

MIPRO®

TA-80 Digital Plug-on Transmitter

MM-100 Measurement Microphone

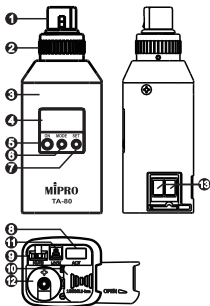
User Guide



TA-80 Digital Plug-on Transmitter

I. Part Names

- ❶ XLR Socket
- ❷ Mechanical Locking Ring
- ❸ Housing
- ❹ LCD Screen
- ❺ Power Button
- ❻ MODE Button
- ❼ SET Button
- ❽ ACT Sync Port
- ❾ Mute Switch
- ❿ Battery Cover
- ⓫ Battery Cover Lock
- ⓬ Battery Compartment
- ⓭ Charge Contacts



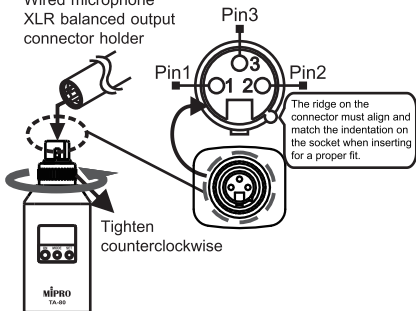
II. LCD Screen Display

- ❶ Settings
- ❷ Parameters
- ❸ AF (audio) Meter
- ❹ Phantom Power Status
- ❺ Transmitter Battery Meter



III. Audio Input

Wired microphone
XLR balanced output
connector holder



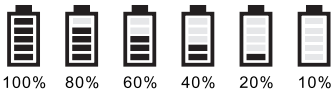
1. Ascertain a wired microphone is plugged in before power on the transmitter to prevent noise interference.
2. Tighten the mechanical locking ring ② in a counterclockwise direction for a secured fit.
3. Unplug the microphone by loosening the mechanical locking ring ② in a clockwise direction.
4. XLR balanced microphone connection pin name and function.
 - A. Pin 1: Ground Pin (Negative phantom power)
 - B. Pin 2: HOT AF+ Positive phase input pin (String 6.8K Ω resistance to positive phantom power)
 - C. Pin 3: COOL AF- Negative phase input pin (String 6.8K Ω resistance to positive phantom power)

IV. Operating Instructions

1. Power On/Off:

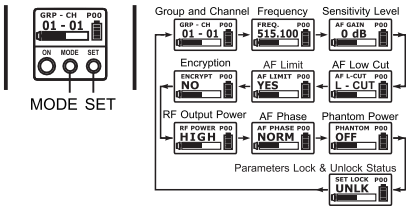
Press and hold the power button for 2 seconds to power on & off. When the power switch is turned off, the LCD will show "OFF..." first and then the system will shut down.

2. Battery Status:



When the battery has less than 10% power remaining, it must be replaced or recharged. If an under-voltage condition continues, the LCD will show "OFF..." and the system will shut down.

3. MODE Button: To access one of the functions below.
4. SET Button: To change parameters.



5. GRP-CH, FREQ.: Displays Group and Channel, Frequency Information.

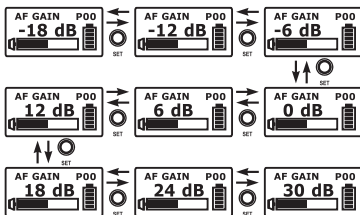


- A. Press MODE and stop on the GRP-CH or FREQUENCY, the LCD screen blinks and shows the current state. In 30 seconds, the display will stop blinking and show the current group and channel.
- B. The LCD only shows the group, channel, and frequency information which is not allowed to be changed.
- C. Changing the current group, channel and frequency must be done on the receiver and then synced by pressing the "ACT" button on the receiver.

- D. When programming a special frequency via monitoring software, the LCD screen cannot display the number. This is because this special channel is not in the preset group and channel. RF, the LCD panel will look like the illustration below.



6. AF GAIN: Setup and Change of Input Sensitivity



- AF gain is programmed between -18dB and 30dB in 6dB increments.
- Press MODE and stop on the AF GAIN function.
- Press SET to set dB value between -18dB and 30dB in 6dB increment.
- The display will stop blinking if not operated within 30 seconds.
- The higher the gains are set, the lower the dynamic range for signal input and the greater the danger of unwanted noises and feedback getting into the system.
- When the gain is set at 0dB, the maximum input strength is 2 Vrms (6dBV).
- When the gain is set at -12dB or -18dB, it stands up to 20Vp-p input signals. Signals cut off when it exceeds this level.

