, feedback suppression, and ultra-low handling noise.
2. In 2016, MIPRO invented a patented bifunctional microphone MM-590A. Users can select unique tone quality up to their personal preferences from MIPRO's condenser or dynamic microphone capsule modules to install on the same microphone housing. The built-in battery supplies 48V DC phantom power for the condenser microphone capsule modules, so users can conveniently use external or built-in phantom power.
3. In 2019, the dynamic microphones were added a MU-59 and MU-39 model number ring on the mic capsule module.

## MM-Series Dynamic Microphones

MM-590A	MM-59	MM-39
Condenser / Dynamic Bifunctional Microphone	Supercardioid Vocal Microphone	Supercardioid Vocal Microphone
		
		

## Features

MM-590A	The first microphone accepts both condenser and dynamic microphone capsule modules for users to select unique tone quality up to their personal preferences. It has a switch to turn on or turn off the 48V phantom power supplied by a built-in AA battery.
MM-59	Equips an MU-59 premium interchangeable supercardioid dynamic capsule module and features high dynamic range, sustains excessive volume without distortion, delivers soft and plentiful sound quality, and has ultra-low handling noise. It's ideal for indoor and outdoor large-scale live stages.
MM-39	Equips an MU-39 interchangeable supercardioid dynamic capsule module and features high dynamic range and sustains excessive volume without distortion, delivers soft and plentiful sound quality, and has low handling noise, suitable for small-scale live performance or KTV.

## Specifications

Model	MM-590A	MM-59	MM-39
Capsule	MU-90A, MU-59A	MU-59	MU-39
Polar Pattern	Supercardioid		
Installation	Interchangeable		
Sensitivity	-46 ± 3 dBV / Pa	-53 ± 3 dBV / Pa	
Housing	Sterling gray die-cast zinc alloy.		
Frequency Response	50 Hz ~ 18 kHz		
Output Impedance	600 Ω ± 30%		
Switch	3-level switch	2-level switch	
Dimensions	51 × 204 mm (Ø × L)		
Weight	Approx. 331 g (Dynamic) Approx. 319 g (Condenser)	Approx. 380 g	Approx. 363 g
Note	Refer to the actual product in the event of product description discrepancy.		

## 4. Conference Microphones



# Conference Microphones

## 1. MM-2 Series Gooseneck Microphones



### Features

1. MM-2 Series gooseneck microphones can be bent in wide angles and are ideal for conference room and church applications.
2. Multi-layered microphone grille effectively eliminates pop noise.
3. Connects directly to any mixer supplying phantom power.
4. 3 pin XLR plug fits wired BC-100 and wireless BC-T Series conference microphone bases.
5. MM-202S with TA4F jack fits any MIPRO bodypack transmitters. MM-202P with Ø 3.5 mm phone jack fits MIPRO's MTG-100T/MTG-100Ta tour guide transmitter.

### Specifications

Model	MM-206J	MM-205J	MM-204J	MM-202S	MM-202P
Color	Black				
Capsule	Ø 10 mm unidirectional condenser microphone				
Frequency Response	50 Hz ~ 18 kHz				
Sensitivity	-46 ± 3 dBV / Pa (0 dB=1 V / Pa)				
Max. SPL	142 dB				136 dB
Output Jack	3 pin XLR male			TA4F Jack	Ø 3.5 mm Phone Jack
Phantom Power	24~48 V DC			5~9 V DC	
Length	585 mm	485 mm	385 mm	130 mm	136 mm
Note	Refer to the actual product in the event of product discrepancy.				

# Conference Microphones

## 2. BC-100 Conference Microphone Base



### Features

1. BC-100 can connect with MM-206J / MM-205J / MM-204J gooseneck microphone to be a desktop conference microphone.
2. BC-100 with a built-in high-sensitivity condenser microphone can be independently used as a boundary microphone.
3. The back panel has a balanced XLR connector for any mixer supplying phantom power and a switch to select the audio source from either the inner boundary microphone or the optional gooseneck microphone. A TALK / MUTE button with a LED status indicator provides easy speaking or mute option.
4. The housing is made of metal with a reinforced base and anti-slip pad to give added stability.

### Specifications

Built-in Boundary Microphone	Ø 10 mm cardioid condenser microphone
Input Jack	XLR female
Output Jack	Balanced XLR male
TALK / MUTE Button	Mechanical PUSH-HOLD switch, with LED status indicator.
Power Supply	External 24 ~ 48 V DC phantom power is required.
Color	Black
Note	Refer to the actual product in the event of product discrepancy.

## 3. BC-T Series Wireless Conference Microphone Bases

BC-24T



BC-58T



### Features

1. BC-T Series encloses the transmitter PCB for wireless transmission and can also connect directly with MM-206J / MM-205J / MM-204J gooseneck microphone.
2. For wired transmission, the output jack requires phantom power from the mixer.
3. For wireless transmission, the operational controls are the same as the ACT-T Series bodypack transmitters. A built-in ICR 18500 rechargeable lithium battery can be charged by an external charger or simply replace with another spare battery.
4. A TALK / MUTE button with a LED indicates TALK (LED on) or MUTE (LED off).

### Specifications

Model	BC-24T	BC-58T
Built-in Transmitter	ACT-240T (2.4 GHz Digital)	ACT-580T (5.8 GHz Digital)
Receiver	ACT-2400 Series	ACT-5800 Series
Input Jack	XLR female	
Output Jack	Balanced XLR male	
Microphones	MM-206J / MM-205J / MM-204J gooseneck microphone	
TALK / MUTE Button	Mechanical PUSH-HOLD switch, with LED status indicator.	
Power Supply	A built-in ICR 18500 rechargeable lithium battery and the charging circuit.	
Phantom Power	External 24 ~ 48 V DC phantom power is required.	
Color	Black	
Note	Refer to the actual product in the event of product discrepancy.	

# 5. MI Wireless Microphone Systems



# MI Wireless Microphone Systems

## Why Musical Instruments Requires Wireless Transmission?

When a higher sound level is required during musical instrument playing, an instrument microphone or a pickup is used to connect the music signal to the amplifier system. Using the cable connection is the easiest way; however, the expert in wireless transmission, MIPRO has developed various instrument wireless systems to replace the cable connection, thus the players can get rid of the tangled cables and conveniently perform with high flexibility on stage. In addition, the wireless systems ensure the natural sound of their instrument to be reproduced.

## 1. MI Wireless Sets Profile

There are many kinds of musical instruments, and the models of the wireless system are relatively complicated. To facilitate the user to easily select a wireless system for various instruments, the appropriate combination of related models is selected according to the type of the instrument, and packaged into a complete set.

### System Overview

Type	Model	Name	Photo
Receiver	MR-58	5 GHz Digital Wireless Pedal Receiver	
Transmitters	MT-58	5 GHz Digital Instrument Transmitter	
	ACT-580T	5 GHz Digital String Instrument Transmitter	
String Instruments Microphone Sets	VM-10L	Violin/Viola Microphone Set	
	VM-10C	Cello Microphone Set	
	VM-10D	Double Bass Microphone Set	
Saxophone Microphone Sets	SM-10S	Soprano Saxophone Microphone Set	
	SM-10A	Alto Saxophone Microphone Set	
	SM-10T	Tenor Saxophone Microphone Set	
	SM-10B	Baritone Saxophone Microphone Set	
Other Instruments Microphone Sets	GM-10A	Guitar Microphone Set	
	UM-10C	Ukulele Microphone Set	
	DM-10C	Cajon Microphone Set	
	CM-10E	Erhu Microphone Set	

# MI Wireless Microphone Systems

## MI Wireless Sets

Model	Contents
<p><b>MR-58GE</b> Wireless Electric Guitar / Electric Bass Set</p>	<p>MR-58 wireless pedal receiver and MT-58GE transmitter set.</p> 
<p><b>MR-58GA</b> Wireless Acoustic Guitar Set</p>	<p>MR-58 wireless pedal receiver and MT-58GA transmitter set.</p> 
<p><b>MR-58UC</b> Wireless Ukulele Set</p>	<p>MR-58 wireless pedal receiver and MT-58UC transmitter set.</p> 
<p><b>MR-58SS</b> Wireless Soprano Saxophone Set</p>	<p>MR-58 wireless pedal receiver and MT-58SS transmitter set.</p> 

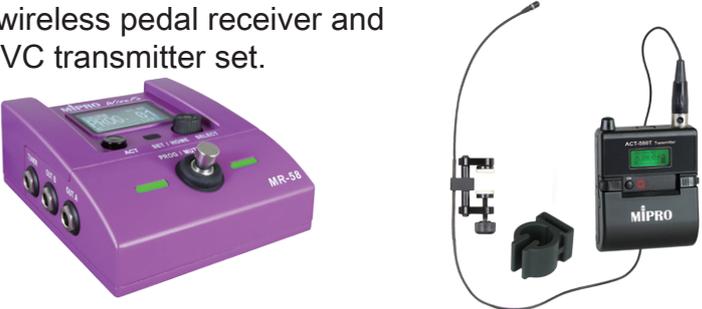
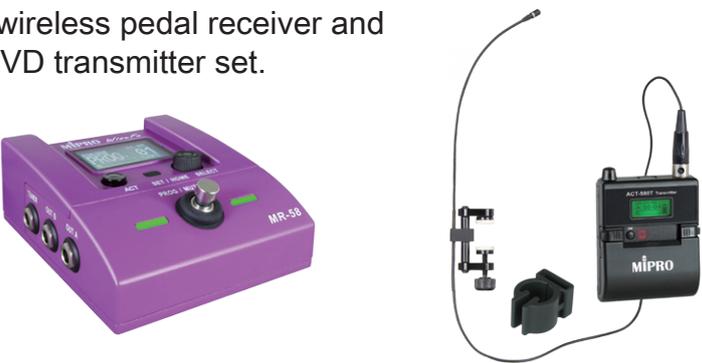
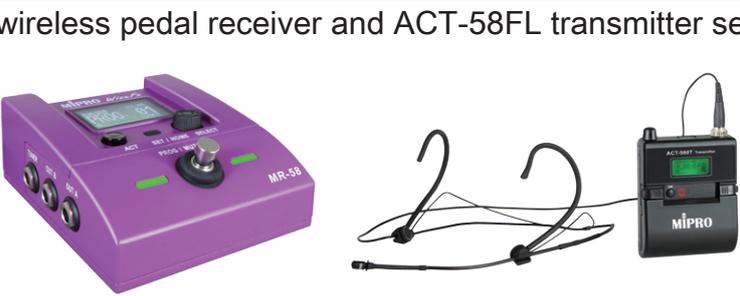
# MI Wireless Microphone Systems

## MI Wireless Sets

Model	Contents
<p><b>MR-58SA</b> Wireless Alto Saxophone Set</p>	<p>MR-58 wireless pedal receiver and MT-58SA transmitter set.</p> 
<p><b>MR-58ST</b> Wireless Tenor Saxophone Set</p>	<p>MR-58 wireless pedal receiver and MT-58ST transmitter set.</p> 
<p><b>MR-58SB</b> Wireless Baritone Saxophone Set</p>	<p>MR-58 wireless pedal receiver and MT-58SB transmitter set.</p> 
<p><b>MR-58VL</b> Wireless Violin / Viola Set</p>	<p>MR-58 wireless pedal receiver and ACT-58VL transmitter set.</p> 

