

Sennheiser G3 Wireless System

A Step-by-Step Setup Guide

By Robert Kennedy

GETTING THE BEST PERFORMANCE OUT OF YOUR SENNHEISER G3 WIRELESS System involves settings a good frequency and matching your output levels to your recording device or camera. These wireless systems use a *banks/channels* arrangement which offers basic frequency coordination for a whopping 12 channels in their entry-level system.

SETTING A CLEAR FREQUENCY

THE RECEIVER

1: Open the battery compartment and press the On/Off button to power on the receiver.

Note: The matching transmitter stays powered down to prevent it from creating RF interference.

2: Look at the RF meter level on the left of the display. If you see no RF activity, skip to The Matching Transmitter

3: Press the Set button to enter the menu. Then press the Up arrow once until the display shows Easy Setup. And press Set

4: Press the Up arrow once the reach Scan New List then press Set to initiate scanning of its entire RF range.

5: When finished (a minute or so) the receiver will automatically select a good *bank of channels* and show you how many of that bank's 12 channels are *free*.

Note: If all 12 channels were not *free* when scanned, note these bad channels and avoid setting them on other wireless systems.

6: Press Set to enter the bank and select an unused channel. Press Set and the unit will display Stored and revert back to the Current List menu.

Note: It's a good idea to note what *bank/channel* to which the unit is tuned for later reference.

7: Press the On/Off button to exit to the home screen.

8: Confirm there is little or no RF activity on the channel you have chosen.

THE MATCHING TRANSMITTER

10: Open the battery compartment and press the On/Off button to power on the transmitter.

11: Press Set to enter the menu and press the Up arrow once to reach the Frequency Preset menu.

12: Press Set to enter the Tune menu and use the Up or Down arrows to match the transmitter *bank* and *channel* to which the RECEIVER is set.

13: Press Set to confirm the transmitter's new frequency then press the On/Off button to return to the home screen. The green LED labeled RF on the RECEIVER should illuminate.

ADDING ADDITIONAL WIRELESS SYSTEMS

Set them to a different channel in the SAME *bank*. *Channels* that are in the same *bank* will not interfere with one another.

14: Press Set to enter the menu. Press Up until you reach Frequency Preset.

Perform steps 6 through 13.

SETTING AUDIO LEVELS

15: Connect a microphone (or other audio signal) to the transmitter and press the Set button to enter the menu.

16: Press Down until you reach Sensitivity then press Set.

17: Hold the mic near your chest and speak loudly while adjusting the sensitivity with Up and Down. Set it to the highest level possible that does not cause the AF PEAK light to illuminate while simulating the signal you intend to mic.

18: Press Set to lock in that level then press On/Off to return to the home screen.

19: Confirm the *AF Level Meter* (labeled *AF*) on the transmitter responds appropriately to your simulated audio signal.

Note: If the meters do not respond, be sure the Mute switch on the transmitter is disengaged. On the Receiver

MATCHING OUTPUT LEVELS OF THE RECEIVER TO THE INPUT OF YOUR CAMERA/RECORDER

Note: For DSLR camera's, refer *The Coffey Files*, *Inception Issue* entitled *DSLR Audio Solutions*.

20: Affix the receiver to your camera, audio mixer or recorder (referred to hereforth as "camera")

21: Set the camera or mixer's input to *mic level* and adjust the gain knob on the camera to approximately 12 o'clock (deal settings vary by manufacturer). Make sure your *external input* is enabled and selected.

22: On the receiver, press Set to enter the menu then Down until you see *AF OUT*. Press Set then press the Up arrow to turn the output out to +12dB for the moment.

23: Simulate your loudest signal into the transmitter's microphone and observe the level meters on the camera. Adjust the *AF Out* level so that the camera's meters do not indicate overload (usually by several red bars) while making sure the camera meters respond to the test signal.

24: If you cannot reach a satisfactory level while adjusting the *AF Out*, you may adjust the input level of your recording device. (Your manual should help - the ideal setting on the device varies greatly by manufacturer.)

25: Turn the headphone volume on the camera down and plug headphones into the camera. Turn up the headphone volume to a comfortable level while speaking into the microphone.

Note: Check your camera's manual for headphone mix instructions.

26: If it sounds good and the meters are responding, press Set on the receiver and it will display *STORED*. Press the On/Off button to return to the home screen.

27: Listen carefully while speaking at a normal and high level. While doing this, listen for a clear, distortion-free signal at different vocal intensities.

Note: Many cameras' headphone amps introduce distortion and the only way to hear it clean is by transferring the footage and playing back from a computer.

28: Write down the camera and receiver's settings and place tape over the camera's audio setting to prevent disruption of settings.

29: Open the battery compartment of the transmitter and press Set to enter the menu. Press Down 3 times to reach the *Sensit* menu and press Set to enter that menu.

30: Place the microphone on talent and keep the transmitter in your hands. Ask talent to simulate speaking as loud as they will get during a take and press the Up or Down arrow to adjust the level so that the yellow *AF LED* on the transmitter illuminates rarely if at all.

31: Always monitor the recording device to ensure a clean and robust sound.

32: Play back your recording via a trusted computer/DAW to ensure a quality recording.

FINAL WORDS

From this point forward there should be no need for further adjustment to audio levels on the receiver or camera. The only adjustment that will improve the signal-to-noise ratio

(and thus the only necessary ones) will be the *SENSITIVITY* setting on the TRANSMITTER.

Standard settings are:

-30 dB = Loud scenes or booming voice (note that you can still overload if yelling or singing)

-20 dB = Standard conservative setting

-10 dB = Standard aggressive setting (for quiet person)

00dB = Special setting for very quiet settings

Sennheiser EW100 ENG Wireless System

Sennheiser's EW100 kit offers great flexibility for portable recording indoors and outdoor. It comes with many extras in the box including; batteries, a XLR cable, jack cable and an omnidirectional ME 2 microphone.

