

## Specifications

Input Level	MIC setting: -36 dBu ideal LINE setting: -10 to +4 dBu ideal
Output Level	Nominal MIC levels
Frequency Response	20 Hz to 20 kHz (+/- 3dB)
Phantom Power	Dual regulated 48 volt power supplies Current to 14 mA (direct short)
Level Meter	Calibrated from -54 dBu to -33 dB
Battery Type	One 9 volt alkaline battery
Battery Duration switches enabled	3 hours typical with both phantom No power required to pass signal
Dimensions	6" x 3" x 1.7" (L x W x H) (152 mm x 75 mm x 43 mm)
Weight	16 oz (0.45 kg)

## Limited Two Year Warranty

This warranty covers any defects or malfunction in your new BeachTek adapter for two years from date of purchase.

BeachTek will replace or repair any defective or malfunctioning adapter, within the warranty period, at no charge. The warranty does not cover damage resulting from accident, alteration, misuse or abuse. The device must be sent to our service center at your expense.

Should you require service please contact us first before returning the unit to us. Return instructions can be found on our website at [www.beachtek.com](http://www.beachtek.com) under the Support option.

Upon receiving the returned adapter it will be inspected and replaced or repaired if found defective. The unit will be shipped back to you within five business days at our expense.

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# DXA-5D

Operating Instructions for the DXA-5D Adapter



The BeachTek DXA-5D is a two-channel, transformer balanced XLR adapter for attaching external microphones and other audio gear to the Canon 5D Mark II camera. It can also be used with any camcorder or other audio recording device that has a built-in mic jack.

The DXA-5D is very easy to set up and use. It allows you to connect a wide variety of audio devices including professional condenser microphones that require 48 volt phantom power to operate. The built-in level meters show the input signal strength at a glance while the trim controls allow you to adjust the input level for optimum recording. The headphone jack lets you monitor the audio that is coming out of the adapter. The DXA-5D uses high quality balancing transformers, which are completely noise free for superb audio.

The adapter mounts to the bottom of the camera and can also be mounted to any standard tripod.

- Before using this high quality device, please read this operating manual thoroughly to obtain the highest performance.
- Please contact us if you have any problems or questions.

# BeachTek

## Before You Begin

- 1.) These instructions refer to the use of this adapter with the Canon 5D Mark II camera unless otherwise noted.
- 2.) It is important that you use a sensitive microphone with the adapter to get the best performance when recording audio on the Canon 5D Mark II.
- 3.) Do a few test recordings and check playback on the camera to be sure that the audio is captured as expected. Since there is no output audio jack on the camera, there is no way to ensure that what you are monitoring is being recorded by the camera.
- 4.) The audio that you hear from headphones connected to the phone jack on the adapter is not exactly the same as the audio you will hear on playback from the camera.
- 5.) Note that you cannot monitor audio on playback through this device.
- 6.) Please read and understand the use of the AGC DSBL feature before using this function.

## Battery Installation

- 1.) The DXA-5D operates on one 9 volt battery. We recommend that you use either an alkaline or lithium for longest operating time.
- 2.) The adapter only requires battery power for supplying phantom power and operating the LCD panel AGC disable feature and headphone amplifier. No power is required to pass the audio signal.
- 3.) To install the battery, simply open the cover by pushing on the end of the cover to unclip it. Insert the battery with the "+" positive terminal lined up with the "+" indicator on the battery compartment. Replace the battery cover.

## Mounting the Adapter on the Camera

- 1.) Line up the locating pins on top of the adapter to the holes on the underside of the Canon 5D Mark II camera. Carefully turn the top mounting knob to the right to screw the adapter squarely into the camera. If you are using this adapter on another camcorder, you can remove the top two locating pins.
- 2.) Connect the output cable to the camera's MIC jack.
- 3.) You can also mount the adapter to any standard tripod.

## Initial Setup

- 1.) Connect your microphones or other audio gear to the adapter via the XLR inputs or AUX mini-plug input.
- 2.) Set the LIN/MIC switch to either MIC when connecting microphones or most wireless receivers, or to LIN when taking a line level feed from a mixing board.
- 3.) Set the G1/G2 switch to G1. You may have to change this to the G2 setting if you encounter any ground loop noise when attached to a mixing board. You will need to do a test recording and playback to determine the best position for your setup.
- 4.) Set the M/S switch to M for mono when using one microphone. Set the unused channel trim control fully clockwise so that it does not interfere with the working channel. When using two microphones, you should normally set the switch to S for stereo to keep each channel separated.
- 5.) Set the AGC DSBL switch to the left so that it is deactivated.
- 6.) Set the LEFT and RIGHT trim controls about half way to start.
- 7.) Plug your headphones into the PHONES jack to monitor the audio. Be sure that the VOLUME control is set low to avoid excessively loud audio from damaging your hearing.
- 8.) Turn on the PWR switch on the DXA-5D.
- 9.) Activate the 48V phantom power switch for only those microphones that require 48 volt phantom power to operate.

## Basic Operation

After following the above Initial Setup, you should be ready to start recording.