# MI Wireless Microphone Systems

## MI Wireless Sets

Model	Contents
<p><b>MR-58VC</b> Wireless Cello Set</p>	<p>MR-58 wireless pedal receiver and ACT-58VC transmitter set.</p> 
<p><b>MR-58VD</b> Wireless Double Bass Set</p>	<p>MR-58 wireless pedal receiver and ACT-58VD transmitter set.</p> 
<p><b>MR-58DC</b> Wireless Cajon Set</p>	<p>MR-58 wireless pedal receiver and MT-58DC transmitter set.</p> 
<p><b>MR-58CE</b> Wireless Erhu Set</p>	<p>MR-58 wireless pedal receiver and ACT-58CE transmitter set.</p> 
<p><b>MR-58FL</b> Wireless Flute Set</p>	<p>MR-58 wireless pedal receiver and ACT-58FL transmitter set.</p> 

# MI Wireless Microphone Systems

## MR-58 Wireless Sets

Series	Musical Instruments	Set Model No.	Set Contents		Transmitter Set Contents		
			Receiver	Transmitter Set	Transmitter	Charger	Microphone
Guitar	Electric Guitar	MR-58GE	MR-58	MT-58GE	MT-58	MP-24	N/A
	Electric Bass						
	Acoustic Guitar	MR-58GA		MT-58GA			GM-10A
Ukulele	Ukulele	MR-58UC	MR-58	MT-58UC	MT-58	MP-24	UM-10C
Saxophone	Soprano Saxophone	MR-58SS	MR-58	MT-58SS	MT-58	MP-24	SM-10S
	Alto Saxophone	MR-58SA		MT-58SA			SM-10A
	Tenor Saxophone	MR-58ST		MT-58ST			SM-10T
	Baritone Saxophone	MR-58SB		MT-58SB			SM-10B
String Instruments	Violin	MR-58VL	MR-58	ACT-58VL	ACT-580T	USB-C	VM-10L
	Viola						
	Cello	MR-58VC		ACT-58VC			VM-10C
	Double Bass	MR-58VD		ACT-58VD			VM-10D
Cajon	Cajon	MR-58DC	MR-58	MT-58DC	MT-58	MP-24	DM-10C
Chinese Instruments	Chinese Erhu	MR-58CE	MR-58	ACT-58CE	ACT-580T	USB-C	CM-10E
Flute	Flute	MR-58FL	MR-58	ACT-58FL	ACT-58FL	USB-C	MU-55HN

## Patented Innovation Design

1. The MR-58 ISM band wireless pedal receiver is designed for musical instruments with a rugged metal case and a built-in antenna. The graphic LCD panel displays various settings and operating parameters and an ergonomic footswitch allows performers to select the signal output to one or multiple amplifiers for the best performance result.
2. The MR-58 ISM band receiver integrates digital wireless transmission technology and musicians' requirements. After the pedal receiver receiving the audio signals picking up from the instrument microphones and modifying the signal outputs with various preset tone effects to satisfy the players' preference. It's ideal for personal studio and professional live stage applications.
3. The MR-58 receiver has 32 user-programmable parameters for setting up Channel and ID, Cable Tone, Acoustic Response, Anti-Feedback, Gain, Output, Phase, Situation Color, Name, Auto Wake Up, and Channel Scan. Each setting can be switched by stepping on the footswitch.
4. The MR-58 has audio dynamic range > 120 dB, T.H.D. < 0.04%, wide frequency response 18 Hz ~ 23 kHz and ultra-low noise floor. It applies both advanced DSP and exclusive algorithm digitized audio for natural sound reproduction.
5. Two 6.3 mm phone jacks and one output XLR connector can be connected to multiple effects, and each output can be muted when needed. An additional TUNER output jack can be individually connected to a tuner for intonation test and adjustment.
6. MIPRO's DSP adaptive tracking algorithm for optimal reception, greatly enhanced receiving range and signal stability in the ISM band. Built-in scan functions effectively avoid the interference from Wi-Fi and other 2.4 GHz communication products, which no competitors can achieve.
7. The programmable gain setting ensures the same volume when switching among different instruments.
8. Compatible with all MIPRO's MI transmitter sets for quick and easy change of multiple instruments without sound engineers' assistance.

# MI Wireless Microphone Systems

## 2. MI Digital Wireless Pedal Receiver and Transmitters

### Why Choose MIPRO Digital Wireless MI Series?

MIPRO is the first to develop the MR-58 digital wireless pedal receiver to solve the problems when using a conventional musical instrument wireless system. The pedal receiver provides players the freedom to switch among different instruments and flexibility to tune sound effects with ease for a flawless performance that no cable system can deliver.

### ISM 5.8 GHz Digital Pedal Receiver Profile

After the pedal receiver receiving the audio signals picking up from the instrument microphones, the signal will be modified with various preset tone effects to suit players' preference, and then output to the amplifier system. It's ideal for personal studio and professional live stage applications.

## MR-58 Musical Instrument Digital Wireless Pedal Receiver



### Features

1. Exclusively designed housing, display panel and color. Built-in with the most advanced circuitry design of ISM 5 GHz frequency band that avoids the interference from 2.4 GHz and UHF bands while offering more reliable and farther transmission and more compatible channels.
2. The true digital wireless system completely solves the inferior sound quality of the analog system and ensures natural sound reproduction.
3. Sturdy metal construction with unique color, large graphic LCD screen and easy to use footswitch.
4. High-sensitivity built-in antenna prevents accidental breakage.
5. 9V DC power supply with auto polarity detection is convenient to connect with power supplies of the effects.
6. A balanced output jack with a ground lift switch can eliminate electrical noise when connecting with other audio equipment on the stage.
7. A microSD slot is designed for user programming and firmware updates.
8. The circuitry design and features are fully compatible with MIPRO ACT-5800 Series.

### Specifications

Carrier Frequency Range	ISM 5.8 GHz (5,725 ~ 5,850 MHz)
Frequency Response	18 Hz ~ 23 kHz
Latency	< 1.7 ms
S/N Ratio	> 120 dBA
T.H.D	0.04 % @ 1 kHz
Sensitivity	-95 dBm
Channel Set-up	ACT sync
Sample Rate	24-bit / 48 kHz
Modulation	Digital modulation
Receiving Mode	True diversity
Display	Graphic LCD, Color LED × 2
Audio Outputs	Ø 6.3 mm phone jack × 3, XLR connector × 1
Interface	MicroSD slot × 1
Power Supply	DC 9 V ~ 12 V / 0.3 A

# MI Wireless Microphone Systems

## ISM 5.8 GHz Digital Transmitter Profile

For musical instrument wireless transmission, just connect the digital transmitter to the output jack of the instrument, and the signal will transmit to the pairing receiver. The players can get rid of tangled cables for carefree performance as well as completely avoid the issues of inferior sound quality and induced noise caused by cables, thus allowing the natural sound of their instrument to be reproduced.

## MT-58 Musical Instrument Digital Transmitter

### Features

1. The MT-58 is a digital transmitter with a rotatable Ø 6.3 mm phone plug for easy fitting to a musical instrument with a built-in pickup, a PC or a projector with a phone jack.
2. The compact MT-58 can be snugly attached to the instruments with various instrument holders. It can be paired with an MR-58 digital pedal receiver to get rid of the problem of tangled cables for carefree performance with truly wireless transmission.
3. The MT-58 operates in ISM 5 GHz frequency band that avoids the interference and the strict telecom regulations from 2.4 GHz and UHF band, thus it has excellent performance especially for instrument signals. Its digital circuitry design eliminates the distortion caused by the analog system, and the natural sound of the musical instruments can be reproduced.



### Specifications

Frequency Range	ISM 5.8 GHz (5,725~5,850 MHz)
RF Power Output	20 mW (country dependent)
Max. Audio Input	6.5 dBV
Battery Meter	4-level green/red LED display
Impedance	Approx. 1 M $\Omega$
Dimensions	84 × 35 × 29 mm (W × H × D)
Weight	Approx. 61 g, excluding battery
Battery	ICR 18500 lithium-ion battery
Note	Refer to the actual product in the event of product discrepancy.

## Optional Accessories

### MP-24 One-slot Charging Station



# MI Wireless Microphone Systems

## 3. MI Microphone Modules

### Why Choose MIPRO MI Microphone Modules?

1. Each MIPRO proprietary instrument microphone set consists of a specific miniature condenser microphone capsule, particularly designed for each instrument according to its acoustic characteristics under collaboration with professional musicians and musical instrument manufacturers.
2. Each microphone set is assembled on a specific anti-shock holder to prevent touch noise and strategically placed in a position that picks up the accurate sound of the instrument. It is easy to install and remove, and protects these precious instruments from surface scratches.
3. The high dynamic range characteristic of MIPRO digital transmission technology is ideal for picking up the sound under high SPL and presents complete sound details for natural sound reproduction.
4. MIPRO scientifically analyzes the structure and the resonance characteristics of the instrument body to design the microphone sets that can completely pick up the natural sound of the instrument, which is different from the electronic sound by a pickup. The signal output can be transmitted by cables or directly connected to a transmitter for wireless transmission.

### String Instrument Microphone Modules

VM-10L	VM-10C	VM-10D
Violin/Viola Microphone Set	Cello Microphone Set	Double Bass Microphone Set
		

### Specifications

Model	VM-10L	VM-10C	VM-10D
Color	Black	Black	Black
Cable	VC-10L	VC-10C	VC-10D
Holder	VH-10L	VH-10C	VH-10D
Capsule Module	MU-55V	MU-55C	MU-55D
Directionality	Omnidirectional		
Max. SPL	135 dB		
Assembly	See figures.		
Note	Refer to the actual product in the event of product discrepancy.		

# MI Wireless Microphone Systems

## Saxophone Instrument Microphone Modules

SM-10S	SM-10A	SM-10T	SM-10B
Soprano Saxophone Microphone Set	Alto Saxophone Microphone Set	Tenor Saxophone Microphone Set	Baritone Saxophone Microphone Set
			

### Specifications

Color	Black			
Cable	SH-10S			
Holder	SG-10S		SG-10T	
Capsule Module	MU-10	MU-16	MU-16	MU-20
Directionality	Cardioid	Semi-supercardioid	Semi-supercardioid	Supercardioid
Max. SPL	142 dB			145 dB
Assembly	See figures.			
Note	Refer to the actual product in the event of product discrepancy.			

## Other Musical Instrument Microphone Modules

GM-10A	UM-10C	DM-10C	CM-10E
Guitar Microphone Set	Ukulele Microphone Set	Cajon Microphone Set	Erhu Microphone Set
			

### Specifications

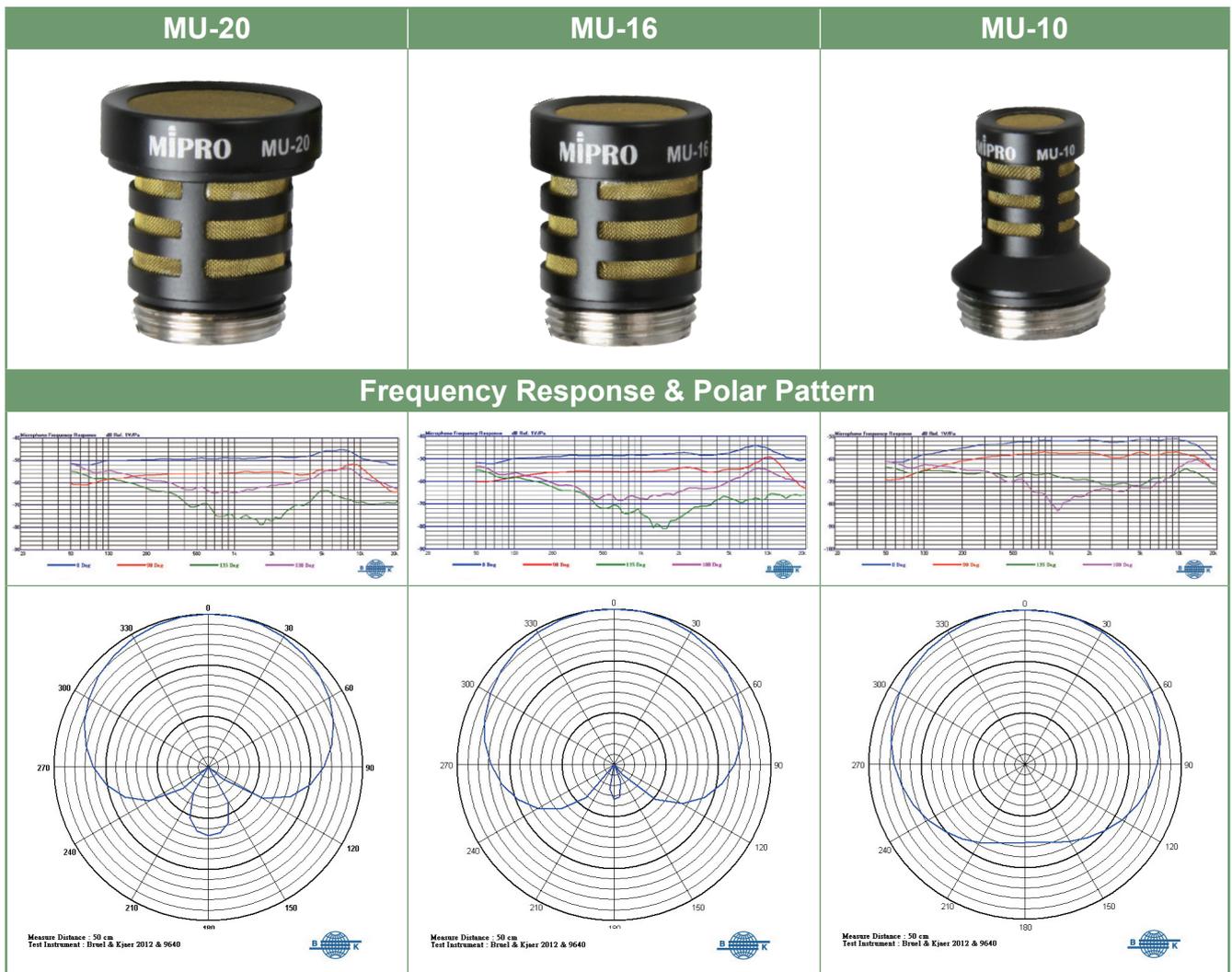
Color	Black			
Cable	AG-10A	UG-10C	DG-10C	CG-10E
Holder	N/A	N/A	DH-10C	CH-10E
Capsule Module	MU-55G	MU-55U	MU-10	
Directionality	Omni-directional		Cardioid	
Max. SPL	135 dB		142 dB	
Assembly	See figures.			
Note	Refer to the actual product in the event of product discrepancy.			

# MI Wireless Microphone Systems

## 4. MI Microphone Capsule Modules Profile

The instrument condenser microphone capsules are precisely designed based on stable sensitivity, high SPL dynamic range, wide frequency response and directionality, and the sound characteristic of different musical instruments to perfectly pick up the original sound of the instruments. All the capsule modules are manufactured in-house.

### MIPRO Instrument Microphone Capsule Modules



### Features

Three different diameter capsules are encapsulated in copper grille housings which all have the same interchangeable base for easy install the capsule module on the same mount. They are offered for the performers to choose the optimal characteristics for instruments.

### Specifications

Color	Black		
Capsule	Ø 20 mm	Ø 16 mm	Ø 10 mm
Polar Pattern	Supercardioid	Semi-supercardioid	Cardioid
Frequency Response	50 Hz ~ 20 kHz	55 Hz ~ 20 kHz	65 Hz ~ 20 kHz
Sensitivity	-49 dB		-52 dB
Max. SPL	145 dB SPL	142 dB SPL	
Features	High fidelity and dynamic range, wide frequency response and directionality, rapid transient response, low feedback, and touching noises present excellent sound characteristic.		
Note	Refer to the actual product in the event of product discrepancy.		

## 6. Pro Audio Wireless Transmission Systems



# Pro Audio Wireless Transmission Systems

## TA-Series Digital Plug-on Transmitter

TA-Series digital miniature plug-on transmitters with a balanced XLR mic input connector, designed for connecting with measurement microphones, condenser / dynamic wired microphones, zoom mic (shotgun), recording and musical instrument microphones. Pairing with ACT-800 Series and ACT-5800 Series receivers for wireless transmission, TA-Series transmitters solve the problem of cable entanglement and keep optimal sound reproduction.



### Features

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. The TA-80 features a flat and wide frequency response, ultra-low T.H.D. and noise floor, fast transient response, and high S/N ratio. It solves the problems of tangling microphone cables and defects of analog transmission. Thus, it is an ideal plug-on transmitter to reproduce the natural sound of any premium wired microphone.</li> <li>2. A balanced XLR input jack for any condenser microphone to plug on. It provides 8 gain levels and supplies selectable 12 / 48V, up to 10 mA phantom power for condenser microphone, and can be switched off for the dynamic microphones.</li> <li>3. A built-in high-capacity lithium-ion battery enables up to 8 hours of use per charge. The TA-80 can be plugged into an intelligent charging station to recharge or simply remove the battery to recharge.</li> <li>4. The compact metal housing isolates RF spurious and noise interference. It has built-in a high efficiency transmitting antenna and a green backlit LCD displaying operation parameters.</li> </ol> | <ol style="list-style-type: none"> <li>1. Operates in the ISM band to avoid the wireless interference signals.</li> <li>2. The TA-58 features a flat and wide frequency response, ultra-low T.H.D. and noise floor, and fast transient response. It solves the problems of tangling microphone cables and defects of analog transmission. Thus, it is an ideal plug-on transmitter to reproduce the natural sound of any premium wired microphone.</li> <li>3. A balanced XLR input jack for any condenser microphone to plug on. It provides supplies 48V, up to 10 mA phantom power for condenser microphone, and can be switched off for the dynamic microphones.</li> <li>4. A built-in high-capacity lithium-ion battery enables up to 8 hours of use per charge. The TA-58 can be recharged via a USB Type-C socket. It is fast and easy to replace the battery with a foolproof design.</li> <li>5. The fiber reinforced plastic housing has a built-in high efficiency transmitting antenna and a green backlit LCD displaying operation parameters.</li> </ol> |
|---|---|

### Specifications

Frequency Range	UHF 480 ~ 960 MHz	ISM 5.8 GHz (5,725~5,850 MHz)
Bandwidth	72 MHz	125 MHz
RF Output Power	10 / 50 mW switchable (country dependent)	20 mW (country dependent)
Gain Setting	0 dB (default), 9 selectable settings	0 dB
AF Input Level	2V max. at 0 dB	2V max.
Phantom Power	Selectable 12 V and 48 V at 10 mA max.	48 V at 10 mA max.
Battery Type	ICR 18500 lithium-ion battery	ICR 18500 lithium-ion battery
Charger	MP-8T	USB Type-C
Note	Refer to the actual product in the event of product discrepancy.	

## MP-8T One-slot Charging Station

### Features and Application

The MP-8T is an intelligent single-slot charging station providing efficient and safe charging with constant voltage and current limiting, and a reverse polarity protection circuit to prevent charging errors. A red/green LED indicator shows charging status. The LED does not glow to indicate there's no battery inside the TA-80. It is designed to charge the TA-80 transmitter.



### Specifications

Input Voltage Range	DC 5V / 1A
Battery	ICR 18500 3.7 V Li-ion battery
Charge Current	Approx. 500 mA constant current
Charge Method	Terminated by 20% max. current
Current Consumption	550 mA / 5 V
Note	Refer to the actual product in the event of product discrepancy.

# Pro Audio Wireless Transmission Systems

## MT-24A ISM 2.4 GHz Digital Interlinking Transmitter

The MT-24A is the latest 2.4 GHz digital interlinking transmitter designed to transmit the output signals of microphones, instruments and other audio equipment for long-distance wireless transmission.



### Features

EIA standard 1/2 U. The MT-24A can connect the outputs of microphones, instruments and other audio equipment with switchable input Mic/Line level. It presets 12 channels and 16 ID codes, switchable high (< 100 mW) and low power (< 10 mW), and supplies +48 V phantom power for condenser microphones. It is used to pair with the ACT-2400 Series receivers for long-distance wireless transmission.

### Specifications

Frequency Band & Modulation Type	ISM 2.4 GHz band. Digital modulation.
Receivers	ACT-2400 Series receivers
Adaptor	XLR & Ø 6.3 mm combo jack
Power Supply	12 ~ 15 V DC
Note	Refer to the actual product in the event of product discrepancy.

## MT-92A UHF Analog Interlinking Transmitter

The MT-92A is a wireless interlinking transmitter designed to transmit the output signals of microphones, instruments and other audio equipment to MR-90B ENG receivers, ACT Series analog receivers or portable PAs for long-distance wireless transmission.



### Features and Application

EIA standard 1/2 U. The MT-92A transmits the output signals of microphones, instruments and other audio equipment. It presets 16 channels, switchable high (< 500 mW) and low power (< 100 mW), switchable Mic/Line input level, and supplies 48 V phantom power for condenser microphones. It is used to pair with the MR-90B and the ACT Series analog receivers for long-distance wireless transmission.

### Specifications

Frequency Range & Modulation Type	UHF 506 ~ 934 MHz. FM modulation (country dependent).
RF Output Power	Low: < 100 mW, High: < 500 mW (country dependent).
Receivers	MR-90B, ACT Series analog receivers and MA Series portable PA systems.
Adaptor	XLR & Ø 6.3 mm combo jack.
Power Supply	12 ~ 15 V DC.
Note	Refer to the actual product in the event of product discrepancy.

# 7. Wireless In-Ear Monitoring Systems



# Wireless In-Ear Monitoring Systems

## Why Choose MIPRO Wireless IEM Systems?

For live performance, the MI-Series digital IEM system can replace the traditional complex floor monitors for its easy-to-use, user-friendly operations and natural sound reproduction. In addition, the MI-Series can be used as a language interpretation system.

### 1. MI-909 UHF Wireless IEM System



### Features

1. MI-909 wireless in-ear monitoring system is designed to replace conventional floor monitors. Its transmission is as reliable as an analog system, but its sound quality is far better thanks to the DSP (Digital Signal Processing) and digital diversity receiving technology, resulting in superior S/N ratio and dynamic range, thus achieves natural sound reproduction and unprecedented performance.
2. The MI-909 Series consists of the MI-909R stereo ultra-compact bodypack receiver and the MI-909T stereo rackmount transmitter and optional noise isolating earphones. Featuring a user-friendly control panel, long-distance transmission, it's ideal for large stages monitoring and conference language interpretation.
3. The MI-909R is a wideband digital encryption stereo receiver operating in the UHF band, featuring unbreakable soft dual-antenna design and digital diversity receiving for reliable RF without signal drop-out. Selectable stereo, mono & mixed output modes and EQ settings can suit the users' preference and a  $\varnothing$  3.5 mm TRS jack provides left/right 120 mW @16  $\Omega$  output for earphones. Optional standard or professional  $\varnothing$  3.5 mm TRS noise isolating earphones are available.
4. The MI-909T digital stereo transmitter is paired with MI-909R, and can be switched between HI 100 mW and LOW 10mW output power with selectable HI/LOW/OFF stages. It can scan the preset group channel or an open, interference-free channel and ACT sync to the receiver. With a high dynamic range stereo input combo jack, it can sustain the maximum output from any mixer. Select the settings by a rotary knob, with 3-band  $\pm$  9 dB EQ settings for modifying the audio input to the best sound quality. It also can be connected to an ACT-BUS networking interface.

