Wireless Microphone Audio Setup

Setting Wireless Mic Squelch

To set the squelch on a wireless microphone, follow these steps:

- 1. **Set the Receiver Volume**: Start by setting the receiver volume control to the minimum to avoid excessive noise in the sound system.
- 2. **Turn On the Transmitter**: Power on the wireless microphone transmitter.
- 3. **Observe the Indicators**: Look at the RF and audio indicators on the receiver. If the indicators show a nosignal condition, the squelch setting may be left as-is.
- 4. **Adjust the Squelch Control**: If the indicators show a steady or intermittent signal-received condition, increase the squelch control setting until a no-signal condition is indicated. Set the squelch control slightly past this point to provide a threshold margin.
- 5. **Check for Signal**: Ensure that the receiver indicates a signal-received condition with the transmitter at normal operating distance. If the no-signal condition cannot be achieved even with high squelch settings, it may be necessary to select a different operating frequency.

The squelch control helps to mute the audio output of the receiver when the radio signal falls out of an acceptable range, preventing unwanted noise from being heard through the PA system. Adjusting the squelch is important to ensure clear communication and to prevent interference from other radio transmissions.

(Ref: Brave AI Search on "how to set wireless microphone squelch" 13Jan25)

Set the levels

The last step with your wireless setup is to set the levels for the receiver, transmitter, and mixer. Unlike a wired setup, it's a 3-step process, so follow these instructions to set your levels.

- 1. Start by adjusting the transmitter and receiver level. Start with the levels all the way down for the transmitter, receiver, and channels on your mixer.
- 2. Sing or play into your input device at the maximum performance level with <u>Proper Technique</u> while slowly turning the transmitter and receiver level up. Once you see the AF meter reach the maximum level, turn it down until it no longer clips.
- 3. Turn up the channel's gain knob until the clip/overload/peak light appears. Once the light appears, turn the gain knob down until the clipping light no longer appears. Lastly, move the channel's fader as needed.
 - Turn the transmitter volume down if you notice the receiver's AF (audio) meter clip and your signal sounds distorted.
 - If the transmitter is quiet, double-check that both the transmitter and the receiver volumes are turned up, go through your Gain Staging, and change the batteries.

(Ref: https://www.sweetwater.com/sweetcare/articles/wireless-microphone-setup-guide/)

Audio-Technica Wireless Mic Setup

System Operation

Turn down the receiver volume control and the mixer/amplifier level before starting up the wireless system. Do not switch on the transmitter yet.

Receiver on...

Plug the power supply into an AC power source. The blue System ID number on the front panel will illuminate.

Transmitter on...

When the transmitter is switched on, the receiver's green pair indicator will light, and two indicators light on the transmitter: the transmitter Power / Battery / Mute status indicator will glow green; and the transmitter blue System ID display on the transmitter turns off after 30 seconds to conserve battery power; the transmitter Power / Battery / Mute status indicator will remain illuminated, indicating transmitter status. To re-illuminate System ID display, press the Power / Mute switch. **Note:** this will alter the transmitter mute status. A slight touch of the power switch toggles between muted and unmuted operation.

The transmitter's Power / Battery / Mute status indicator glows red when transmitter is muted, or green to indicated unmuted status. In a low-battery situation, the Power / Battery / Mute status indicator begins to blink.

The transmitters have a soft-touch power switch. When the switch is set to "Mute" (red indicator LED), the transmitter produces RF with no audio signal. When the switch is "On" (green indicator LED) the transmitter produces both RF and audio. Excessive audio input to the transmitter will cause the receiver's red AF Peak indicator to light.

Receiver Volume

Under typical operating conditions, the receiver's volume control should be turned all the way up, with overall system audio gain adjusted at the mixer or amplifier.

Input Level Adjustment

Input trimmer controls in the **transmitters** enable you to maximize performance for a particular microphone or guitar sensitivity, or to adjust for different acoustic input levels.

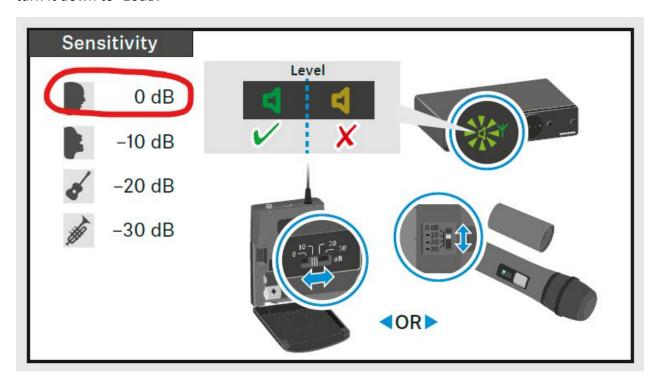
Adjusting Input Level — UniPak® Transmitter

Slide the battery cover off the transmitter and remove the screwdriver from its clip. **Using the screwdriver**, gently turn the "VOL" (Volume – Microphone/Instrument Level) all the way up (clockwise, toward "H"). Check for excessive gain by speaking / singing into the microphone at typically loud levels while watching the receiver's Peak Indicator. If the Peak indicator does light, turn the "VOL" control slightly counterclockwise until the Peak indicator no longer lights with maximum audio input to the transmitter.

(Ref: Audio-Technica System 10 Digital Wireless System Installation and Operation, p.6)

Sennheiser XS Wireless 1 Setup

Based on the diagram below from the Sennheiser Quick Guide, I think that we should set the transmitter sensitivity to 0 dB unless it is still too loud to provide adjustment headroom on the mixer. If this is the case, turn it down to -10dB.



Here is the diagram for setting the Squelch:

