

MIPRO[®]
MICROPHONE PROFESSIONALS

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MIPRO[®]

ACT-80

Digital Wireless ENG Receiver

User Guide

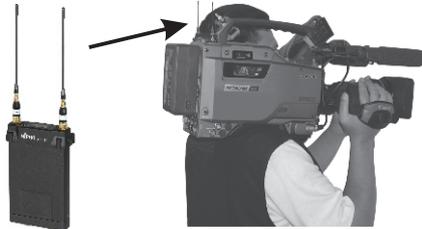


Digital Wireless ENG Receiver

Introduction

The MIPRO ACT-80 is a portable digital wireless receiver specifically designed for professional broadcast and media production applications. Matched with any MIPRO digital ACT handheld or bodypack transmitter, the ACT-80 eliminates the need for microphone cables during recording. The sturdy ACT-80 not only allows a closer combination of video and crystal-clear audio so that a more natural sound can be recorded, but it also ensures a robust and reliable operation.

For professional camcorder



The ACT-80 can also be installed on an active PA speaker via its optional mounting accessories and matched with MIPRO's Wireless Audio Mixer to form a wireless inter-linking amplifier system. Alternatively, the ACT-80 can be matched with any of the digital ACT-series wireless transmitter microphones to turn active speakers into wireless amplifiers.

Mount on any active speaker
via velcro fasteners

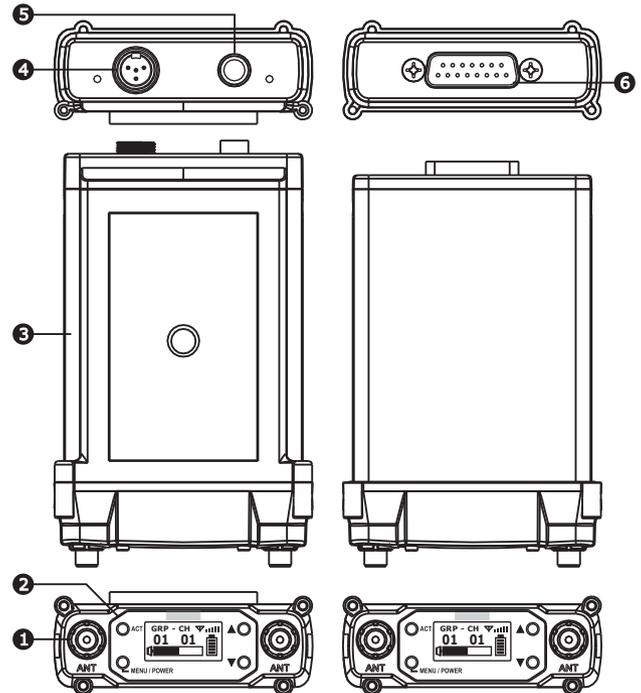


Digital Wireless ENG Receiver

Operating Controls and Indicators

For camcorders and powered PA speakers without built-in power socket.

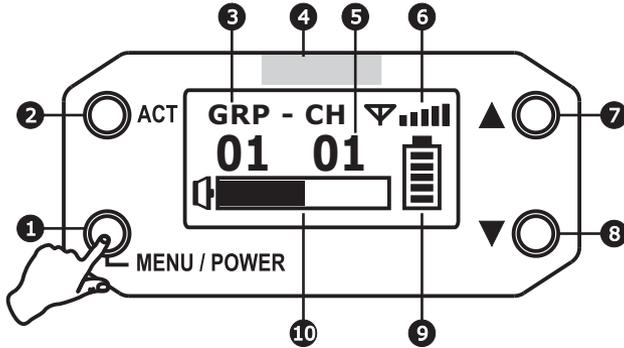
Mounts onto SONY's BETACAM® camcorders



- 1 Antenna Connector:** Detachable SMA antenna.
- 2 LCD Screen:** Displays current settings and menus.
- 3 Weatherproof Case:** Protects internal circuitry.
- 4 4-Pin Mini XLR Connector:** Audio output connector.
- 5 DC Power Input Socket:** 12V-DC power socket, positive center.
- 6 D-SUB 15PIN Socket:** Compatible with SONY BETACAM® pre-adjusted signal transmission socket.