### Specifications

MI-909R Receiver	
Housing	Industry's smallest, lightweight magnesium & glass-fiber reinforced plastic case.
Display	Backlit graphic LCD
Frequency Range	470 ~ 639 MHz, 705 ~ 960 MHz (country dependent)
Modulation Type	Digital modulation
Channel Setting	ACT sync
Receiving Mode	True diversity receiving
Frequency Response	20 Hz ~ 15 kHz (stereo)
Stereo Separation	> 95 dB
Max. S/N Ratio	95 dBA (stereo)
T.H.D	< 0.1% @ 1 kHz
Sensitivity	10 $\mu$ V input level, S/N > 90 dB (stereo)
Earphone Jack	$\varnothing$ 3.5 mm stereo phone jack, Left / Right x 120 mW @ 16 $\Omega$
Battery	AA alkaline x 2, 8-hour standby time.
Accessories	E-8S or E-8P earphones (optional)
Note	Refer to the actual product in the event of product discrepancy.

MI-909T Transmitter	
Housing	Standard 1/2U metal case with a rotary control knob
Display	LCD screen displays all functions and settings. Dual rows of LED indicators show L / R signal.
Frequency Range	UHF 470 ~ 639 MHz, 705 ~ 960 MHz (country dependent)
Preset Channels	12 interference-free frequencies without any limited conditions in group 1-10. 16 interference-free frequencies in group 11-16. 216 preset frequencies in total. Group 17 is for testing.
Channel Setting	ACT sync
RF Output Power	Low < 10 mW, High < 100 mW switchable (country dependent).
Modulation Type	Digital modulation
Spurious Emission	< 4 nW
Audio Input Jack	2 x XLR and $\varnothing$ 6.3 mm combo jack
Audio Output Jack	2 x $\varnothing$ 6.3 mm TRS Jack
Earphone Jack	$\varnothing$ 6.3 mm stereo phone jack with volume control.
Power Supply	External 12 ~ 15 V DC
Note	Refer to the actual product in the event of product discrepancy.

# Wireless In-Ear Monitoring Systems

## 2. MI-58 ISM Digital Stereo Wireless IEM System

MI-58R Digital Stereo Bodypack Receiver



MI-58T Digital Stereo Transmitter



### Features

1. The MI-58 Series is a digital IEM system operating in ISM 5.8 GHz band, due to the wider bandwidth property, the frequency response range is expanded to 20 Hz~23 kHz, and the S/N ratio is greatly improved, the audio latency is reduced, the sound quality is superior to the UHF system, and has an affordable price. It provides an optional DANTE interface.
2. The MI-58 Series consists of the MI-58R stereo bodypack receiver, the MI-58T stereo transmitter and optional noise isolating earphones. Featuring a user-friendly control panel, long-distance transmission, it's ideal for personal and professional stages monitoring and conference language interpretation.
3. The MI-58R has Stereo / Mono / Mixed output modes and EQ settings to suit the users' preferences. A Ø 3.5 mm TRS jack provides left/right 100 mW @16 Ω output for earphones. Optional standard or professional Ø 3.5 mm TRS noise isolating earphones are available.
4. The MI-58T is equipped with a graphic OLED, a rotary knob, an ACT sync button, an audio input set button and the industry's first LED indicators (SLC) for clear identification of the input volume to prevent the loudest peaks. It has Ø 3.5 mm and Ø 6.3 mm dual earphone monitoring connectors and individual volume controls.
5. The rear panel of MI-58T is equipped with two XLR and Ø 6.3 mm input combo jack and two Ø 6.3 mm phone jack loop output. ACT-BUS networking interface and optional Dante interface. TNC RF output connectors. 12V DC power supply.
6. The MI-58T delivers < 25 mW output power (the maximum value depends on the telecom regulations of different countries) with an ON / OFF switch, presets several interference-free channels and can ACT sync to the receiver. With a high dynamic range stereo input combo jack, it can sustain the maximum output from any mixer.

### Specifications

MI-58R Receiver		MI-58T Transmitter	
Housing	Industry's smallest, reinforced plastic case.	Housing	Standard 1/2U metal case with a rotary control knob.
Display	Backlit graphic LCD.	Display	Graphic OLED displays all functions and settings. The LED indicators display (SLC) for proper input stereo signals volume status adjustment.
Frequency Range	ISM 5.8 GHz (5,725 ~ 5,850 MHz)	Frequency Range	ISM 5.8 GHz (5,725~5,850 MHz)
Modulation Type	Digital modulation	Preset Channels	Group A & B. Presets 12 channels of interference-free operation in Group A, and 24 channels of interference-free operation in Group B1 & B2. 64 ID codes and 1 specific ID are allowed to be set for each channel to prevent the same channel interfered in the same field.
Channel Setting	ACT sync	Channel Setting	ACT sync
Receiving Mode	True diversity receiving	Audio Sampling	24-bit / 48 kHz
Frequency Response	20 Hz ~ 23 kHz (stereo)	RF Output Power	< 25 mW (CE compliance), or country dependent.
Stereo Separation	> 100 dB	Audio Input Jack	XLR and Ø 6.3 mm combo jack × 2.
Max. S/N Ratio	> 105 dBA (stereo)	AF Loop Output Jack	Ø 6.3 mm TRS × 2
T.H.D	0.03% (min) at 1 kHz	Earphone Jack	Ø 6.3 mm × 1 and Ø 3.5 mm × 1
Sensitivity	5 µ V input level, S/N > 100 dB (stereo).	Networking Interface	RJ-11 ACT-BUS × 2, RJ-45 DANTE interface (optional) × 1.
Earphone Jack	Ø 3.5 mm stereo phone jack, Left / Right × 100 mW @ 16 Ω .	Power Supply	External 10 ~ 15 V DC
Power Supply	ICR18500 Li-ion rechargeable battery × 1. Current drain 165 mA.	Note	Refer to the actual product in the event of product discrepancy.
Charger	MP-8 one-slot charging station		
Optional Accessories	E-8S or E-8P earphones		
Note	Refer to the actual product in the event of product discrepancy.		

# Wireless In-Ear Monitoring Systems

## 3. MI-24 ISM Digital Wireless IEM System



### Features

1. The MI-24 Series digital wireless IEM system operates in ISM 2.4 GHz band and presets 8 channels. Simple functions and operations for the personal user market.
2. The MI-24 adapts a 24 bit / 48 kHz sample rate. The main features are similar to the MI-58 system. However, the MI-24R receiver adds EARDRIVE to enhance the performance of earphones and the audio latency is < 3.5 ms, thus can satisfy the demanding music listening.
3. Before, the MI-909 Series UHF IEM system cannot deliver the best sound quality due to the telecom regulation's restrictions. Now the MI-24 system has the advantages of the frequency band, sound quality and price, so it is the best choice of the wireless IEM system.

### Specifications

MI-24R Receiver	
Housing	Industry's smallest reinforced plastic case.
Display	Backlit graphic LCD
Frequency Range	ISM 2.4 GHz (2,400 ~ 2,483.5 MHz)
Modulation Type	Digital modulation
Channel Setting	ACT sync
Receiving Mode	True diversity receiving
Frequency Response	20 Hz ~ 23 kHz (stereo)
Stereo Separation	> 100 dB
Max. S/N Ratio	> 109 dBA
T.H.D	< 0.1% at 1 kHz
Sensitivity	5 $\mu$ V input level, S/N > 100 dB (stereo).
Earphone Jack	$\varnothing$ 3.5 mm stereo phone jack, Left / Right $\times$ 100 mW @ 16 $\Omega$ .
Power Supply	ICR18500 Li-ion rechargeable battery $\times$ 1. Current drain 140 mA. Up to 9 hours of continuous use.
Charger	MP-8 one-slot charging station
Optional Accessories	E-8S or E-8P earphones
Note	Refer to the actual product in the event of product discrepancy.

MI-24T Transmitter	
Housing	Standard 1/2U metal case with a rotary control knob.
Display	Graphic OLED displays all functions and settings. The easy-to-read volume indicator is easy to identify the input volume for proper status adjustment.
Frequency Range	ISM 2.4 GHz (2,400~2,483.5 MHz)
Preset Channels	Presets 8 channels. 64 ID codes are allowed to be set for each channel to prevent the same channel from being interfered with in the same field.
Channel Setting	ACT sync
Audio Sampling	24-bit / 48 kHz
RF Output Power	< 10 mW (CE compliance or country dependent)
Audio Input Jack	XLR / $\varnothing$ 6.3 mm combo jack $\times$ 2
AF Loop Output Jack	$\varnothing$ 6.3 mm TRS $\times$ 2
Earphone Jack	$\varnothing$ 6.3 mm $\times$ 1, $\varnothing$ 3.5 mm $\times$ 1
Networking Interface	RJ-11 ACT-BUS $\times$ 2
Power Supply	External 10 ~ 15 V DC
Note	Refer to the actual product in the event of product discrepancy.

# Wireless In-Ear Monitoring Systems

## 4. MI-TP Series Quad-channel Wireless IEM System Set

### Why Choose MI-TP Series Quad-channel Wireless IEM System Set?

In a music band, when each performer needs a wireless microphone and an IEM system, the antenna and power supply of each transmitter must be correctly assembled in a rack case or carrying case. The assembly procedures for such a multi-channel system are complicated, time-consuming and laborious. The MI-TP Series is designed with four channels as a set, and the transmitters, antennas and power supplies are assembled correctly and firmly in the carrying case so that the performer can use it as long as the case is opened and the AC power cord is plugged in. It is very convenient whether it is used in a performing venue or carried to a tour around the world, there is no need to worry about assembly and channel setting.

### MI-TP Series Quad-channel Wireless IEM System Set

UHF MI-909TP	ISM MI-58TP	ISM MI-24TP
MI-909T x 4 + FB-70 x 1 + MPC-100 x 1	MI-58T x 4 + FB-70 x 1 + MPC-100 x 1	MI-24T x 4 + FB-70 x 1 + MPC-100 x 1
		

### MI-TP Series Accessories

#### FB-70 Rear-to-front Antenna Kit



#### FB-72 Rack Mount Kit × 2



#### MPC-100 Receivers Power Supply Storage



# Wireless In-Ear Monitoring Systems

## 5. Accessories



### Features and Application

The E-8S in-ear monitors provide excellent isolation, balanced full-range sound thanks to a single transducer which doesn't require crossovers. Built with flexible and comfortable cables along with three different sizes of silicone ear sleeves for a custom fit and comfort.

The E-8P professional in-ear monitors are designed for live stages and provide brilliant sound reproduction. The flexible and high quality twisted cable allows being molded around the ear for an ergonomic fit, comfort, and invisibility.

### Specifications

1. In-ear design with replaceable silicone ear sleeves.
2. Input Sensitivity: > 103 dB SPL.
3. Frequency Response: 15 Hz ~ 20 kHz
4. Impedance: 16  $\Omega$
5. Noise Isolation: > 26 dB

1. Detachable cable system with replaceable silicone ear sleeves.
2. High efficiency dual-dynamic coaxial driver.
3. Input Sensitivity: > 106 dB SPL.
4. Frequency Response: 15 Hz ~ 22 kHz frequency response
5. Impedance: 16  $\Omega$
6. Noise Isolation: > 26 dB

Note Refer to the actual product in the event of product discrepancy.

