

# AirLine XD

Fitness Headset USB Digital Wireless System

# AirLine XDm

Fitness Headset Digital Wireless System



RXD2 Receiver



RXD1M Receiver



Qe Fitness Headset

**OWNER'S MANUAL**

**SAMSON®**



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 27 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

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Samson Technologies Corp.  
278-B Duffy Ave  
Hicksville, NY 11801  
[www.samsontech.com](http://www.samsontech.com)

**SAMSON**

# Important Safety Information

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 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 polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If 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 the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the 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 the apparatus during lightening storms, or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Service 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 has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
16. Caution-to prevent electrical shock, match wide blade plug wide slot fully insert.
17. Please keep a good ventilation environment around the entire unit.
18. The direct plug-in adapter is used as disconnect device, the disconnect device shall remain readily operable.
19. Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.



# Important Safety Information

## FCC Rules and Regulations

Samson wireless receivers are certified under FCC Rules part 15 and transmitters are certified under FCC Rules part 74. Licensing of Samson equipment is the user's responsibility and licensability depends on the user's classification, application and frequency selected.

This device complies with Part 15 of the FCC rules Class B and RSS-210 of Industry & Science Canada.

Operation is subject to the following two conditions:

- (1) This device must not cause harmful interference, and
- (2) This device must accept any interference received including interference that may cause undesired operation. Suitable for home or office use.

NOTE: 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 or more 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.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment is intended for use in wireless microphone applications.

Equipment is intended for sale in: AT, BE, CH, CY, CZ\*, DK, EE, FI\*, FR\*, DE\*, GR\*, HU, IE, IS, IT, LV, LT\*, LU, MT\*, NL, NO\*, PL\* PT, RO, SK, SI, ES, SE, UK

\*Subject to license. Please contact your national frequency authority for information on available legal use in your area. Any changes or modifications not expressly approved by Samson Technologies Corp. could void your authority to operate the equipment.

# Specifications

## System

Simultaneous Systems

Working Range

Working Frequency

Modulation Type

Tone Key Frequency

## RXD2 USB Receiver with AHD Transmitter

Frequency Response

SNR

2

100' line of sight

2.404-2.476

GFSK

35 kHz

23Hz-17kHz (+0/-1dB)

84dB (A-wt.)

Re. 0dBFS for USB output

Re. 0dBu for headphone output

## RXD1M Receiver with AHD Transmitter

Frequency Response

SNR

20Hz-17kHz (+0/-3dB)

89dB (A-wt.)

Re. 0dBu for XLR output

## AHD Transmitter

Microphone Element

RF Power

Battery Type

Battery Life

Gooseneck length

Battery Charge Temperature

Dimensions (LxWxH)

Weight

Qe Condenser

<10mW EIRP

Lithium Ion rechargeable battery

5 hours continuous use

4.7"/ 120mm

-10°C to +45°C

5.9" x 6.7" x 3.9" 150mm x 170mm x 100mm

3oz / 86g

## RXD2 Receiver

Max Headphone Output Level

(1% THD+N, @ 1kHz)

Bit depth

Operating Voltage

Operating Temp

Dimensions (LxWxH)

Weight

14mW into 16R

24mW into 32R

16-bit

5V DC

-10°C to +40°C

3.5" x 5.5" x 7.9" 89mm x 23mm x 8mm

.35oz / 10g

## RXD1M Receiver

Audio Output Level

1/8" (3.5mm) & 1/4" (6.3mm) jack (unbalanced)

XLR jack (balanced)

Audio Output Impedance

1/8" (3.5mm) & 1/4" (6.3mm) jack (unbalanced)

XLR output jack (balanced)

Sensitivity

Image Rejection

Operating Voltage

Dimensions (LxWxH)

Weight

+4dBu, 1kHz, <0.6% THD+N

+4dBu, 1kHz, <0.6% THD+N

110 Ohms, @ 1kHz

2.4KOhms, @ 1kHz

-78dBm/20dB SINAD

>50dB

5VDC 500mA

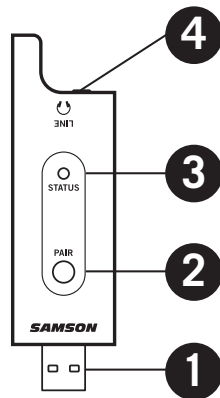
4.3" x 3.7" x 1.5" 110mm x 95mm x 39mm

0.42lb / 192g

NOTE: Specifications and images are subject to change without notice.

