



# TA-80

## Digital Plug-on Transmitter



# MIPRO TA-80 Digital Plug-on Transmitter

## How to connect microphone output to a sound system

The microphone output connects to sound system with a microphone cable is the easiest and the most economical way; however, in live shows and outdoor performance, using the wireless is the best way to avoid the tangling cable. Now, MIPRO has developed the most advanced digital wireless technology to achieve the requirements of high quality transmission with reproduction of natural sound from microphone.



Cable Connection



Wireless Transmission

## The advantages and shortcomings of wired and wireless transmission

Wired transmission is an easy and economical way; however, the cable quality and long-distance transmission will cause the attenuation of high and low frequency, and even cause induction noises due to the nearby magnetic or RF field, which will result in the deterioration of the signal quality.

Wireless transmission solves the cable tangling issue. However, it has to avoid noise signal interferences. In addition, it requires radio telecommunication and safety approvals. The cost to produce this wireless solution is much higher than wired transmission.

The common wireless transmission way is analog-based but its transmission quality can't meet the professionals' requirements. MIPRO started the digitalization of wireless microphone systems in 2006, and the transmission quality almost met the original sound quality requirements and was nominated for TEC Award in 2007.



MIPRO digital wireless microphone system

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## TA-80 Features

1. The compact aluminum alloy housing that isolates RF spurious and noise interference, is equipped with a built-in high-efficiency transmitting antenna and a green backlit LCD, which displays operation parameters. Operates in the UHF band and is compatible with ACT-800 Series digital receivers.
2. Features a flat and wide frequency response, ultra-low THD 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 gear to reproduce the natural sound of any premium wired microphone.
3. Compatible with various pick-up microphones, it also supplies several gain settings. Selectable 12 / 48 V phantom power at 10 mA for condenser microphones.
4. A high-capacity lithium battery that enables up to 8 hours of use per charge. After use, directly plug it into the MP-8T charger to recharge or simply remove the battery or replace it with a full-charged battery. TA-80 has reverse polarity protection and battery replacement is fast and easy.



TA-80 plugged into the microphone and charged directly with MP-8T charger



TA-80 is compatible with ACT-818/ACT-828/ACT-848 receivers



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## TA-80 Applications



### Measurement microphone plugged onto the TA-80

A. Acoustical measurement: For single and multi-point reverberation and STI (Speech Transmission Index) in sites.

B. Sound field performance venues and speaker systems optimizing adjustment: single and multi-point measurements.

This way can replace the traditional optimizing adjustment by cables in large stadiums and obtains the same effect as wired measurement. Without the cables, the measurement task will become easier.



### Personal wired condenser microphone plugged onto the TA-80





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**Personal wired dynamic microphone plugged onto the TA-80**



**Recording microphone plugged onto the TA-80**



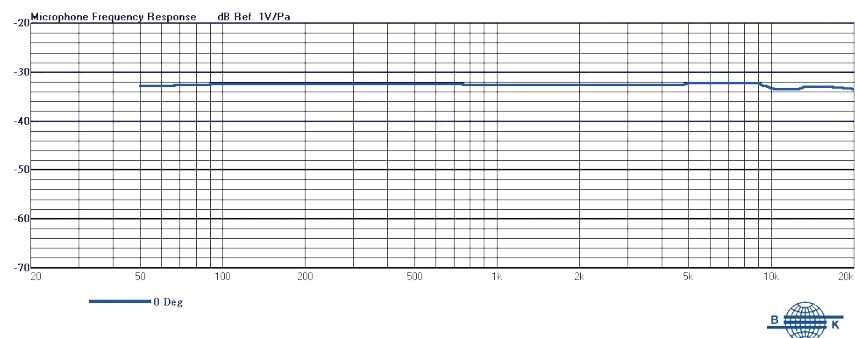
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## TA-80 and ACT-800 Series Receivers Specifications

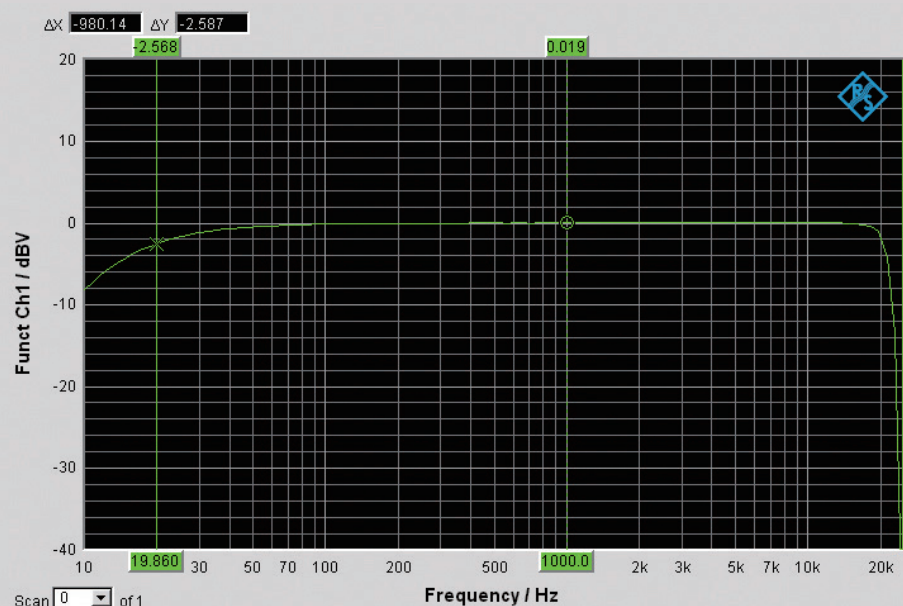
### TA-80 Specifications

Frequency Band	UHF 480 – 960 MHz
Bandwidth	72 MHz
RF Power Output	10 / 50 mW switchable (country dependent)
Gain Setting	-18 to 30 dB, 9 selectable settings
AF Input Level	2 V max. @ 0 dB
Phantom Power	Selectable 12 V and 48 V @ 10 mA max.
Battery	18500 Li-ion battery
Charger	MP-8T
Dimensions	44 × 114 × 37 mm (W × H × D)
Weight	Approx. 180 g
Note	Refer to the actual product in the event of product description discrepancy