## MP-8 One-slot Charging Station



### Features and Application

The MP-8 is an intelligent single-slot charging station providing efficient and safe charging, designed exclusively for MIPRO rechargeable transmitters and bodypack receivers. In addition to providing both quick and trickle charging, it has a reverse polarity protection circuit to prevent charging errors and shows the precise charging status with LED indicators.

### Specifications

Input Voltage Range	DC 10 ~ 15V / 1A
Battery	ICR 18500 3.7 V Li-ion battery
Charge Current	Approx. 500 mA by regulation current
Charge Method	Termination by 20% regulation current
Current Consumption	Max. 600 mA / 12 V
Note	Refer to the actual product in the event of product discrepancy.

# 8. Wireless Tour Guide Systems



# Wireless Tour Guide Systems

## 1. ISM 2.4 GHz Digital Wireless Tour Guide System

### Why Choose 2.4 GHz Digital Wireless Tour Guide System?

This system operates in ISM 2.4 GHz and is ideal for guided tours, camcorders and wireless applications of sound systems. It provides an affordable price and professional quality for consumers.

#### System Composition



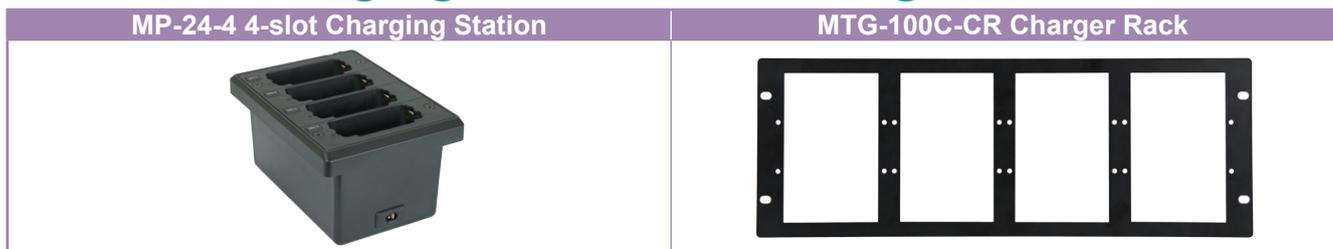
#### Receiver Features

1. Industry's most compact and smallest housing. Featuring a lightweight and rugged plastic case to meet professional requirements.
2. Stable digital modulation circuitry. All frequencies are located in one band. It can skip most Wi-Fi frequencies and eliminates interference from 2.4 GHz communication products.
3. True diversity receiving technology eliminates signal dropout.
4. A backlit graphic LCD displays various function settings.
5. Pairs with new handheld and bodypack transmitters can be charged via USB Type-C. The ACT-24R can be recharged by a charging station and is easy for battery replacement.

#### Receiver Specifications

Frequency Band & Modulation	ISM 2.4 GHz (2,400 ~ 2,483.5 MHz). Digital modulation.
Bandwidth	83 MHz
Receiving Mode	True diversity receiving
Display	Backlit graphical LCD
Characteristics	Latency < 4 ms, Dynamic range > 106 dBA, THD < 0.1 %.
Preset Channels	12
Transmitters	ACT-240H handheld, ACT-240T bodypack, MT-24A interlinking transmitter.
Optional Accessories	A clip and a cable
Power Supply	One ICR 18500 lithium battery
Charger	MP-24-4, MP-8 One-slot Charging Station.
Note	Refer to the actual product in the event of product discrepancy.

### Charging Station and Charger Rack



#### Features and Application

<ol style="list-style-type: none"> <li>1. Quick-charge for less than 4 hours.</li> <li>2. Separate "red" charging and "green" ready indicator. DC 12 V / 0.75 A power supply. Allows for charging 4 ACT-24R receivers. It is designed for end-users.</li> </ol>	Accepts 4 units of MP-24-4 4-slot charging station, up to 16 receivers, to be installed on a rack cabinet.
Charge Time < 4 hours	N/A
Max. Power Consumption < 9 W	N/A

# Wireless Tour Guide Systems

## 2. MTG-100 Series Digital Tour Guide System

### Why Requires MTG-100 Digital Tour Guide System?

The MTG-100 Series is an innovative tour guide system operating in UHF universal ISM band with digital circuit design, featuring miniature, lightweight, easy-to-use, digital crystal-clear sound quality, secure and reliable transmission, and insensitive to many interference sources, exhibiting unparalleled superiority over analog-based systems.

### Features and Application

1. MIPRO MTG-100 digital wireless tour guide system is comprised of two powered models: built-in lithium rechargeable battery & disposable AA battery systems. The two systems are nearly identical in design, characteristics and performance.
2. The built-in lithium rechargeable battery of the MTG-100 saves the inconvenience of constant battery changes, is kinder to the environment and saves a significant amount of money over the years. The optional 4-slot charger and convenient 12 or 28-slot charger carry cases can accommodate any small to large, indoor or outdoor tour guide applications.
3. The disposable AA battery system also accepts rechargeable AA batteries. Extended operational hours are possible due to its ultra-low current consumption. This system is ideal for international tour groups who may prefer the convenience of personal battery replacement rather than transporting charger carry cases.
4. The MTG-100Ha digital handheld microphone and MTS-100 stationary digital transmitter are available for convenience and suitable applications.

### Receivers



### System Composition

Compatible Transmitters	MTG-100T, MTG-100Ha	MTG-100Ta, MTG-100Ha
Power Supply	Built-in lithium-ion battery	2 AA alkaline or 2 AA rechargeable batteries
Accessories (Optional)	MTG-100C-28, MTG-100C-12, MTG-100C-4, MTG-100C-CR.	N/A

### Features

Up to 60-meter line-of-sight reception range. A channel-lock setting prevents accidental operation. Ethernet interface allows for system setting and management.

### Specifications

Housing	Ultra-compact, pocket-sized.	
Display	LCD with advanced function settings and battery status.	
Frequency Range	CEPT/EU: 863 ~ 865 MHz & USA: 926 ~ 928 MHz, license-free for users in ISM bands.	
Modulation Type	Digital modulation	
Preset Channels	16 preset channels. At least 3 compatible channels for different tour groups can be used simultaneously at the same place.	
Channel Setup	Manual ACT sync or via MTG-100C-12 or MTG-100C-12-28 charger carry case.	Manual ACT sync
Receiving Mode	True diversity receiving with proprietary built-in dual antennas.	
Earphones	E-5S, E-10S, E-20S (optional)	
Note	Refer to the actual product in the event of product description discrepancy.	

# Wireless Tour Guide Systems

## Transmitters

MTG-100T Digital Transmitter (Built-in Rechargeable Battery)	MTG-100Ta Digital Transmitter (AA Battery)
	

## System Composition

Compatible Receivers	MTG-100R	MTG-100Ra
Power Supply	Built-in lithium-ion battery	2 AA alkaline or 2 AA rechargeable batteries
Accessories (Optional)	Charger & Storage Cases: MTG-100C-28, MTG-100C-12 4-Slot Charger: MTG-100C-4 Charger Rack: MTG-100C-CR	N/A

## Features

Low, Mid, High switchable output power for battery saving or extending distance.

## Specifications

Housing	Ultra-compact, pocket-sized	
Display	LCD with advanced function settings and battery status.	
Frequency Range	CEPT/EU: 863 ~ 865 MHz & USA: 926 ~ 928 MHz, license-free for users in ISM band.	
Modulation Type	Digital modulation	
Preset Channels	16 preset channels. At least 3 or 4 compatible channels for different tour groups can be used simultaneously at the same place.	
Channel Setup	Manual ACT sync or via MTG -100C -12 or MTG -100C -12-28 charger carry case.	Manual ACT sync
Optional Microphones	MM-10, MM-202P, MU-101P, MU-53HNP, MU-23P	
Note	Refer to the actual product in the event of product description discrepancy.	

# Wireless Tour Guide Systems

## MTG-100R / Ra Accessories



### Specifications

Driver Unit	Ø 30 mm	Ø 10 mm	Ø 24 mm
Frequency Response	20 Hz ~ 20 kHz	20 Hz ~ 15 kHz	100 Hz ~ 20 kHz
Sensitivity	105 dB ± 3 dB at 1 mW	103 dB ± 3 dB at 1mW	108 dB ± 3 dB at 1 mW
Max. Input Power	100 mW	20 mW	100 mW
Impedance	24 Ω at 1 kHz 1 mW	16 Ω at 1 kHz 1mW	32 Ω at 1 kHz 1 mW
Cable Length	120 cm	40+55 (R), 10+55 (L) cm	120 cm
Connector	Ø 3.5 mm phone jack		
Note	Refer to the actual product in the event of product description discrepancy.		

## MTG-100T / Ta Accessories

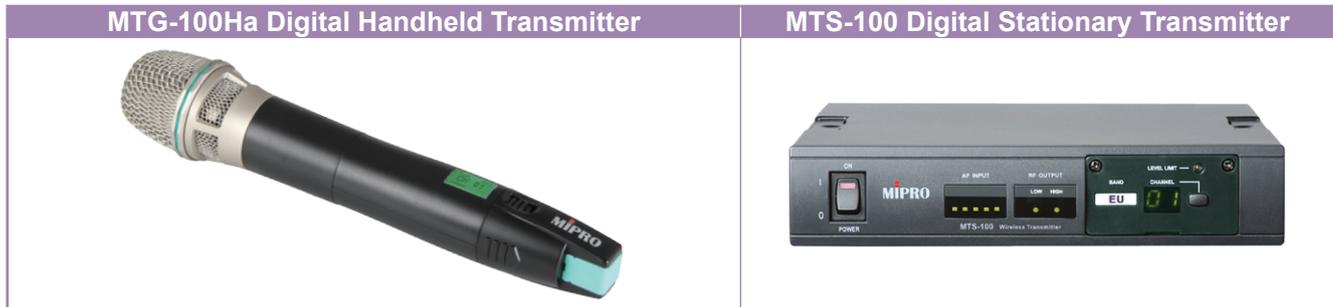


### Specifications

Capsule	Ø 4.5 mm Omni-directional ECM	Ø 10 mm Uni-directional ECM	Ø 10 mm Uni-directional ECM		Ø 3 mm Uni-directional ECM
Frequency Response	40 Hz ~ 20 kHz	50 Hz ~ 18 kHz		40 Hz ~ 20 kHz	
Max. SPL	135 dB	136 dB	135 dB	136 dB	138 dB
Sensitivity	-49 dBV ± 3 dB	-46 dBV ± 3 dB	-49 dBV ± 3 dB	-46 dBV ± 3 dB	-56 dBV ± 3 dB
Length	110 mm	136 mm	150 cm		
Connector	Ø 3.5 mm phone jack				
Note	Refer to the actual product in the event of product description discrepancy.				

# Wireless Tour Guide Systems

## Optional Transmitters



### Features

A handheld microphone ensures vocal clarity.	Stationary transmission; switchable low (10 mW) or high (50 mW) output power; Accepts either dynamic or condenser wired microphone.
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### Specifications

Housing	Rugged Plastic, Black	EIA-standard 1/2U metal case
Display	LCD with settings and battery status	Channel in LED
Frequency Range	CEPT/EU: 863 ~ 865 MHz & USA: 926 ~ 928 MHz, License-free for users in ISM bands.	
Modulation Type	Digital modulation	
Channel Setup	Manually	
Preset Channels	16 preset channels. At least 3 compatible channels for different tour groups can be used simultaneously at the same place.	
Compatible Receivers	MTG-100R & MTG-100Ra	
Power Supply	2 AA alkaline or 2 AA rechargeable batteries	12 ~ 15 V DC
Note	Refer to the actual product in the event of product description discrepancy.	

