

# ACT-818 828

**8<sup>Th</sup> Year Commemorative Model Digital Wireless Microphone Systems** 

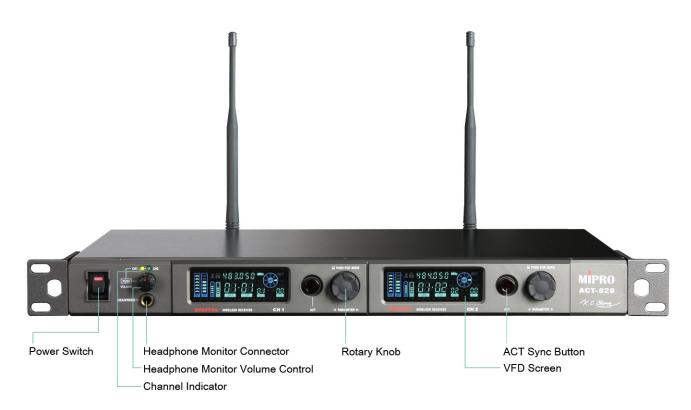


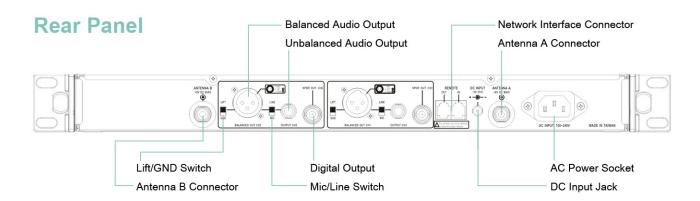


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# ACT-828 Wideband Dual-Channel Digital Receiver





## **Standard AA Battery Transmitters**



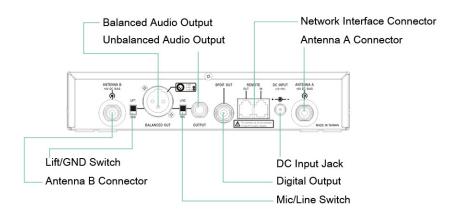
## **Rechargeable Lithium Battery Transmitters**



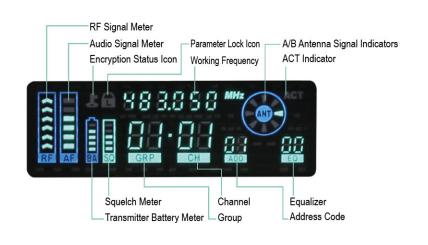
# ACT-818 Wideband Single-Channel Digital Receiver



### **Rear Panel**



### **VFD Screen**



# 8<sup>Th</sup> Year Commemorative Model Digital Wireless Microphone Systems

# Digital wireless technology promotes a new era in sound quality

Since 2006 and after years of product development, MIPRO introduces an 8th year commemorative digital model, the ACT-828, that truly rivals any wired cable transmission. The handheld microphone transmitter, equipped with a true condenser microphone (TCM) or dynamic microphone capsule, delivers an exceptionally clear, accurate sonic image to the listener. 10 built-in SmartEQ ™ presets and user-defined microphone capsule equalization allows faithful sound reproduction to suit artists' preferences.

# Monitoring capability and improved color VFD display and new wide bandwidth design

A headphone connector was added for monitoring along with an improved color panel display for better clarity and control. Proprietary 256-bit encryption provides secure audio transmission, preventing unauthorized listening, and an expanded 64 MHz bandwidth ensures optimal flexibility, allowing more interference-free, compatible channels to select from.



# Rechargeable transmitters for installed market solutions

In addition to using 2AA alkaline batteries for both the ACT-80H & ACT-80T transmitters, the optional ACT-80HC & ACT-80TC rechargeable transmitters offer rechargeable lithium-ion batteries as a charging alternative. The rechargeable transmitters provide up to 12 hours of continuous use per charge and can be charged and stored in the 3-in-1 MP-80 intelligent charger that provides up to 500 charge cycles for cost savings as well as being more environmentally friendly.