LCD Screen

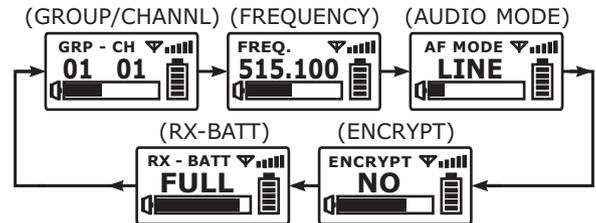
LCD Screen Controls and Indicators



- 1 **MENU/POWER:** Power on/off and access or select menu screens.
- 2 **ACT Button:** Facilitates frequency & encryption synchronization (sync) between receiver and transmitter.
- 3 **LCD Screen**
- 4 **ACT Sync Port:** Align IR sync ports of both receiver and transmitter for a successful synchronization after the ACT button is pressed.
- 5 **Parameters Screen**
- 6 **Antenna Signal Indicator**
- 7 **▲ Button:** Increase or change menu parameters.
- 8 **▼ Button:** Decrease or change menu parameters.
- 9 **Transmitter Battery Indicator**
- 10 **AF (audio) MUTE**

Operating Instructions

1. **MENU/POWER:** Powers on & off and menu button. Menu button to be used in conjunction with the ▼▲ buttons to access the configuration menus.
 - a. Press & hold MENU/POWER to power the receiver on – a lit LCD screen.
 - b. Press & hold MENU/POWER to power the receiver off – PO-OFF.
 - c. LCD screen backlight turns off automatically after 5 seconds if no settings.



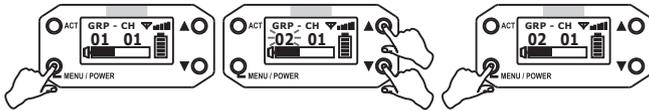
2. **▲ or ▼ button:** Use to change parameters.
 - a. When ▲ or ▼ button is pressed and released, backlight flashes and displays current setting for approximately 5 seconds to denote it is ready to accept change. Once a successfully change is made the setting is automatically saved. The backlight flashing on the screen will generally “time out” after five seconds.
 - b. ▲ button: Press & release to increase.
 - c. ▼ button: Press & release to decrease.

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3. **GRP-CH:** GROUP and CHANNEL

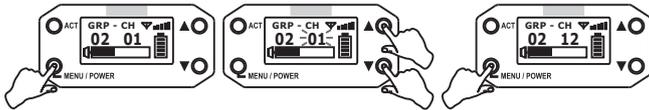
"GROUP" Set-up Instructions

- Press Menu button to activate setup mode.
- Press ▲ or ▼ when GRP-CH mode is located.
- Press ▲ or ▼ again to increase or decrease group number during number flashing.
- Press the Menu button to save the change.



"CHANNEL" Set-up Instructions

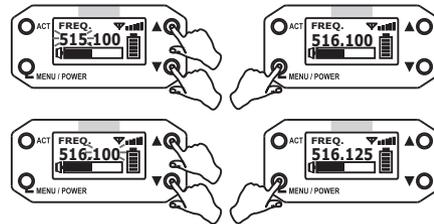
- CHANNEL number flashes automatically after GROUP is saved by pressing the Menu button.
- Press ▲ or ▼ again to increase or decrease channel number during number flashing.
- Press the Menu button to save the change.



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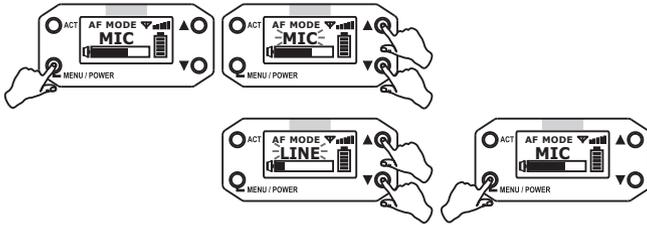
4. **FREQUENCY:** Set-up Instructions

- Press Menu button to activate setup mode.
- Press ▲ or ▼ when FREQ mode is located.
- Press ▲ or ▼ again to increase or decrease MHz frequency number during number flashing. Adjustable in increments of 1 MHz.
- Press the Menu button to save the change.
- Press ▲ or ▼ again to increase or decrease kHz frequency number during number flashing. Adjustable in increments of 25 kHz.
- Press the Menu button to save the change.