## MTG-100 Series Charger and Storage Cases



### Features

<ul style="list-style-type: none"> <li>• Charge, carry and storage.</li> <li>• Separate “red” charging and “green” ready indicator.</li> <li>• Innovative “Sync” button for automatic frequency synchronization from master to slave.</li> <li>• Optional Ethernet Network Interface management software.</li> </ul>	<ul style="list-style-type: none"> <li>• Quick-charge for less than 4 hours.</li> <li>• Separate “red” charging and “green” ready indicator.</li> <li>• DC 12 V / 0.75 A power supply.</li> </ul>	Accepts up to 4 units of 4-slot charging station and installed on a rack cabinet.
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### Specifications

Charging Slot	24 receivers & 4 transmitter	10 receivers & 2 transmitters	4 receivers or transmitters	Up to 4 units of MTG-100C-4. Up to 16 receivers or transmitters.
Charge Time	< 4 hours			N/A
Max. Power Consumption	80 W	26 W	< 9 W	N/A
Note	Refer to the actual product in the event of product description discrepancy.			

# 9. Wireless Portable PA Systems



# Wireless Portable PA Systems

## Why Choose MIPRO Wireless PA Systems?

In 1995, MIPRO took the lead to develop MA Series portable wireless PA systems with exclusive one-piece molded cabinet, retractable pulling handle and wheels, together with robust construction, powerful clear sound, and reliable quality. Won German Red Dot Award, iF Design Award, and Taiwan Excellence Award, these models are the most advanced products selling worldwide until now.

MIPRO MA Series portable wireless PA systems are the most convenient with excellent sound effects provide in school classrooms, trade show presentations, indoor/outdoor gatherings, election public-address, music instrument, stage singing, and aerobic centers, etc.

## Why Develop the MA-II Wireless PA Systems?

1. MIPRO MA-Series has been sold worldwide for two decades and faces the problem of low-priced counterfeits. Thus since 2018, MIPRO started to design a second-generation MA-II series of innovative models MA-929, MA-828 and MA-727 portable PA systems by accumulated technique and break through the traditional concept of innovative design in the cabinet appearance, speaker system, power amplifier, control panel, audio source and power supply. Provide for medium and large occasions applications.
2. In 2021, MIPRO continues to redesign the personal wireless PA system and launches MA-II Series MA-300, MA-200 and MA-100 new models to get rid of the counterfeits, and provide clear, loud sound effects, easy-to-carry wireless PA system for small occasions.
3. Choose the most advanced innovative MA-II series Wireless PA Systems to increase the performance value.

## 1. MA-Series Classic Portable Wireless PA Systems History and Awards

1. In 1995, MIPRO introduced MA-707 portable wireless PA, the industry's first one-piece cabinet integrated with a built-in retractable handle and paired with wheels for hand carry or pulling, which won the prestige "Taiwan Excellence Award" later. It has been produced and sold worldwide for 26 years until now.
2. Introduced in 2005, the innovative MA-808 flagship portable wireless PA features exclusive appearance, Hi-fi audio, and complete functions. It won the prestigious "Red Dot Award" in 2017.
3. In 2006, MIPRO introduced MA-708 portable wireless PA. It won the prestigious "Red Dot Award" in 2016.
4. In 2012, MIPRO introduced MA-303, the compact and fully-featured portable wireless PA.
5. In 2013, MIPRO introduced MA-505 portable wireless PA. It won the "Taiwan Excellence Award" in 2016.
6. Since 1995, MA Series portable PA systems have been mass-produced and sold worldwide until now.

## MA-Series Classic Portable Wireless PA Models

MA-808	MA-708	MA-707	MA-505	MA-303
Flagship Portable PA	Luxury Portable PA	Classic Portable PA	Elite Portable PA	Miniature Portable PA
				
				

# Wireless Portable PA Systems

## Features

MA-808	MA-708	MA-707	MA-505	MA-303
One-piece molded cabinet built-in a high-efficiency amplifier and speaker system for powerful and clear sound in full range.				
One-piece molded integrated with a retractable handle and paired with the bottom wheels for hand carry or pulling. Also can be installed on a tripod stand.			Robust, rugged enclosure and lightweight for hand carry. Also can be installed on a tripod stand.	
Built-in transmitters storage			Power cord storage	N/A
Industry's first built-in active dual antennas for long distance and stable receiving				
Mixed output of wired and wireless mics				
CD player, Bluetooth, USB		CD player	Bluetooth, USB, CD player	Bluetooth, USB
VOP and Echo on mics		N/A	VOP and Echo on mics	N/A
Built-in AC switching power supply and rechargeable batteries				Exterior AC power supply and built-in lithium-ion rechargeable battery.
Additional interlinking transmitter modules		Extension speaker socket	Additional interlinking transmitter modules	N/A

## Specifications

Model	MA-808	MA-708	MA-707	MA-505	MA-303
Max. Power Output	267 ~ 456 W	190 ~ 325 W	100 ~ 170 W	145 ~ 248 W	60 ~ 102 W
Frequency Response	50 Hz ~ 18 kHz				
Loudspeakers	Two ways		Full-range	Two ways	
Audio Inputs	Mic in: Balanced, unbalanced Line in: RCA		Mic in: XLR, Ø 6.3 mm Line in: Ø 6.3 mm	Mic in: Balanced, unbalanced Line in: Ø 3.5 mm	Mic in: Ø 6.3 mm Line in: Ø 3.5 mm
Audio Outputs	Unbalanced RCA jack		Ø 6.3 mm phone jack	Ø 3.5 mm mini jack	
Receiver Modules	Up to 4		Up to 2	Up to 4	Built-in 2
Audio Players	DPM-3 player/recorder or CDM-2 CD/USB player, Bluetooth		CDM-2 CD/USB player	DPM-3 player/recorder or CDM-2 CD/USB player, Bluetooth	USB player/recorder Bluetooth (built-in)
Microphones	Optional MM-59 or MM-590A				
Transmitter Modules	MTM Series		N/A	MTM Series	N/A
Extension Speaker	Speak only output	Ø 6.3 mm phone jack			N/A
Volume Controls	Individual volume controls for each input				
Other Functions	VOP (voice-over-priority), Echo on mics		N/A	VOP, Echo on mics	N/A
Alarm Siren	N/A			Siren sound with fade-in effect	
Power Supply	Built-in two rechargeable batteries and an AC power supply. External DC socket.			Built-in rechargeable lithium battery. External AC power supply and DC socket.	
Standby Time	Min. 6 hours	Min. 7 hours	Min. 8 hours		Min. 11 hours
Battery Indicator	4 segment indicators 25/50/75/100% (except MA-707)				
Color	Black				
Patents	Patented. Telecom and safety regulations approved.				
Note	Refer to the actual product in the event of product description discrepancy.				

# Wireless Portable PA Systems

## 2. MA-Series Classic Personal Wireless PA Systems

### History Introduction

1. In 1995, using a traditional megaphone requires holding the microphone and carrying the megaphone together which causes inconvenience, so MIPRO created the wireless megaphone MA-101, and then users can hold the wireless microphone and megaphone separately without being restricted by the cables. Users can carry megaphones by themselves or by others with one or more wireless megaphones on their shoulders, and can flexibly use them at a long distance.
2. The industry's first MA-101 personal wireless PA has the patented unique, robust and lightweight cabinet built-in a premium wireless system and high-efficiency antennas. Featuring clear, powerful sound and long-distance reception. Since 2016, the wireless system has been shifted to the ISM band, and a rechargeable lithium battery replaces sealed lead-acid rechargeable battery for reducing the weight significantly and it also extends operating hours and increases battery lifespan. It has continued to be mass-produced and sold well worldwide for over 25 years.
3. In 2002, MIPRO introduced the industry's first MA-101ACT Wireless Classroom PA System wall-mounted in every classroom. Users can carry their own personal rechargeable wireless microphone to activate and remotely control MA-101ACT.
4. In 2009, MIPRO introduced the flagship model, MA-202 personal wireless PA system, designed with an enlarged cabinet of MA-101. The MA-202 houses a Class D amplifier driving two-way loudspeakers for clear and powerful sound in full range and features practical functions and excellent performance.
5. In 2012, MIPRO introduced the ultra-compact MA-100 personal wireless PA system. The built-in high-efficiency power amplifier drives a full-range loudspeaker to present powerful clear sound. The built-in reliable, long-distance reception receiver modules, wired / wireless microphones and USB flash drive can use simultaneously with loud inputs without distortion. The system also has an alarm siren function and an easy-to-operate control panel. The MA-100 is a best-in-class and feature-rich personal wireless PA system in the market today.
6. Lightweight MA Series personal wireless PA systems can be hand-carried, shoulder strapped or mounted on a microphone stand. They are the best choice for addressing small crowds, including school classrooms, gatherings, presentations, tour guides, election campaigns or multimedia applications.

### MA-Series Personal Wireless PA Systems Specifications

	MA-202	MA-101	MA-101C	MA-101ACT
	Flagship Personal PA	Compact Personal PA	Wired Personal PA	Wall-Mounted Classroom PA
				
Power Output	60 W max.	56 W max.		
Loudspeakers	Two ways	Full-range		
Receivers	UHF × 1	UHF × 1 or ISM 5.8 GHz × 1	N/A	UHF x 1
Transmitters	ACT-222T ACT-32H/ 32T	ACT-32H/ 32T ACT-58H/ 58T	N/A	MT-101ACT
Audio Inputs	Ø 6.3 mm Mic in, Ø 6.3 mm Line in, with individual volume control.	Ø 6.3 mm Mic in, Ø 3.5 mm Line in		Ø 6.3 mm Line in
Audio Outputs	N/A	Ø 3.5 mm Line out	N/A	N/A
Audio Players	SD card, USB player	Bluetooth (5.8 GHz model)	N/A	Bluetooth (optional)
Installation	Shoulder-strapped, hand-carried and mounted on a stand.			Wall-mounted
Power Supply	Built-in 14.8V/ 2.6A lithium battery. External DC power supply			Built-in AC power supply

# Wireless Portable PA Systems

## 3. MA-II Series Portable Wireless PA Systems

### MA-II Series Core Value

The value of audio is not for seeing, but for listening. Hear the sound effects of the MA-II to believe the core value of it!

### MA-II Series Application Introduction

1. The MA-II MA-929 Pro Flagship model, MA-828 new Flagship model and MA-727 new Luxury model are three innovative professional L/M/S sized models, with patented speaker cabinet appearance, the best sound effects, the most complete functions and the most intimate operation mode to meet the needs of users.
2. MA-929 Pro Flagship model has the largest cabinet with full-range clear and powerful sound output. Up to 8 various modules can be inserted, it is ideal to be used for speech or music playing applications on large indoor/outdoor occasions.
3. MA-828 new Flagship model has a medium-sized cabinet with full-range clear and powerful sound output. Up to 4 various modules can be inserted, it is ideal to be used for speech or music playing applications in medium indoor/outdoor occasions or mobility usage.
4. MA-727 new Luxury model has a small-sized cabinet with full-range clear and powerful sound output. Up to 2 various modules can be inserted, it is ideal to be used for speech or music playing applications in small indoor/outdoor occasions or mobility usage.
5. Two or more sets of MA-II Series can be installed on one occasion and make use of interlinking transmitter modules to wirelessly connect all models as a sound system to expand the sound field and increase the sound level. DSP control provides sound delay time setting.
6. The MA-II Series can be installed on a subwoofer cabinet by a pole and connected to the AF input via the SUB output to make up an MTM line-array speaker system, delivering optimal full-range music sound effect.
7. Any two MA-II Series can be paired with each other via Bluetooth to get music playing from mobile phones or Tablet PC in TWS stereo sound effect and increase the maximum sound level.
8. The latest MIPRO MA-II innovative wireless PA series is the best choice for medium and large occasions such as teaching, seminar, exhibition advertising, campaign rally, aerobic exercise and karaoke.