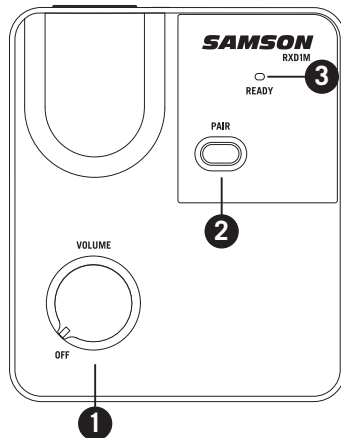
## RXD2 USB Receiver Features

1. **USB Connector** - Plugs into the USB jack on the rear panel of a wirelessly enabled Samson audio device. The receiver can also plug directly into a computer USB port and will be recognized as a USB audio device. The unit passes audio to the device and receives power from the device through this connector. If connecting the LINE output to an analog device, the RXD2 can be powered using a standard 5 Volt adapter.
2. **PAIR Switch** - Press >5 seconds to enter pairing mode.
3. **STATUS Indicator** - This LED displays the operation mode:  
Amber: Normal Operation  
Flashing Amber: Pairing  
No Light: Not paired; Transmitter out of range; No Power
4. **LINE / Headphone Output** - Use this 3.5mm jack when connecting to an analog line input or headphones for monitoring.



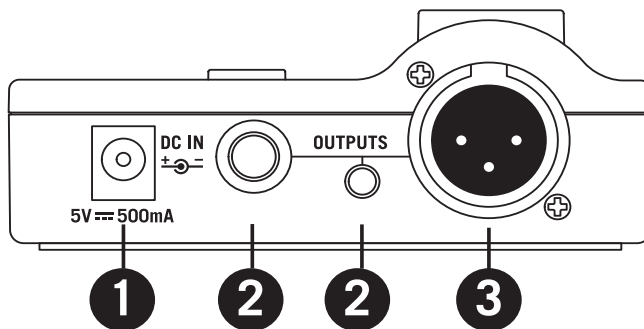
## RXD1m Table Top Receiver Features

1. **VOLUME/Power Control** - This rotary knob controls the level of the receiver output and powers the RXD1m on and off. Turn clockwise to power on and counterclockwise to power off. The light ring around the VOLUME/Power Control will illuminate white when powered on.
2. **PAIR button** - Press and hold for more than three seconds to enter pairing mode, the READY LED will begin flashing. NOTE - the system is paired at the factory prior to shipment.
3. **READY Indicator** - This LED displays the operation mode. Solid AMBER means normal operation, flashing AMBER means pairing, no light means not paired or that the transmitter is either out of range or powered off.

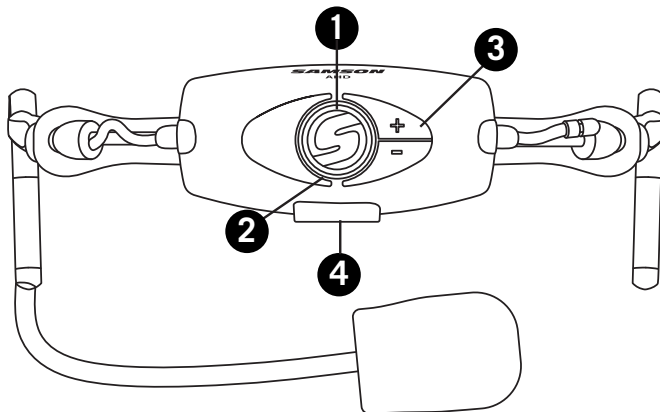


## RXD1m Receiver Features Rear Panel

1. **DC Input** - Connect the supplied adapter here. **WARNING:** Do not substitute any other kind of power adapter. Doing so can cause severe damage to your RXD1m and void your warranty.
2. **Unbalanced Outputs** - Use these unbalanced 1/4" and 1/8" jacks when connecting the RXD1m to consumer (-10 dBV) audio equipment. Wiring is as follows: tip hot, sleeve ground
3. **Balanced Output** - Use this electronically balanced low impedance (600 Ohm) XLR jack when connecting the RXD1m to professional (+4 dBu) audio equipment. Pin wiring is as follows: Pin 1 ground, Pin 2 high (hot), and Pin 3 low (cold)



## AHD Headset Transmitter Callouts



1. **Power/Pair Button** - Short press to turn the unit on or off. Press and hold to enter pairing mode, green LED will flash and turn solid green when TX and RX have been paired.
2. **Status Indicator** - This LED displays the operation mode, low battery and recharge status of the transmitter. The chart below defines the LED colors for each function.