7. AF L-CUT: Setup and Change of Low Frequency Cut Off



- A. Press MODE and stop on the AF L-CUT function.
- B. Press SET to set L- CUT or FLAT.
- C. The display will stop blinking if not operated within 30 seconds.
- D. Set as L-CUT, the frequency response below 100Hz will decrease about 3dB with a slope of -6dB/Octave.

8. AF LIMIT: Setup and Change of Input Limit



- A. Press MODE and stop on the AF LIMIT function.
- B. Press SET to set YES or NO.
- C. The display will stop blinking if not operated within 30 seconds.
- D. Set as YES, the maximum output of the receiver is limited to 1V.

9. ENCRYPT: Displays Information of Encryption



- A. Press MODE and stop on the ENCRYPTION function.
- B. The display will stop blinking if not operated within 30 seconds.
- C. The ENCRYPTION function displays status information only and is not allowed to be changed on the transmitter.
- D. The ENCRYPTION function must be set at receiver first and then using ACT to program the transmitter. (Refer to the "Encryption" function of the receiver)

10. RF POWER: RF Power Selection



- A. Press MODE and stop on the RF POWER function.
- B. Press SET to set HIGH or LOW.
- C. The display will stop blinking if not operated within 30 seconds.
- D. HIGH has 50mW transmitting power. LOW has 10mW transmitting power. Set appropriate power to meet region/country regulations.

11. AF PHASE: Phase Selection of AF Inputs



- A. Press MODE and stop on the AF PHASE function.
- B. Press SET to set NORM or INVER.
- C. NORM: AF input is positive (positive polarity)
- D. INVER: AF input is negative (reverse polarity)
- E. The display will stop blinking if not operated within 30 seconds.
- F. AF PHASE function provides users a phase selection for different condenser microphones. The normal setting is NORM. INVER might be selected if the condenser microphone has reverse polarity. Set as INVER might eliminate the feedback, but affect the sound quality.

12. PHANTOM: Phantom Power



- Press MODE and stop on the PHANTOM function.
- Press SET to set OFF, 12V or 48V.
- The display will stop blinking if not operated within 30 seconds.
- PHANTOM is for setting phantom power and provides three selections: 12V or 48V or OFF. 12V or 48V is normally set for a condenser microphone; OFF is normally set for a dynamic microphone.
- Generally, a wired microphone with phantom power is allowed to use in 12V ~ 48V phantom power supply range. If the wired microphone is determined to be operated at 12V, it is strongly recommended to be set as 12V to reduce the transmitter power consumption significantly & extend battery life.
- Phantom power status: P00 indicates turned off (OFF); P12 indicates 12V phantom power; P48 indicates 48V phantom power
- The maximum power supply is 10mA under 48V phantom power. However, observe the total power consumption will increase significantly and the battery life will therefore be reduced by 50% or more.

13. SET LOCK: Setup and Change of Parameter Lock



- Press MODE and stop on the SET LOCK function.
- Press SET to set UNLOCK or LOCK.
- UNLK: To unlock; LOCK: To lock.
- The display will stop blinking if not operated within 30 seconds.

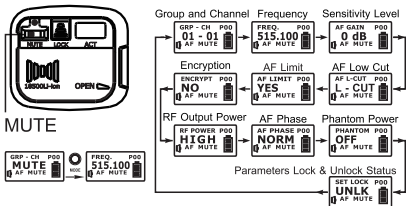
- E. Under LOCK status, receiver settings cannot be changed, and power on/off is locked. To power off, change to unlock status (UNLOCK).
- F. A sudden loss of power will deactivate the LOCK function.

14. ERR: Error Code “ERR” display indicates the operation is not correct. The error codes are as follows:

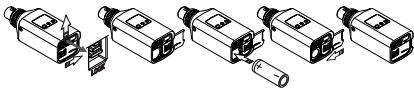
- A. ROM-ER → Transmitter does not have the initial data.
- B. ERROR1 → Failure on RF circuitry.
- C. NO----03 → Frequency to be programmed into the transmitter exceeds the highest frequency of the designated frequency band of the transmitter.
- D. NO----04 → Frequency to be programmed into the transmitter exceeds the lowest frequency of the designated frequency band of the transmitter.

V. MUTE (ON/OFF)

1. Light on: “Muted”. Function setting is not affected and ACT synchronization is allowed.
2. Light off: “Unmute”.
3. The MUTE setting is not affected under LOCK status.



VI. Insertion and Replacement of the Batteries



1. Push up the battery cover lock towards the outward direction, and push the battery cover sideways to open.
2. Ready for a 18500 rechargeable battery insertion or replacement.
3. Insert one 18500 rechargeable battery as shown with positive (+) end towards inside compartment.
4. Push the battery cover back for a secured lock.
5. Make sure the battery cover is locked and tightly secured.
6. Attention: Power off the transmitter to avoid additional battery use. Remove the battery if it will not be used for an extended period.