- 1.) Use the level meters on the adapter to monitor the signal levels from your sound source.
- 2.) Adjust the LEFT and RIGHT trim controls to give you a peak reading of -36 dBu on the level meter. This is the "sweet spot" for getting the highest signal to noise ratio from the camera. The closer you are able to get to this reading, the less hiss you will get from the camera preamplifiers. If you are not able to reach this level, then you should try moving the microphone closer to the sound source or switch microphones to a more sensitive model for better results. Normally, you will simply leave both trim controls at full clockwise or maximum position for no attenuation.
- 3.) Adjust the VOLUME control for the headphones to a comfortable listening level.
- 4.) Do a test recording and play back the audio to determine if the captured audio is acceptable. Note you will not be able to monitor the playback audio from the adapter.
- 5.) The Auto Gain Control (AGC) in the camera will vary the amount of gain depending upon the input signal level. During quiet moments, the AGC will increase the gain, which will also increase the amount of hiss from the camera preamplifiers. See "**Using the AGC DSBL Feature**" to reduce this problem.

## Using the AGC DSBL Feature

This switch is a means to disable the wild swings of the Auto Gain Control in the camera. It activates an inaudible tone of 20 kHz to the left channel (when set to STEREO operation) that prevents the Auto Gain Control from increasing the gain to its maximum level. This reduces the hiss that normally occurs when the camera is recording audio during quiet moments. The tone is recorded by the camera but can be easily filtered out if necessary. You can still use the left channel for recording normal audio at the same time as the AGC DSBL feature is active.

You may also want to record audio only on the right channel and leave the left channel unused for the AGC control signal if this tone presents a problem down the line. In this case, you should set the M/S switch to S for stereo to keep the AGC signal separated from the recorded signal. Again, it is important that you do a test recording and play back the audio to see if it is acceptable.

The AGC DSBL feature will lower the gain on the camera, which will require a sensitive microphone for best results.

## Adapter Controls

**PWR**  
Provides power to the phantom power supplies, LCD meter, AGC disable feature and headphone amplifier. Power is not required to pass the audio signal.

**48V**  
If your microphone requires 48 volt phantom power to operate, first connect the microphone to the adapter. Activate the PWR ON switch and then the 48V switch for the channel it is connected to. Do not activate phantom power for dynamic microphones, condenser microphones that do not operate on phantom power, wireless receivers, mixing boards or any unbalanced device as it may cause damage to both the adapter and connecting device.

## LIN/MIC Switches

When connecting a microphone to either channel of the DXA-5D, set the corresponding LIN/MIC switch to MIC. When connecting a line level output from a mixing board or sound board set the switch to LIN to activate a 40 dB pad. This attenuates the line level signal to the proper level so that it does not override the input of the camera.

## LEFT and RIGHT Controls

Each channel has a trim control that attenuates the input signal from unity to no output. Adjust each trim control to give you a maximum reading of -36 dBu on the level meter of the adapter. This will give you the ideal recording level for best signal to noise ratio.

## M/S Switch

The M (MONO) setting mixes both channels together and sends the audio to both the right and left channels, which is ideal when only one microphone is being used. Be sure to keep the trim control for the unused channel fully clockwise so that it does not interfere with the working channel. The S (STEREO) setting keeps both channels separated and should normally be used when two microphones are connected. This provides two discrete channels of audio.

## Volume Control

This adjusts the headphone volume level for monitoring the audio. Be sure to adjust the control for a comfortable listening level to avoid hearing damage.

## PHONES

This jack lets you connect headphones to monitor the audio coming out of the adapter. Note that it does not monitor the audio coming out of the camera. Audio is only heard during recording – it will not allow you to listen to the playback audio.

## G1/G2 Switch

Set the G1/G2 ground switch to the position that gives you the least amount of noise. This should normally be set to G1 for use with the Canon 5D Mark II. This switch allows the input and output grounds to be isolated to reduce ground loops when connected to AC powered mixing boards. A record and playback test should be done to determine the best setting for your setup.

## LEFT and RIGHT XLR Inputs

The two balanced XLR inputs attach to professional microphones or other audio gear such as mixers and sound boards.

## R AUX Input

The unbalanced input is ideal for connecting to a wireless receiver that has a mini-plug output cable. This sends the signal to the right channel. Be sure to disconnect any cables plugged into the right XLR input when using the AUX input.

## Output Cable

The attached shielded cable terminates in a gold plated, stereo mini-plug connector. Plug this into the microphone jack on your camera.

## MIC OUT

This stereo output jack is ideal for connecting an auxiliary audio recording device. The output level is a nominal MIC level.

## AGC DSBL

This switch provides a fixed high frequency tone of about 20 kHz into the left channel of the camera to tame the wild swings of the Auto Gain Control in the camera. This reduces the hiss from the camera preamplifiers that occur during quiet moments of the recording. This tone is recorded by the camera, but is inaudible and can also be easily filtered out.

## LCD Display

The back lit display shows the level meters, battery indicator and position of the various switches on the adapter.