

Operating Manual

DXA-5Da

Passive XLR Adapter for DSLR Camcorders



This operating manual explains the function settings and how to use the adapter to record audio into the camera.

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Thank You for Purchasing a BeachTek Product

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

Description

The BeachTek DXA-5Da is a two-channel, transformer balanced XLR adapter for attaching external microphones and other audio gear to any DSLR camera that has a built-in mic jack. It can also be used with any camcorder or other audio recording device that has a mic jack. The DXA-5Da uses high quality balancing transformers, which are completely noise free for superb audio.

The DXA-5Da is very easy to set up and use. It allows you to connect a wide variety of audio devices including professional microphones, wireless systems and even take a feed from a house sound system or mixer. 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.

A unique feature of the DXA-5Da is the ability to control the wild swings of the Auto Gain Control that plague most cameras. This dramatically reduces noise during quiet moments of recording.

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

Before You Begin

These instructions refer to the use of this adapter with DSLR cameras unless otherwise noted.

- 1) Since there are no preamplifiers in the passive adapter, it is important that you use sensitive condenser microphones to get the best performance out of the DSLR camera. Most DSLR cameras have very noisy preamplifiers so a sensitive microphone will give you the best signal to noise ratio.
- 2) 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 most cameras, there is no way to ensure that what you are monitoring is being recorded by the camera.
- 3) 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 play back from the camera.
- 4) Note that you cannot monitor audio on playback through this device.
- 5) Please read and understand the use of the AGC DSBL feature before using this function.

Supplied Accessories

- 3.5 mm to 3.5 mm output cable
- 3.5 mm to 2.5 mm output cable

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Quick Setup Guide

- 1) Mount the DXA-5Da adapter to the camera.
- 2) Connect one of the supplied output cables from the MIC jack on the adapter to the MIC input on the camera.
- 3) Install a fresh alkaline or lithium battery in the adapter.
- 4) Set the GROUND switch on bottom of adapter to G1.
- 5) Set the LIN/MIC switch to MIC for microphones or LIN for mixers.
- 6) Connect your audio sources to the adapter.
- 7) Set the M/S switch to M for mono when using one channel or to S for stereo when using two channels.
- 8) Set the AGC DSBL switch to the left for off. Before using this function, please read the information supplied in this manual for a detailed explanation of how this feature works.
- 9) Turn the adapter PWR switch on. The LCD screen should activate.
- 10) Adjust the level controls for each channel fully clockwise to 10 for no attenuation. Adjust the trim controls only if the input signals exceed -36 dBu on the level meters.
- 11) Note that the level meters on the adapter monitor the signal strength from your sound source. It is normal if you do not see the meters move. They will only register when using sensitive type microphones or when you are attached to a mixer or wireless microphone.
- 12) Plug your headphones into the PHONE jack on the adapter and adjust the VOLUME control to a comfortable level. Be sure that you hear audio on both channels from the connected devices.
- 13) Do a test recording and playback to ensure that the captured audio is satisfactory. Note that you will not hear audio on playback through the adapter.

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Adapter Connectors and Controls

1 PWR Switch

Activates power for the LCD meter, AGC disable feature and headphone amplifier

2 LIN/MIC Switches

Selects microphone or line level input on each channel

3 LEFT and RIGHT Level Controls

Trim controls to adjust output level on each channel

4 M/S Switch

Selects mono or stereo output mode

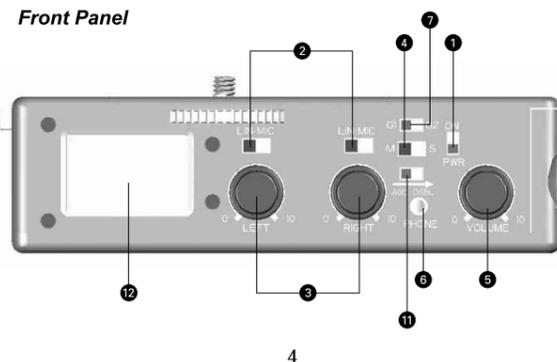
5 Volume Control

Adjusts the headphone volume level

6 PHONES

Headphone jack to monitor the audio coming out of the adapter

Front Panel



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7 G1/G2 Switch

Ground selection switch

8 LEFT and RIGHT XLR Inputs

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

9 R AUX Input

Unbalanced input for connecting to a wireless receiver or other device that has a mini-plug output cable