### MA-II Series Models

MA-929 Professional Flagship	MA-828 New Flagship	MA-727 New Luxury
		
		

# Wireless Portable PA Systems

## MA-II Series Features

1. Industry's first portable wireless PA systems to apply MTM and line-array two-way loudspeaker system designing principle to expand the sound field, enhance sound pressure level and reproduce natural sound.
2. Industry's first one-piece cabinet has a built-in loudspeaker system that configures a vertical dumbbell-shaped layout and performs balanced and natural sound projection for a wide coverage of hearing positions.
3. The front of the cabinet is fully covered by an MTM shaped grille, the dimensions close to aesthetic golden-section ratio, and departs away from the outdated counterfeits.
4. The three L/M/S sized models have identical cabinet designs. The built-in exclusive power amplifier drives the loudspeaker system to achieve a full-range "Point Source" sound field and powerful, clear sound output, offering for various occasions and different requirements.
5. All three models are equipped with the same control panel, providing users to operate all models with the same familiar operating modes.
6. The control panel configures wireless receiver modules, MP3 recorder/player, USB port, SD card slot, CD player, line input jack, and microphone input jack. All audio signals are mixed to output and the input level can be adjusted individually. Also, an exclusive subwoofer out socket, alarm siren button, VOP switch and power on/off switch, and the LED indicators displaying battery level and charging status.
7. Each model is equipped with two ISM 5.8 GHz receiver modules. More modules can be added for MA-828 and MA-929.
8. The plug-in Bluetooth receiver module performs a reliable connection with smartphones or tablets to play music.
9. An additional interlinking transmitter module offers more active speakers to be connected together in operation by wireless linking.
10. An exclusive mute button to replace the master volume control for easy access and correct control of various input signals.
11. MIPRO adapts exclusive DSP function instead of the traditional complex sound effect controls, to simplify the panel configuration for easy operation. It allows quick selection of preset sound effect modes to meet requirements. DELAY mode is also provided for adjusting the sound transmission time delay of extension speakers.
12. Industry's first patented retractable pulling handle storage design, combining with the bottom wheels for effortless transport.
13. A stand adaptor at the bottom of the cabinet allows the cabinet to be installed on a tripod stand or a subwoofer cabinet.
14. Built-in exclusive rechargeable battery holder allows fast insertion and replacement with lithium-ion batteries. External AC power source also can be connected to provide the system for complete operation and battery charging. A storage compartment provides for storing accessories.
15. The user-friendly waterproof storage bag is an included accessory.
16. Designed in Taiwan and manufactured in MIPRO's computerized management production line to guarantee the best product quality.

## MA-II Series Specifications

Model Name	MA-929 Pro Flagship	MA-828 New Flagship	MA-727 New Luxury
Max. Power Output	290 W rms, 410~700 W max.		170 W rms, 240~580 W max.
Rear Panel	4 units of the dual-module slot, control panel module and amplifier module	2 units of the dual-module slot, control panel module and amplifier module	1 unit of the dual-module slot, control panel module and amplifier module
Audio Input / Output	DSP control panel module		
Control Panel Module	<ol style="list-style-type: none"> <li>1. ISM 5.8 GHz digital receiver × 2</li> <li>2. DPM-3 recorder/player and SD / USB slots</li> <li>3. Foolproof plug-in Bluetooth module</li> <li>4. Combo XLR balanced Mic-in × 2</li> <li>5. Ø 3.5 mm stereo Line-in × 1, Ø 6.3 mm Line-in × 1</li> <li>6. Ø 6.3 mm Line-out × 1, Ø 6.3 mm SUB-out × 1</li> <li>7. Each audio signal has an adjuster for adjusting the volume individually. Then all signals are mixed to output.</li> <li>8. The mute button replaces the traditional master volume control, which can mute only the background music or all audio signals.</li> <li>9. DSP buttons</li> <li>10. Alarm Siren button with fade-in effect</li> <li>11. VOP switch</li> <li>12. Power on/off switch and battery capacity indicators</li> </ol>		
Receiver Modules	Up to 8 receiver or interlinking transmitter modules	Up to 4 receiver or interlinking transmitter modules	Up to 2 receiver or interlinking transmitter modules
Transmitters	Compatible with the receiver modules		
Antennas	Built-in active high-efficiency dual antennas for long-distance stable reception.		
Wired Microphones	MM-59 or MM-590A (optional)		
CD player	CDM-2 (optional)		N/A
Power Supply	Built-in battery compartment. External DC power supply.		
Rechargeable Batteries	MB-38 Lithium-ion battery set (32700 × 8)		MB-28 Lithium-ion battery set (26650 × 8)
Standby Time	9 hours		6 hours
Battery Indicators	4 segment LED indicators display battery capacity and charging status.		
Patents and Approvals	Patented. Telecom and safety regulations approved.		
Note	Refer to the actual product in the event of product description discrepancy.		

# Wireless Portable PA Systems

## MA-II / Classic Models Comparison

	MA-II MA-Series			Classic MA Series			
Model	MA-929	MA-828	MA-727	MA-808	MA-708	MA-505	MA-707
Name	Pro Flagship	New Flagship	New Luxury	Flagship	Luxury	Elite	Classic
Front View							
Back View							
Loudspeakers	One HF and two LF two-way system			One HF and one LF two-way system			Full-range
Speaker Grille	An MTM shaped grille covers the front of the cabinet fully, and the dimensions are close to the aesthetic golden-section ratio.			A square grille covers the LF loudspeaker.			A round grille
Power Output	410~700 W max.		240~580 W max.	267~456 W max.	190~325 W max.	145~248 W max.	100~170 W max.
Receivers	Up to 8	Up to 4	Up to 2	Up to 4			Up to 2
Bluetooth	Plug-in			Built-in			N/A
Power Supply	External AC power supply			Built-in AC power supply			
Rechargeable Batteries	Lithium-ion			Lead-acid or lithium-ion			
Audio Players	Built-in DPM-3 recorder/player, USB, SD card slot			Optional CD player, USB, SD card slot			
Retractable Handle	90° folded on top of the cabinet			Integrated with the cabinet		N/A	Integrated with the cabinet

## The Substitute Suggestion of New / Classic Models

Innovative models	Classic models	The Substitute Advantages
MA-929	MA-808	Upgrade to the professional Flagship model and greatly increase the performance value.
MA-828	MA-808	<ol style="list-style-type: none"> <li>Greatly increases the range of the sound field and presents a balanced and natural sound. The original sound can be reproduced perfectly in vocals or musical instruments.</li> <li>The front of the cabinet is fully covered by an MTM shaped grille, the dimensions close to aesthetic golden-section ratio, and departs away from the outdated counterfeits.</li> <li>Features the most advanced and complete functions. Suitable for fixed or mobile indoor/outdoor applications.</li> <li>Choose innovative new models of MA-II series wireless PA to substitute the classic models will greatly increase the value of performance.</li> </ol>
	MA-708	
MA-727	MA-707	
	MA-505	

# Wireless Portable PA Systems

## 4. MA-II Series New Portable / Personal Wireless PA Systems

### MA-II Series Portable / Personal Wireless PA Systems Design Highlights

1. MA-300 has a small cabinet with an echo effect and delivers full-range clear and powerful sound output. It is ideal for speech or music playing applications on small indoor/outdoor occasions.
2. MA-200 flagship personal PA has a shoulder strap for easy carrying and delivers a clear and powerful sound output level. It is ideal for speech or music PA applications on medium indoor/outdoor occasions.
3. MA-100 miniature personal PA is lightweight and shoulder strapped wireless megaphone, optimized the original MA-100 handle to make it more convenient to carry, shared operating panel and plug-in Bluetooth module, deliver loud sound level for mobile PA applications on small indoor/outdoor occasions.
4. MA-II Series personal wireless PA systems have three models equipped with ISM 5 GHz single-channel receiver modules, and another three models are equipped with dual-channel receiver modules.
5. MA-II Series personal wireless PA systems will replace the classic models as it's the most convenient mobile speech PA system on small occasions.

### MA-II Series Portable / Personal Wireless PA Systems Models

MA-300 Single-channel Portable PA	MA-300D Dual-channel Portable PA	MA-200 Single-channel Personal PA	MA-200D Dual-channel Personal PA	MA-100 Single-channel Personal PA	MA-100D Dual-channel Personal PA
					
					

# Wireless Portable PA Systems

## Features

MA-300	MA-300D	MA-200	MA-200D	MA-100	MA-100D
The two-way speaker cabinet is redesigned to improve the efficiency in treble frequency and deliver a powerful, clear sound effect for both speech and music.		MA-200 incorporates the design essence of MA-202 and MA-100. The two-way, high efficiency speaker system delivers powerful, clear sound output in full range.		With a robust and lightweight speaker cabinet with a redesigned handle, MA-100 has high efficiency full-range speaker to deliver clear and powerful sound output.	
Easy to be hand-carried or stand-mounted, it is the best personal PA ideal for various occasions.		Easy to be hand-carried or stand-mounted, it is the best miniature personal PA system ideal for mobile PA applications.			
Equipped with the same audio input module, plug-in Bluetooth module, MP3 player/recorder, and UHF or ISM band receiver modules. Long-distance and reliable reception performance. Built-in echo function and alarm siren, which has a fade-in effect. Retractable lithium battery compartment for fast insertion and replacement. Any two MA-II Series can be paired with each other via Bluetooth to get music playing from mobile phones or Tablet PC in TWS stereo sound effect and increase the maximum sound level.					

## Specifications

Power Output	Class D, 60~102 W max.
Frequency Response	50 Hz ~ 18 kHz
Loudspeakers	MA-300/200 : Two ways MA-100 : Full-range
Receivers	MA-300 / MA-200 / MA-100: UHF or ISM 5.8 GHz module × 1 MA-300D / MA-200D / MA-100D: UHF or ISM 5.8 GHz module × 2
Audio Inputs	Ø 6.3 mm Mic in, Ø 3.5 mm Line in
Audio Outputs	Ø 3.5 mm
Audio Players	Built-in MP3 player/recorder, Plug-in Bluetooth module
Microphones	MM-59, MM-590 (optional)
Volume Controls	Each audio source has individual volume control
Other Function	Echo on mics
Alarm Siren	Alarm sound with fade-in effect
Power Supply	Built-in battery compartment and DC socket for external AC power supply.
Batteries	MB-14 Lithium-ion battery set (18650 × 4)
Standby Time	> 10 hours
Battery Indicators	4 segment LED indicators display battery level and charging status.
Patents	Patented. Telecom and safety regulations approved.
Note	Refer to the actual product in the event of product description discrepancy.

