

## FAQS: THE ETS PA911 DSLR Audio Camera Balun

Q&A: Using the ETS PA911 with the Canon© 5D and 7D Series of DSLR cameras

Q: How do I get audio into a 5D, 7D etc?

A: The audio input on this camera is a 3.5mm stereo jack (also called a 1/8" jack) built into the left side of the camera under the protective rubber insert. This jack gives you access to two channels (stereo).

Q: What kind of audio input is the jack on a 5D, 7D etc.?

A: This audio input is an unbalanced stereo. Because it is not a balanced input, many regard it as "non-professional." Nonetheless, it can be used as a guide track for editing, or as a back-up track to a separate audio recording device such as the Zoom h3C.

Q: Can I use the audio input of a 5D, 7D etc. with professional balanced line microphones?

A: Yes. You can convert this input to a balanced line using a balun transformer such as the ETS PA911 ([www.etslan.com](http://www.etslan.com)). This is a passive balun (no external power is required) that puts the same mic audio on both tracks. It converts the balanced audio from the mic to unbalanced audio required by the camera. There is a precision transformer built into the XLR connector to accomplish this. You can also special order from ETS a balun that gives you two inputs so you can record stereo microphones. The only thing this arrangement won't support is phantom-powered condenser microphones, but dynamic microphones (or condenser microphones with external power supplies or internal batteries) will work just fine. Beware of adaptors that simply attach the 3.5mm plug to an XLR. That style of adaptor actually unbalances the mic to which it is attached, which reduces the ability of the mic and wiring to reject noise and interference.

Q: Do I HAVE to use balanced microphones?

A: No. They're simply of higher quality than most mics with unbalanced outputs. There are many varieties of shotgun and other styles of microphone with the same 3.5mm plug used in the 5D and 7D. Some of these are of adequate quality, but there are far more suitable choices available when you employ a true 3-pin XLR balanced line.

Q: What if I want to run a long cable to an external microphone?

A: You can purchase any number of wireless systems that have the 3.5mm output you need. Alternatively, you can use the ETS PA911 ([www.etslan.com](http://www.etslan.com)) to adapt a professional wireless receiver. But you can combine higher quality with lower cost by simply using an appropriate length of balanced line mic cable, such as Belden 1800F. The cable would plug into the ETS PA911 balun on one end and the balanced-line mic on the other end. There is essentially no reasonable limit to distance (at least up to 2000 ft.) with this arrangement. But bear in mind that if you use a simple XLR-to-3.5mm-plug adaptor, it will unbalance the entire mic cable, as well as the mic at the other end, and thereby greatly reduce the ability of the cable to reject noise and interference.

Q: How can I maximize the audio quality in my 5D and 7D?

A: Consult the Owner's Manual and disable the "automatic gain control" on the audio in the camera. Of course, you will then have to set the audio level manually.

Q: How do I attach an outboard video monitor to the 5D and 7D cameras?

A: There is a mini-HDMI output on the same side of the camera as the audio jack. Use a cable of the appropriate length that adapts from min-HDMI to standard HDMI. External self-powered monitors are available from a number of manufacturers. But please note that these HDMI cables are typically fragile, so you might want to take a few backup units with you on a shoot.