#### **Features**

- 1. The ACT-828 is an EIA standard 1U dual channel receiver and the ACT-818 is a 1/2U single channel rack-mountable receiver, both with metal chassis.
- 2. A full-color VFD (vacuum fluorescent display) provides clear viewing of all parameters. All controls are intuitive and easily accessible, allowing for quick and easy system setup via a single rotary control.
- 3. A headphone monitor connector is provided for sound monitoring.
- 4. Enhanced RF circuitry improves anti-interference characteristics and system compatibility with a 64 MHz-wide bandwidth, allowing more interference-free channels to be selected.
- 5. New digital diversity receiving technology eliminates signal dropout and enhances receiving range.
- 6. Full-range sound quality is not affected by the strength of RF signals or operating distance.
- 7. Digitally-processed RF circuitry and DigitnamicPlus <sup>™</sup> technology eliminates compander noise, assuring a wireless sound quality that easily rivals cable transmission.
- 8. Improved proprietary Audio A/D Converter provides a true dynamic range of 115 dBA, T.H.D. < 0.03% at 1 kHz with < 2.7 ms latency.
- 9. SPDIF Digital Audio Interface facilitates a direct connection to digital mixing consoles and transmits signal without distortion, ensuring a stable S/N ratio which will not deteriorate in long distance transmission.
- 10. Proprietary 256-bit encryption provides secure audio transmission, preventing unauthorized listening.
- 11. 10 built-in SmartEQ ™ presets and user-defined microphone capsule equalization allows faithful sound reproduction to suit artists' preferences.
- 12. 10 built-in digital anti-feedback SmartEQ ™ presets minimize feedback effectively without sacrificing sound quality.
- 13. Optional MIPRO RCS2.Net software allows real-time network remote-controlling and monitoring of 64 systems.

#### **Specifications**

Frequency Range	480~544 MHz ( US & EU ) 636~700 MHz ( EU )	540~604 MHz ( U 696~760 MHz ( E		
Bandwidth	64 MHz			
Preset Frequency	12 preset compatible frequencies in group 1-10. 16 preset compatible frequencies in group 11-16. 16 user-defined frequencies can be stored in group 18 216 preset frequencies in total			
Channel Grid	25 kHz	25 kHz		
Channel Set-up	Scan & ACT sync			
Audio Sampling	24-bit / 44.1 kHz Rate			
Audio Compression	2nd Generation DSP inertial	2nd Generation DSP inertial coding		
Latency	< 2.7ms	5		
Audio Frequency Response	20 Hz~20 kHz (-2dB)			
S/N Ratio (analog output)	> 115dB(A)			
T.H.D.	< 0.03 % @ 1 kHz	and the state of t		
Encryption	256 bit			
	Recei			
Model	ACT-828		ACT-818	
Chassis /Channel	EIA Standard 19 " 1U, Dual		EIA Standard 19 " 1/2U, Single	
Sensitivity	15 dB μ V at S/N ≒ 118 dBA			
Image and Spurious Rejection	> 85dB	> 85dB		
Receiving Mode	Digital Diversity			
Analog Output	Balanced XLR × 2 Unbalanced 6.3 mm (1/4 ") × 2		Balanced XLR × 1 Unbalanced 6.3 mm (1/4 ") × 1	
Analog Output Switch	Mic / Line × 2		Mic / Line × 1	
Digital Audio Interface	SPDIF output. BNC female × 2		SPDIF output. BNC female × 1	
Digital Equalizer	Preset 10 Microphone Capsule N	Preset 10 Microphone Capsule Modeling		
Digital Anti-feedback Equalizer	Preset 10 Anti-feedback Microph	Preset 10 Anti-feedback Microphone Capsule Modeling		
PC Interface	USB or RS-232 Interface. Proprietary MIPRO ACT-BUS			
Display	Full-color VFD	Full-color VFD		
Battery Meter	Transmitter battery status	Transmitter battery status		
Antenna Input	50 Ω TNC Female Connector × 2	50 Ω TNC Female Connector × 2		
Power Supply	Built-in 100~240V AC Switching	Power Supply	External AC Power Supply, 12~15V DC, 1A	
Dimensions (W × H × D)	420 × 44 × 245 mm (16.5 × 1.7 ×	× 9.6 ")	210 × 44 × 230 mm (8.3 × 1.7 × 9 ")	
Weight	Approx. 2.2 kg (4.8 lbs)		Approx. 1.1 kg (2.4 lbs)	
Environment Conditions	-10~+60 °C			
Notes		Refer to actual product in the event of product description discrepancy.  Frequency range and maximum deviation comply with the regulations of different countries.		