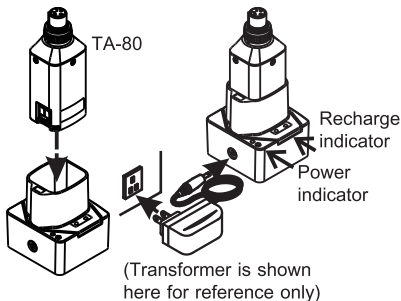
VII. Notes

1. Refer to the actual product in the event of product description discrepancy.
2. Frequency range, RF output power, and maximum deviation comply with the regulations of different countries.

VIII. Accessories (Optional)

MP-8T Charging Station

Recharge TA-80 in the MP-8T charging station.



MM-100 Measurement Microphone (Optional)

1. Features:

- A. The MM-100 is an omnidirectional microphone designed for measurement purposes.
- B. The MM-100 requires a 12 ~ 48 V phantom power supply.
- C. Flat and wide frequency response from 20Hz to 30kHz.
- D. Fitted with precise high sensitivity and ultra-low noise omnidirectional capsule, it is ideal for sound field measurement and piano or other musical instruments pick-up.



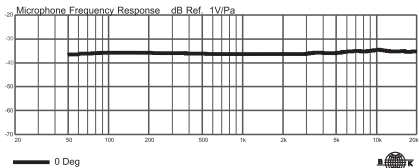
2. Application:

- A. The MIPRO MM-100 is ideally suited for measurements including loudspeaker system installation and sound field quality control application.
- B. The MM-100 is easy to operate. Connect the microphone to a mixer with 12 ~ 48 V phantom power by a standard XLR microphone cable. When the microphone is in use, plug it in or pull it out is allowed. For optimum results, we recommend the MM-100 faces toward the sound source.

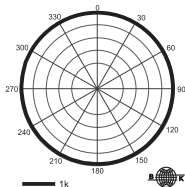
3. Specifications:

- A. Housing Material: Stainless steel
- B. Polar Pattern: Omnidirectional
- C. Sensitivity: $-36 \text{ dBV} \pm 2 \text{ dB V / Pa}$
(0 dB=1 V Open-circuit voltage)
- D. Frequency Response: 20 Hz ~ 20 kHz
(94 dB SPL)
- E. S/N Ratio: $> 75 \text{ dB @ } 94 \text{ dB SPL (1Pa)}$
- F. Max. Input SPL: 138 dB (Typical)
- G. Power Supply: External phantom power
12 ~ 48 V DC
- H. Current Consumption: 2.0 mA
- I. Output Impedance: 200 Ω
- J. Dimensions: 9 \AA \times 168 L mm
(0.75 \times 6.61 in)
- K. Weight: Approx. 110 g (3.90 oz)

L. Frequency Response:



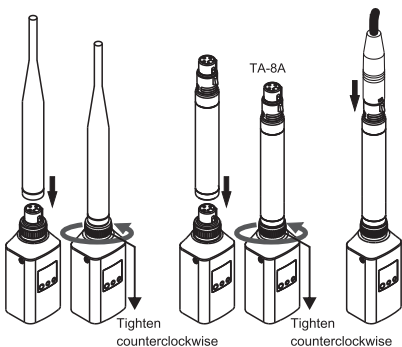
M. Polar Pattern:



IX. Installation with the Accessories (Optional)

1. Measurement microphone

2. Extension Antenna

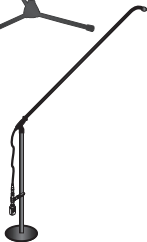


3. Assemble the TA-8A holder onto a mic stand with extending boom arm.

A. TA-8A holder assembly. B. Assembly complete.



C. After assembly, the mic cable shouldn't hang on the holder to prevent electric interference.



FCC Statement

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

THIS DEVICE COMPLIES WITH PART 74 OF THE FCC RULES. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

Industry Canada Statement

This device complies with Industry Canada licence-exempt RSS standard.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Disposal Dispose of any unusable devices or batteries responsibly and in accordance with any applicable regulations.



2005-08-13

Disposing of used batteries with domestic waste is to be avoided!

Batteries / NiCad cells often contain heavy metals such as cadmium(Cd), mercury(Hg) and lead(Pb) that makes them unsuitable for disposal with domestic waste. You may return spent batteries/accumulators free of charge to recycling centres or anywhere else batteries/accumulators are sold.

By doing so, you contribute to the conservation of our environment!

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