SOLID GREEN	Normal Operation
Flashing GREEN	Pairing
	Volume adjust
Slow Flashing RED	Charging
RED	Fully Charged
Rapid Flashing RED	Low-power indication

3. **Volume +/- Buttons** - Press and hold either Volume button to adjust the volume. Pressing the + or – button increases or decrease the level by one step with each push of the button. There is a total of 8 volume levels. The Status Indicator light will flash faster for each increased step and slower for each decrease.
4. **Charging Connector** - Connect the supplied magnetic charging cable to this sealed, gold contact charging connector to recharge the internal Lithium Ion battery. The AHD can be recharged by connecting the cable to the USB connector on any 5-volt DC adapter that has a USB receptacle.



## Wearing the AHD QE Headset Microphone

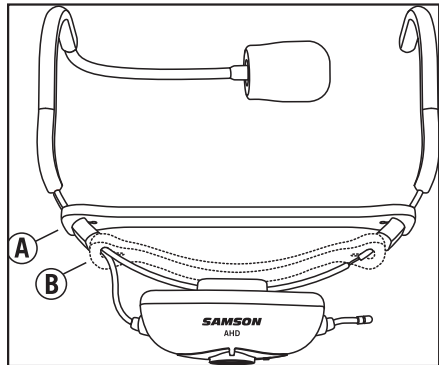
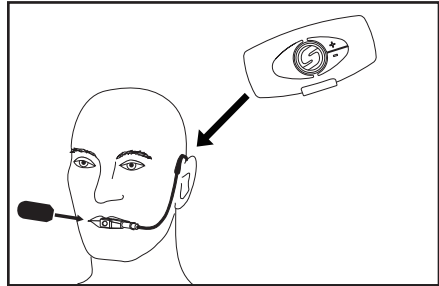
As shown in the illustration, the correct way to wear your Qe fitness headset microphone, is over the ears, as you would wear a pair of eyeglasses. Because the Qe microphone is specially designed to be used up close, be sure to position the microphone directly in front of your lips. To avoid feedback problems, take care not to cover the microphone capsule with your hand.

Position the headset over your head so that the body of the transmitter is behind your head. Adjust the headset so that it fits comfortably on your ears and is secure against your head.

*Note: If wearing glasses, it is recommended to put the AHD transmitter on first than place glasses over the transmitter.*

For added comfort and fit, the headset includes an adjustable headband. To fit the headband, pull elastic strap over the ear hooks and locate in front of the stop point (A). For larger sizing, the headband can be moved behind the stop point (B) or completely removed by sliding the elastic band over the ear hooks and microphone capsule.

*Note: When removing the headband, first take off the microphone windscreen.*



## Quick Start Airline XD with RXD2

1. Plug the RXD2 USB receiver into the USB jack on a wireless-enabled Samson audio device, or to an available USB port on a computer.

Note: When using the XPD2 wireless system with a computer, you must set the computer's audio input device to "Samson RXD Wireless Receiver". In most computer operating systems, an audio software must be used to record or monitor the audio from the USB receiver.

2. Ensure that the AHD transmitter is fully charged (see section Charging the AHD Transmitter).
3. If using a Samson audio device, turn the wireless level knob on the audio device completely counterclockwise, then turn the power of the audio device to the ON position.
4. Turn on the power to the AHD Transmitter by quick pressing the power button, LED will light solid green.
5. If the transmitter and receiver have not been previously paired, press and hold the button on the RXD2 receiver for >5 seconds, until it begins to flash. Press and continue to hold the Power button on the AHD transmitter until the LED indicator flashes green. The AHD's LED will change to solid green indicating that the receiver and transmitter are paired and ready for operation.
6. Speak or sing into the microphone at a normal performance level and raise the input level on the audio device until the desired level is reached. For best signal-to-noise operation, set the input Gain control as high as possible without overloading.
7. If you hear distortion turn down the input level on the audio device. If distortion is still audible, reduce the gain of the AHD Transmitter. Press and hold the volume +/- button to enter volume adjustment mode, press the minus (-) button to reduce transmitter gain level. Conversely, if you hear a weak, noisy signal at the desired volume level and with the wireless level control of the audio device set to maximum, use the plus (+) button to increase the transmitter gain level.