# **ACT-80H** Wideband Digital Handheld Transmitter



## **Standard AA Battery Insertion**



## **Interchangeable Capsule Modules**



# **ACT-80HC** Rechargeable Wideband Digital Handheld Transmitter



# **Rechargeable Lithium Battery Insertion**



## **Reversible Protective Cap**



# 8<sup>™</sup> Year Commemorative Model Digital Wireless Microphone Systems

#### **Features**

- 1. Innovatively designed housing combines aesthetics and ergonomic style.
- 2. Standard champagne-color housing. Optional custom-made colors are available.
- 3. Turn upper housing for 2 AA battery installation and replacement.
- 4. The unique flat top multi-layered metal grille for condenser capsules and round top for dynamic capsules protect the capsule against impact, rolling and pop noise. The upper grille is able to be detached easily for cleaning and hygiene practices.
- 5. Patented capsule suspension design virtually eliminates vibration and handling noises.
- 6. Interchangeable capsule module with premium condenser or dynamic options for easy and fast changeovers.
- 7. True condenser capsule exhibits high fidelity, wide dynamic range, fast transient responses, good feedback rejection, accurate sound image characteristics, transparent sound quality, and withstands maximum SPL.
- 8. Backlit LCD displays frequency band, group, channel, battery status, encryption status, RF and audio levels
- 9. The bottom housing with built-in high-efficiency antenna features power switch, mute and setup buttons for programmable gain, limiter, low cut and RF output power.
- 10. Patented end-cap cover with color-coded channel identification clips. Detach the end-cap cover for parameters set-up. Reversible end-cap allows shielding of power on/off or mute switches during performance.
- 11. Three selectable mute settings: Auto, Manual & Disabled. "Auto" mute activates automatically when handheld transmitter points down towards the ground.
- 12. Three selectable gain settings: 0 dB (same as microphone sensitivity), +3 dB, +6 dB.
- 13. An interference-free channel can be synchronized automatically and quickly without error by stable PLL circuit and MIPRO's patented ACT ™ sync function.
- 14. Two selectable transmitter output power settings: HI (high-power) & LOW (low-power).
- 15. The ACT-80HC accepts one ICR 18500 rechargeable lithium battery.
- 16. The ACT-80HC can be charged standing alone or its internal ICR 18500 battery can be detached and charged alone in the MP-80 battery charger.

### **Specifications**

Model       ACT-80H       ACT-80HC         Battery       2 AA alkaline       Rechargeable lithium battery 18500 type         Battery Hours       Up to 12 hours (Low Power)         480~544 MHz (US & EU)       540~604 MHz (US & EU)         636~700 MHz (EU)       696~760 MHz (EU)         Oscillation Mode       PLL Synthesized, Frequency Stability ≤± 0.005% (-10~+60°C)         RF Power Output       10 mW / 50 mW switchable (country dependent)
Battery Hours       Up to 12 hours (Low Power)         480~544 MHz ( US & EU )         540~604 MHz ( US & EU )         636~700 MHz ( EU )         696~760 MHz ( EU )         Oscillation Mode       PLL Synthesized, Frequency Stability ≦± 0.005% (-10~+60°C )
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Frequency Range       540~604 MHz ( US & EU )         636~700 MHz ( EU )         696~760 MHz ( EU )         Oscillation Mode       PLL Synthesized, Frequency Stability ≤± 0.005% (-10~+60°C )
RF Power Output 10 mW / 50 mW switchable (country dependent)
Spurious Emission ≦ -60dBc
Modulation Type New Digital Modulation
Audio Compression DSP Inertial Coding
Gain Setting +6 dB, +3 dB, 0 dB (3 settings). 0 dB = MU-89 microphone sensitivity
Dimensions (Ø × L) 50 × 258 mm (2 × 10.1 ") 50 × 250 mm (2 × 9.8 ")
Net Weight Approx. 292 g (10.3 oz), excluding batteries Approx. 281 g (9.9 oz), excluding batter
Refer to actual product in the event of product description discrepancy.  Frequency range and maximum deviation comply with the regulations of different countries.