## The Substitute Suggestion of New / Existing Models

New models	Existing models	The Substitute Advantages
MA-300	MA-303SG	The new models share the same receiver modules, control panel, amplifier and power supply of other personal wireless PA systems. The treble is optimized to be clearer and stronger. A newly plug-in Bluetooth module and ECHO functions are added. The built-in ISM band can avoid RF signal interference and output digital clearer sound. Pair with the latest handheld and bodypack transmitters, to greatly increase the product value.
MA-300D	MA-303DG	
MA-200	MA-202	The newly designed MA-200 has the MA-100 style and the MA-300 functions. It has the most powerful sound effect of a megaphone deliver a loud sound level for mobile PA applications on indoor and outdoor occasions.
MA-100	MA-101	The new models are the most lightweight shoulder-strapped wireless megaphones. Built-in handle for more convenience to carry. Share the ISM band receiver module can avoid RF signal interference, and a newly plug-in Bluetooth module and ECHO functions on the control panel, and the amplifier, power supply to deliver clear loud sound output with longer continuous working time for small indoor/outdoor mobile PA applications. Pair with the latest handheld and bodypack transmitters which can be inserted with AA or rechargeable lithium battery, charging via USB Type-C. These advantages upgrade the original models to the most advanced models.
MA-100	MA-100SG	
MA-100D	MA-100DG	
MA-100	MA-100SB	
MA-100D	MA-100DB	

# Wireless Portable PA Systems

## 5. Accessories

### MA-II Series Optional Modules

Modules	MRM-70 UHF	MRM-58 ISM
Handheld Transmitters	ACT-500H	ACT-580H
Bodypack Transmitters	ACT-500T	ACT-580T
Optional MI Transmitters	VT-22, ST-32, ET-32	MT-58GE, MT-58GA, MT-58SB, ACT-58VL, MT-58UC, MT-58SS, ACT-58VC, ACT-58VD, MT-58SA, MT-58ST, MT-58DC, ACT-58CE, ACT-58FL.
Optional Interlinking Transmitters	MTM-24 or MTM-58 to pair with ISM 2.4 GHz / 5.8 GHz band receiver module.	MTM-91 to pair with a UHF receiver module. MTM-24 to pair with an ISM 2.4 GHz receiver module.
CD Players	CDM-2 (optional)	

### Receiver Modules

MRM-70 UHF Single-Channel Receiver Module	MRM-24 ISM 2.4 GHz Single-Channel Receiver Module	MRM-58 ISM 5.8 GHz Single-Channel Receiver Module
		

### Compatible Transmitters

ACT-500H Handheld Transmitter	ACT-240H Handheld Transmitter	ACT-580H Handheld Transmitter
ACT-500T Bodypack Transmitter	ACT-240T Bodypack Transmitter	ACT-580T Bodypack Transmitter
VT-22, ST-32, ET-32 Transmitter Sets	MT-24G, MT-24S, MT-24U, MT-24D, ACT-24V, ACT-24C Transmitter Sets of ISM Bands.	MT-58G, MT-58S, MT-58U, MT-58D, ACT-58V, ACT-58C Transmitter Sets of ISM Bands.

### Features

<ol style="list-style-type: none"> <li>1. Preset 16 auto-scannable frequencies.</li> <li>2. "SCAN" and "ACT" buttons, interference warning indicator and "Sensitivity" adjuster.</li> <li>3. An easy-to-read LED channel display, 5-segment RF and AF meters.</li> <li>4. CPU-controlled diversity receiving technology for optimum reception quality.</li> <li>5. Modular design allows for easy installation and replacement.</li> </ol>	<ol style="list-style-type: none"> <li>1. 12 preset compatible channels with 8 selectable ID codes to prevent interference at the same location.</li> <li>2. Digital modulation and true diversity receiving eliminate signal dropouts.</li> <li>3. An easy-to-read LED channel, RF indicator and AF meters.</li> <li>4. The modular design allows for fast and easy installation or replacement.</li> <li>5. Affordable for personal, family users and musical instrument players.</li> </ol>	<ol style="list-style-type: none"> <li>1. 12 preset compatible channels with 8 selectable ID codes to prevent interference at the same location. One specific ID is exclusively for 1-to-1 pairing.</li> <li>2. Digital modulation and true diversity receiving eliminate signal dropouts.</li> <li>3. An easy-to-read LED channel, RF indicator and AF meters.</li> <li>4. The modular design allows for fast and easy installation or replacement.</li> <li>5. Affordable for personal, family users and musical instrument players.</li> </ol>
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### Specifications

Model	MRM-70	MRM-24	MRM-58
Frequency Range	480 ~ 934 MHz	2.4 ~ 2.4835 GHz	5.725 ~ 5.850 GHz
Bandwidth	24 MHz	83.5 MHz	125 MHz
Preset Channels	16	12 preset compatible channels with 8 selectable ID codes to prevent the audio crosstalk on the same channel.	12 preset compatible channels with 8 selectable ID codes and one specific ID to prevent the audio crosstalk on the same channel.
Channel Setup	Manually set up the desired channel or scan for an open channel. Press the ACT button to synchronize the transmitter and receiver.		
ID Code Setup	N/A	8 ID Codes	d1, d2, ... d8 for general selection. dP for 1-to-1 Pairing mode.
Display	Channel, RF/AF meters, sensitivity meters and interference warning indicator.	LED channel, RF indicator and AF meters.	
Receiving Mode	MCU-controlled diversity receiving	Dual-tuner digital true diversity	
Sensitivity	S/N > 80 dB at 10 dB $\mu$ V	+12 dB $\mu$ V	
Latency	N/A	< 4 ms	< 2.6 ms
S/N Ratio	> 100 dBA	> 115 dB(A), analog input	
T.H.D.	< 0.5% @ 1 kHz	< 0.1% @ 1 kHz	
Frequency Response	50 Hz ~ 18 kHz	20 Hz ~ 20 kHz	
AF Output	610 mV rms	2 V rms	
Power Supply	12 ~ 15 V DC		
Note	Refer to the actual product in the event of product description discrepancy.		

# Wireless Portable PA Systems

## Wireless Interlinking Transmitters



### Features

Compatible with UHF band receiver modules	Compatible with ISM 2.4 GHz receiver modules	Compatible with ISM 5.8 GHz receiver modules
16 selectable channels, with LED display.	12 selectable channels, with LCD display.	
Modular design allows for easy installation and maintenance.		

### Specifications

Frequency Range	480 ~ 934 MHz	2400 ~ 2483.5 MHz	5725 ~ 5850 MHz
Bandwidth	24 MHz	83.5 MHz	125 MHz
Oscillation Mode	PLL synthesized		
RF Output Power	10 mW or 100 mW (country dependent)	10 mW	20 mW
Spurious Emissions	< -45 dBm	< -40 dBm	

## Audio Player Modules



### Features

<ol style="list-style-type: none"> <li>1. Records from line-in into SD card or USB drive. A single track can be deleted during playback.</li> <li>2. Standard recording with 44.1 kHz sample rate and 192 kbps bitrate.</li> <li>3. One-press to play the recorded file.</li> <li>4. Supports MP3 / WMA / FLAC / APE / WAV / M4A / AAC / OGG format.</li> <li>5. Speed control for fast and slow play.</li> <li>6. Song management by music folders.</li> <li>7. Repeat, fast forward/reverse search.</li> <li>8. Numeric selection.</li> <li>9. Random playback.</li> <li>10. Repeat a specified period for language learning function.</li> <li>11. Ideal for live recording.</li> <li>12. Fits MA-505, MA-708, MA-808.</li> </ol>	<ol style="list-style-type: none"> <li>1. Select and Search.</li> <li>2. Repeat a single song or all songs playback.</li> <li>3. USB 2.0 port.</li> <li>4. Numeric selection.</li> <li>5. Remote control included.</li> <li>6. CDM-2 fits MA-505, MA-707, MA-708, MA-808, MA-828, and MA-929.</li> </ol>
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# Wireless Portable PA Systems

## Rechargeable Battery Case

### MB-80 12V Lithium-Ion Battery Case



The MB-80 holds four MB-15 LFP batteries (batteries are not included)



MB-15 LFP battery (optional)

## Features

1. MB-80 battery case is designed to hold four 65~70mm (length) lithium batteries. Four series-connected battery voltages coincide and are compatible with the voltage of 12V lead-acid batteries. Therefore, it can be a direct replacement battery for the existing MB-70 lead-acid battery inside the MIPRO wireless PA systems.
2. The lithium-ion battery is reputed for its long battery life and high numbers of charge cycles and features superior weather resistance and durability. Thus, an ideal upgrade option for a battery that is lightweight, low in failure rate, and environmentally friendly.
3. MB-80 has BMS smart battery management circuits and provides safe charging and longer life cycles.

## Specifications

1. It holds four 32650/ 26650/ 32700 lithium-ion batteries.
2. Same polarity direction insertion with screws and hooks for secure and easy installation.
3. Standard output voltage 12.8V; maximum continuous output current up to 8A.
4. Shorts-circuit protection ensures the safe operation of batteries.
5. Each battery has protection circuits for overcharge voltage at 3.9V and over-discharging voltage at 2.0V.
6. A smart management circuit ensures balanced charging and discharging states.
7. Four 32650 high-capacity lithium-ion batteries installed in an MB-80 can be interchangeable with one MB-70 rechargeable sealed lead-acid battery.
8. Flame retardant rating: V0.

## Lithium-ion Batteries

Model Name	MB-14 Lithium-ion Battery Set	MB-28 Lithium-ion Battery Set	MB-38 Lithium-ion Battery Set
Battery	18650 × 4	26650 × 8	32700 × 8
Compatible Models	MA-100, MA-200, MA-300	MA-727	MA-707, MA-708, MA-808, MA-828, MA-929

# Wireless Portable PA Systems

## Accessories

Stands			
MS-11	MS-30	MS-70	MS-90
Bracket	Tripod Stand	Tripod Stand	Bracket
			
MA-101ACT	MA-100 / 101 / 200 / 202 / 300 / 303	MA-505 / 707 / 708 / 808 / 727 / 828 / 929	MA-303 / 300, MA-303AXP

Storage   Carry Bags									
SC-100	SC-200	SC-300	SC-505	SC-707	SC-708	SC-808	SC-727	SC-828	SC-929
Carry Bag			Storage Bag						
									
MA-100 MA-101	MA-200 MA-202	MA-300 MA-303	MA-505	MA-707	MA-708	MA-808	MA-727	MA-828	MA-929

Extension Speakers					
MA-101EXP	MA-303AXP	MA-505EXP	MA-707EXP	MA-708EXP	MA-808EXP
Passive Extension Speaker	Active Extension Speaker	Passive Extension Speaker			
					
MA-101ACT	MA-303	MA-505	MA-707	MA-708	MA-808

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ACT-828	10	MA-505	79/84	MR-58SA	55	MU-90A	28
ACT-848	10	MA-505EXP	90	MR-58SB	55	<b>R</b>	
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AD-702	40	MA-708	79/84	MR-58UC	54	SC-100	90
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## MIPRO MA-708 Won "2016 Red Dot Award"



The German Red Dot Design Award originated in 1955 and has developed into one of the largest design competitions in the world. The "Red Dot Award" product was carefully selected the most outstanding product of the year by a professional jury. It is an internationally respected design quality certification mark. In 2016, MA-708 portable wireless amplifier won the Red Dot Product Design Award! MIPRO president, Solomon Chang attended the Red Dot Gala held in Essen, Germany, and received the certificate.

## MIPRO MA-808 and ST-24 Won "2017 Red Dot Award"



In 2017, the "Red Dot Award: Product Design 2017" received more than 5,500 products of participants from 54 countries. MIPRO's MA-808 and ST-24 received "Red Dot."

## MIPRO's Innovative TA-80 Won an iF DESIGN AWARD 2018



For 65 years, the iF DESIGN AWARD has been recognized as an arbiter of quality for exceptional design, and the iF DESIGN AWARD is one of the most important design prizes in the world. In 2018, over 6,400 entries were submitted from 54 countries in the discipline "Product", MIPRO TA-80 won the "iF DESIGN AWARD" in the "Audio" category.

## Digital Wireless MI Series Won "2019 Red Dot Award"



In 2019, MIPRO's Digital Wireless MI Series received "Honorable Mention."

**MIPRO**<sup>®</sup>  
MICROPHONE PROFESSIONALS

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