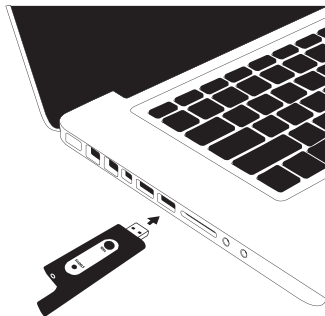
# Computer Setup

## Windows

1. The first time you plug the XPD2 into a USB port, Windows will install the USB driver for that port.
2. To set the XPD2 as your default input/recording device, or to change its settings, open the Control Panel, Hardware & Sound settings, then click SOUND. Under Recording tab, select the “Samson RXD Wireless Receiver” from the list of devices and press the **Set Default** button to set it as the default audio input device.
3. To set the gain of the microphone, click the Properties button, and then select the Levels tab. Slide the control until the desired level is reached.

## Apple macOS

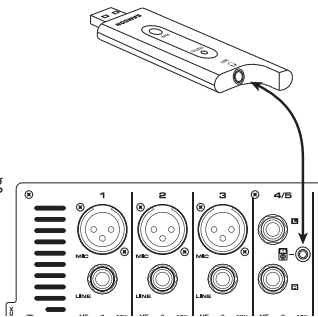
1. Plug the RXD2 receiver into an available USB port.
2. Select the XPD2 as the computer's audio input, open System Preferences from the dock or the main Apple Menu.
3. Next, open the Sound preferences, choose the Input tab and select “Samson RXD Wireless Receiver”. To set the gain of the microphone, adjust the Input volume slider at the bottom of the Sound dialog box. The Input Level meter will show the recording level.



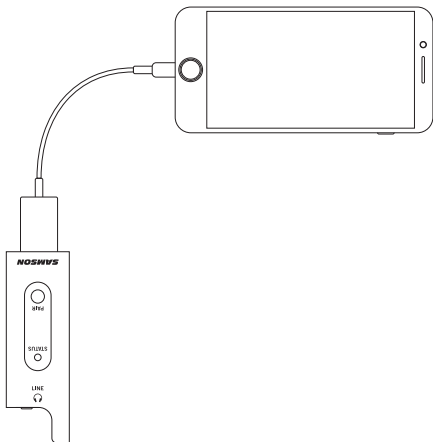
## Connecting to a Line Input

The Airline XD wireless system can work with any audio gear that accepts a line input like a mixer or portable PA system. Follow these steps to connect your Airline XD system using the analog output:

1. Plug the RXD2 receiver into a standard 5 Volt USB adapter and plug the adapter into an available AC outlet.
2. Turn the volume on the input channel that you are connecting to the Airline XD system all the way down.
3. Using a 1/8" (3.5mm) cable, connect the RXD2 LINE / Headphone output to the line input on the audio device.
4. Turn on the power to the AHD transmitter by quick pressing the Power button; the indicator LED will light solid green.
5. Speak or sing into the microphone at a normal performance level and raise the input level control on the input channel until the desired level is reached.



## Connecting to a smartphone



The RXD2 receiver can be used with a smartphone to add a wireless microphone to your live streams or mobile exercise classes.

To use the Airline XD system with an iPhone or iPad, you will need to use the Apple Lightning to USB Camera Adapter (not included).

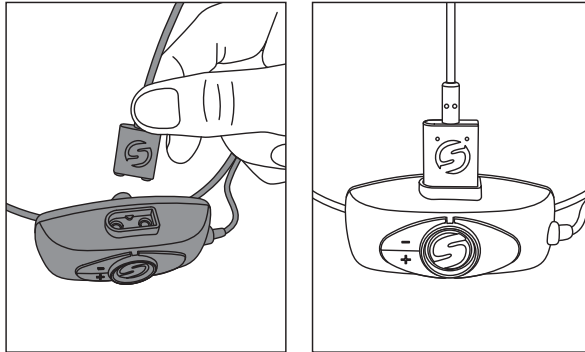
To use the Airline XD system with an Android device, you will need to use a Host OTG adapter.

You can connect headphones to the 1/8" (3.5mm) Headphone output to monitor the wireless signal.