# ACT-80T

# Wideband Digital Bodypack Transmitter



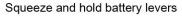
# ACT-80TC

# Rechargeable Digital Wideband Bodypack Transmitter



## **ACT-80T Install Disposable Transmitter Battery**







Open the battery cover



Insert or remove batteries

## **ACT-80TC Install Charged Transmitter Battery**



Squeeze and hold battery levers



Open the battery cover



Insert or remove battery

# 8<sup>™</sup> Year Commemorative Model Digital Wireless Microphone Systems

#### **Features**

- 1. Ultra slim bodypack transmitter with sturdy magnesium alloy housing.
- 2. Detachable antenna, mini power switch and XLR input connector are located on the top of transmitter.
- 3. Backlit LCD displays various operation information.
- 4. Innovatively designed battery cover allows easy access to operate buttons and prevents accidental operation.
- 5. Mute button with remote-control jack for easy activation of mute function.
- 6. Stable PLL circuit. The receiver's frequency automatically synchronized by MIPRO's patented ACT ™ function
- 7. Selection of polarization for audio input to match capsules of different polarizations.
- 8. Six selectable gain settings.
- 9. Mini-XLR input with secure screw lock connector for lavaliere / headworn mics and guitar.
- 10. 2 AA batteries provide up to 12 hours of operation for the ACT-80T. An ICR 18500 rechargeable lithium battery provides up to 12 hours of operation for the ACT-80TC.
- 11. Adjustable belt clip allows wearing transmitter in up or down position.
- 12. The ACT-80TC accepts one ICR 18500 rechargeable lithium battery.
- 13. The ACT-80TC can be charged standing alone or its internal ICR 18500 can be detached and charged alone in the MP-80 battery charger.

### **Specifications**

Model	ACT-80T	ACT-80TC	
Housing	Magnesium alloy		
Frequency Range	480~544 MHz ( US & EU ) 540~604 MHz ( US & EU ) 636~700 MHz ( EU ) 696~760 MHz ( EU )		
RF Power Output	10 mW / 50 mW switchable (country dependent)		
Spurious Emission	≦ -60dBc		
Oscillation Mode	PLL Synthesized, Frequency Stability ≦± 0.005% (-10~+60°C)		
Display	Backlit LCD displays frequency band, group channel, AF gain, limiter, low cut, phase, output power, mute, battery status, encryption status & error codes.		
Modulation Type	New Digital Modulation		
Audio Compression	DSP Inertial Coding		
Gain Setting	+18 dB, +12 dB, +6 dB, 0 dB, -6 dB, -12dB (6 settings). 0 dB = microphone sensitivity		
Mute Connector	Optional MJ-70 remote mute switch		
Battery	2 AA Alkaline	Lithium (18500) X 1	
Battery Hours	Up to 12 hours (Low Power)		
Dimensions (W × H × D)	63 × 70 × 25 mm (2.5 × 2.7 × 1.0 ")		
Net Weight	Approx. 78 g (2.8 oz), excluding batteries	Approx. 122 g (4.3 oz), excluding batteries	
Notes	Refer to actual product in the event of product description discrepancy. Frequency range and maximum deviation comply with the regulations of different countries.		

# MP-80 3-in-1 Transmitter Charger Station

The MIPRO MP-80 is a new 3-in-1 charger station design. The two charger slots provide convenient charging for MIPRO rechargeable handheld & bodypack transmitters and an ICR18500 rechargeable battery. Each station also provides two storage slots for 2 spare charged ICR18500 lithium batteries.

MP-80's intelligent charging circuitry provides fast & trickle charges with protections from reverse polarity and short circuits as well as displaying the precise charging status with red (charging) & green (charged) indicators.

### **Charging Methods**



### **Interconnected Chargers Charging**



### **Features**

- 1. High quality ICR 18500 rechargeable batteries.
- 3-in-1 charger station design provides convenient charging for MIPRO rechargeable handheld & bodypack transmitters and an ICR18500 rechargeable battery. Each station also provides two storage slots for 2 spare charged ICR18500 lithium batteries.
- MP-80's intelligent charging circuitry provides fast & trickle charges with protections from reverse polarity and short circuits and precise charging status with red (charging) & green (charged) indicators.
- Two or more chargers can be easily interconnected for more charging options.

## **Charged Indicators**



### **Specifications**

Input Voltage Range	DC 10V~15V /1A
Battery Type	ICR18500 3.7V Li-ion Battery × 2
Charge Methods	Termination by 20% Regulated Current
Charge Current	Approx. 500mA
Current Consumption	Approx.600mA /12V, for two batteries charging at the same time
Dimension (W × H × D)	92 × 87 × 158mm (3.6 × 3.4 × 6.2")
Weights	Approx. 300g (10.6 oz)
Environmental	-10~+ 60 °C