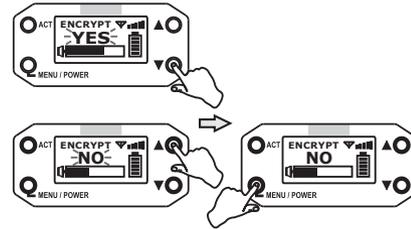
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5. **AF (Audio) MODE:** Set-up Instructions for MIC or LINE
- Press Menu button to activate setup mode.
 - Press ▲ or ▼ when AF MODE mode is located.
 - Press ▲ or ▼ again to select between MIC (microphone) or LINE during flashing.
 - Press the Menu button to save the change.



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6. **ENCRYPT MODE:** Set-up Instructions
- Press Menu button to activate setup mode.
 - Press ▲ or ▼ when ENCRYPT mode is located.
 - Press ▲ or ▼ again to select between **YES** (receiver to be encrypted) or **NO** (receiver is not currently encrypted) during flashing.
 - Press the Menu button to save the change.
 - Must perform an ACT sync procedure immediately after change is saved. If sync procedure is skipped and not performed, audio will not function properly despite with the same compatible group & channel between the receiver and transmitter.



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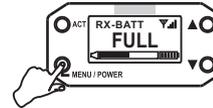
NOTE:

- a. YES denotes the receiver is now encrypted.
- b. NO denotes the receiver is not yet encrypted.
- c. Encryption is factory set by default to "NO" in the receiver (encryption is off).
- d. The transmitter can only display encryption status and cannot activate/de-activate encryption.
- e. The 256-bit encryption key is randomly generated; hence, a new, secure, encryption key must be synced from the saved receiver to a transmitter each time.
- f. This means the last encrypted transmitter will work only with the previous encrypted receiver. It also means that previously encrypted transmitters will not work with the new generated encrypted receiver even though they are on the same frequency as there will be no audio output. This method also ensures that another similar receiver cannot listen in to the encrypted transmitter.

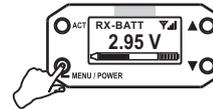
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7. **RX-BATT:** Display battery level on the receiver screen with an optional external battery pack.
 - a. Press "MENU" button until "RX-BATT" mode appears. Battery life is shown in battery indicator.

Battery Indicator

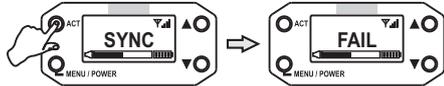


Battery Indicator with voltage level



Digital Wireless ENG Receiver

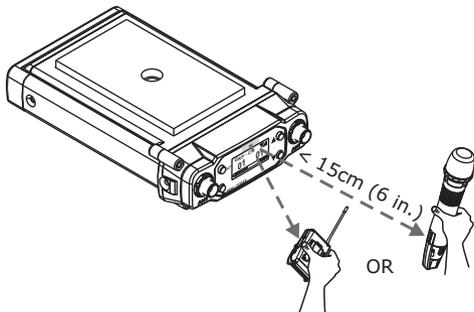
8. ACT Synchronization: Set-up Instructions



Press ACT
button to Sync

FAIL appears during
a failed synchronization

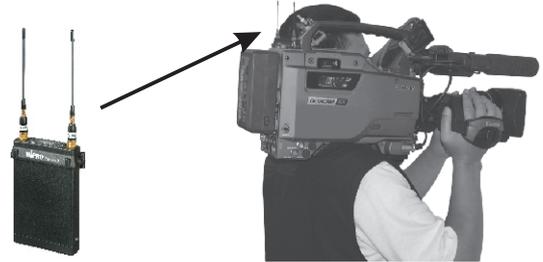
- On the LCD display, briefly press "ACT" button. "ACT" flashes on the display.
- Place the transmitter within 15cm of the receiver, and position the ACT signal indicator of the transmitter toward the "ACT" button on the receiver panel. See below.
- The ACT function will be deactivated automatically once the microphone frequency is locked on and the LCD display on the receiver module returns to the standard display. If "ACT" is flashing on the display, The function was not successful and will have to be repeated.