## Charging the AHD Transmitter

1. Insert the magnetic power cable to the USB Port of the supplied 5-volt DC adapter (or any other 5-volt DC adapter that has a USB port).
2. Place the AHD transmitter on a flat surface.
3. Attach the magnetic connector to the gold contact power port on the bottom of the AH9 transmitter. The cable attaches to the port magnetically. The magnetic connector is keyed so it will only connect in one direction. *Note: Transmission is disabled during charging.*
4. Look at the indicator light on the AHD transmitter to determine when the transmitter has finished charging. When the light is slowly flashing red, the AHD is charging. When the red light stops flashing it indicates that the AHD is fully charged.
5. Disconnect the magnetic power cable from the AH9 when the unit is fully charged.

If you notice your AH9 battery life is becoming shorter after a full charge, you can order a user replaceable battery from your local Samson distributor.



### Getting the most out of the rechargeable battery:

- Completely charge the batteries before first use
- Fully charge the battery before it will be used.
- After the battery is charged, unplug the charger from the outlet.
- The optimal temperature range for using and storing the battery is 50°F - 86°F (30°C - 50°C). The battery performance and operation may decrease in temperatures below 50°F (30°C).

A warning that batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. Attention should be drawn to the environmental aspects of battery disposal

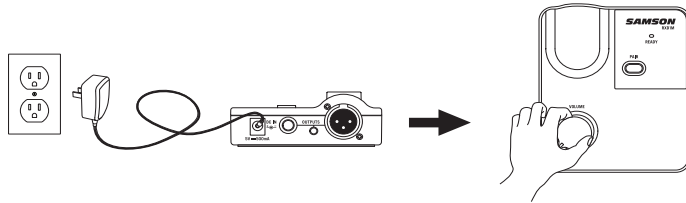
## Quick Start XDm with RXD1m

In order for the Airline XDm Digital Wireless System to work correctly, both the RXD1m receiver and AHD headset transmitter must be paired together. (NOTE: The Airline XDm Digital Wireless System will come paired from the factory).

Follow this basic procedure for setting up and using your Airline XDm Digital Wireless System:

1. Physically place the RXD1m receiver where it will be used. We suggest you keep receiver and transmitter within line of sight for optimal performance, meaning the performer wearing the transmitter can see the receiver.
2. Connect the included power adapter to the RXD1m receiver before turning the power on. Turn the RXD1m on momentarily to confirm that it is receiving power, then turn it off (figure 1).

Figure 1



3. With your amplifier or mixer powered off and volume control down connect the RXD1m receiver output jack to the mic or line input using the balanced XLR output, unbalanced 1/4" or 1/8" output jacks. Turn the RXD1m power on but keep the volume at minimum level (figure 2).
4. Ensure that the AHD transmitter is fully charged (see section Charging the AHD Transmitter).

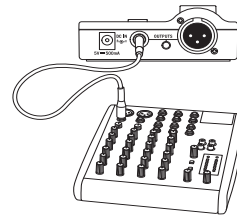
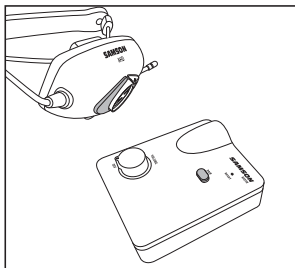


Figure 2

## Quickstart Continued

5. If the receiver and transmitter have not been previously paired press and hold the pair button on the RXD1m receiver for >3 seconds until the LED begins to flash (amber). Press and continue to hold the power button on the transmitter until the LED indicators on both units light steadily indicating that the receiver and transmitter are paired and ready for operation (figure 3). NOTE: AHD transmitter will light solid green, RXD1m will light amber.

Figure 3



6. Turn on the connected amplifier or mixer but leave the PA system's volume at the minimum level. Turn the volume control of your RXD1m fully clockwise, this is unity gain. Speak or sing into the microphone at a normal performance level while turning up the PA system's volume control until you reach the desired output level.
7. NOTE: Only two Airline XDm systems can be used within close proximity to each other.

**Having Trouble with your AirLine XD or Airline XDm Digital Wireless System?  
We can help!**



**CONTACT OUR SUPPORT TEAM: [support@samsontech.com](mailto:support@samsontech.com)  
Our experts can help you resolve any issues.**

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Samson Technologies  
278-B Duffy Ave  
Hicksville, NY 11801  
[www.samsontech.com](http://www.samsontech.com)