Measurement  
Microphone in  
Cabled Connection  
Frequency Response  
Diagram



System Frequency  
Response Diagram

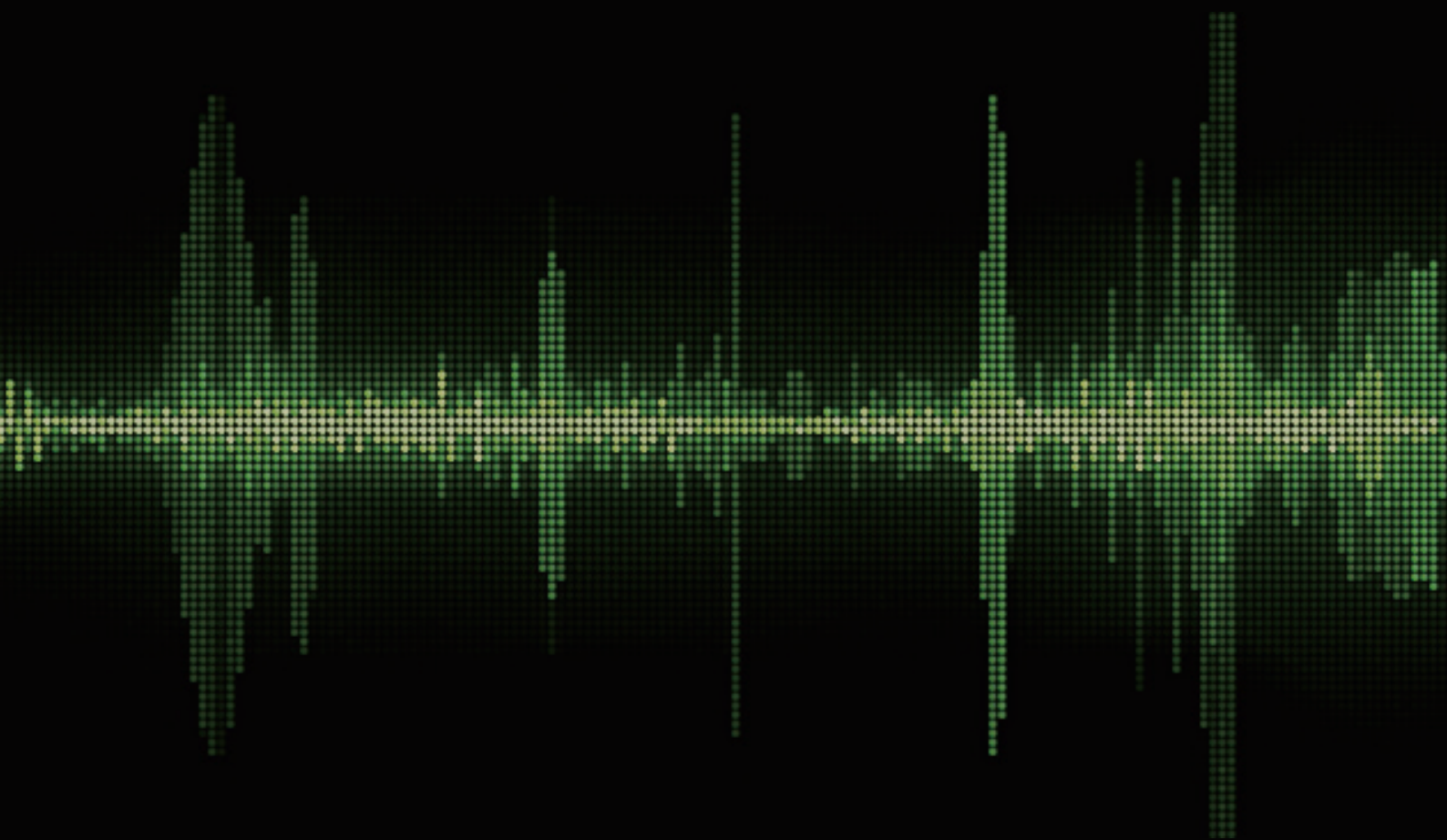


# MIPRO TA-80 Digital Plug-on Transmitter

## ACT-800 Series Receivers Specifications

Model	ACT-848	ACT-828	ACT-818
Chassis	EIA standard full-rack (19") metal chassis		EIA standard half-rack (9.5") metal chassis
Monitor Output	Monitor headphone jack with volume control		N/A
Network Interface	Dante or AVB (optional)		N/A
Display	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		
Encryption	256-bit		
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 with 3 switchable levels: +16 dB / 0 dB / -6 dB		
EQ	Presets 10 digital audio and anti-feedback EQs		
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	DC 12 – 15 V. External AC 100 – 240 V switching power supply		
Dimensions (W × H × D)	420 × 44 × 219 mm		210 × 44 × 163 mm
Weight	Approx. 2.3 kg	Approx. 2.1 kg	Approx. 1.0 kg
Note	Refer to the actual product in the event of product description discrepancy		





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