10 MIC OUT

Output jack for connection to the camera

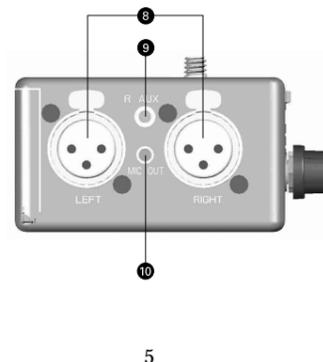
11 AGC DSBL Switch

Disables the Auto Gain Control feature in the camera

12 LCD Display

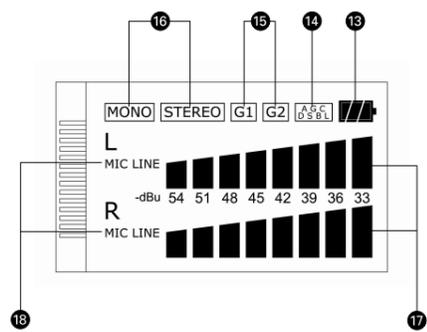
Back lit display shows the level meters, battery indicator and position of the various switches on the adapter

Side Panel



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LCD Display



- 13 Battery Level Indicator
- 14 AGC DSBL Indicator
- 15 G1/G2 Indicator
- 16 Mono/Stereo Indicator
- 17 Signal Level Indicator
- 18 Mic/Line Indicator

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Setup Guide

Battery Installation

- 1) The DXA-5Da operates on one 9 volt battery. We recommend that you use either an alkaline or lithium type battery for the longest operating time.
- 2) The adapter only requires battery power for 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 mounting bolt on top of the adapter to the tripod hole on the underside of the camera. Carefully turn the top mounting knob to the right to screw the adapter squarely into the camera.
- 2) Use one of the supplied output cables and connect one end to the MIC OUT of the adapter and the other end to the MIC IN on the camera.
- 3) You can also mount the adapter to any standard tripod.

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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 fully clockwise to 10.
- 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 the adapter PWR switch to ON.

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Basic Operation

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

- 1) The level meters on the adapter monitor the signal strength from your sound source. It is normal if you do not see the meters move. They will only register when using sensitive type microphones or when you are attached to a mixer or wireless microphone.
- 2) Keep the trim controls at the maximum setting for unity gain. Only adjust the trim controls if the input signals exceed -36 dBu on the level meters. If you have a mixer or some other form of amplified signal connected to the adapter, adjust the trim controls to give you a peak reading of -36 dBu. This is the "sweet spot" for attaining the highest signal to noise ratio from the camera preamplifiers.
- 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" below to reduce this problem.

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Advanced Operation

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.

When this feature is active, you will see 2 or 3 bars indicate on the level meter for the left channel (when the M/S switch is set to S for stereo) which verifies that the tone is being sent to the camera.

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.

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Features

Inputs

- Two transformer balanced XLR connectors
- One unbalanced mini-jack

Outputs

- Unbalanced stereo mini-jack for connection to the camera

Headphone Monitor

- Built-in headphone amplifier with volume control
- 3.5 mm phone jack

Auto Gain Control Disable

- Controls wild swings of the AGC in the camera to reduce hiss

Level Meters

- Stereo LCD Meter to show input signal strength

Trim Controls

- Adjusts signal level on each channel from unity to no output

MIC/LINE Switches

- Allows connections of microphones or mixers for versatility

Balancing Transformers

- Premium wide-bandwidth transformers for superb audio
- Shielded in a custom deep drawn mu-metal cover for very quiet operation

Power

- Easily replaceable 9 volt battery
- Low battery indicator

Case

- High impact-resistant polycarbonate

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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)
Level Meter	Calibrated from -54 dBu to -33 dBu
Battery Type	One 9 volt alkaline battery
Dimensions	6" x 3" x 1.7" (L x W x H) (152 mm x 75 mm x 43 mm)
Weight	11.3 oz (0.32 kg)

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Warranty Information

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 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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