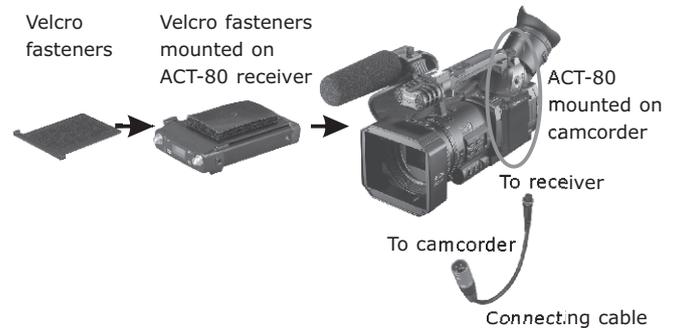
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Installation

Plug into built-in slot on SONY Betacam® -series camcorders.

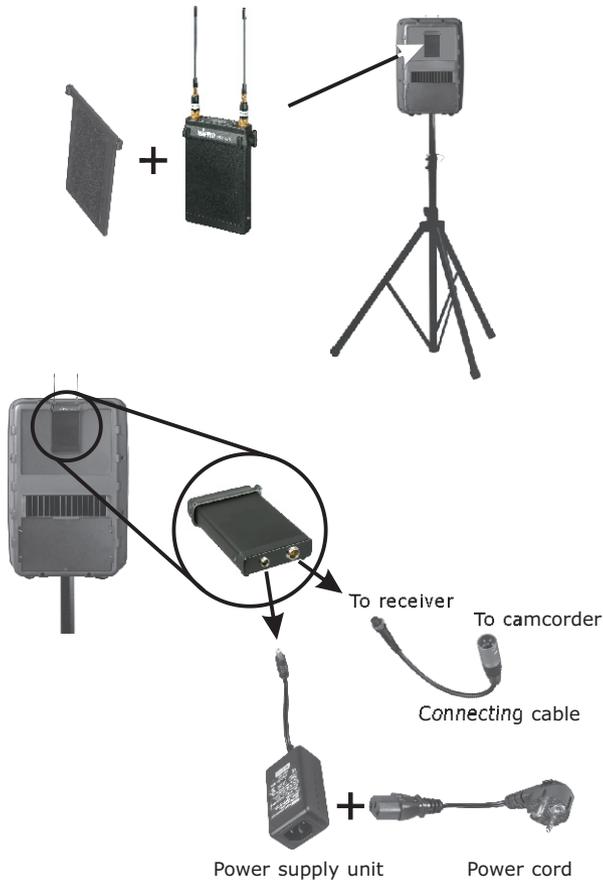


Connect to other camcorders via exclusive accessories.



Digital Wireless ENG Receiver

Connect to active speaker via exclusive accessories.



Note

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

Frequency range and maximum deviation comply with the regulations of different countries.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 0.5 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 0.5 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING

1. FOR OUTDOOR USE:

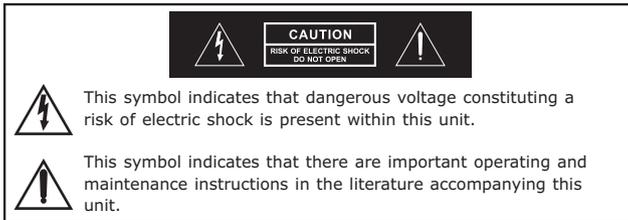
To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

2. UNDER WET LOCATION:

Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, such as vases should be placed on the apparatus.

3. SERVICE INSTRUCTIONS:

CAUTION - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



IC

This device complies with Industry Canada licence-exempt RSS-123 ISSUE 2 / RSS-310 ISSUE 3 standards. 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.



2002-08-13

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!

! IMPORTANT SAFETY INSTRUCTIONS !

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarised or ground plug: A polarised plug has two blades with one wider than the other. The wide blade is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when Moving the cart/apparatus combination to avoid injury from tip-over. 
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, should be placed on the apparatus.
17. Use only with the battery which specified by manufacturer.
18. The power supply cord set is to be the main disconnected device.