

# *Operating Manual*

## **DXA-POCKET**

### **Compact Audio Adapter**



This operating manual explains the adapter 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 operating manual thoroughly to obtain the highest performance.
- Please contact us if you have any problems or questions.

### ***Description***

The Beachtek DXA-POCKET is a two-channel, compact audio adapter for camcorders or DSLR cameras. It is ideal for the Blackmagic Pocket Cinema Camera. This adapter is designed to easily attach wireless mics and small, self-powered, camera mounted microphones such as the popular Rode VideoMics that have unbalanced mini-plug connectors.

The DXA-POCKET is very easy to set up and use. Exceptionally low noise preamplifiers provide very clean, wide bandwidth audio for full rich sound. Dual trim controls allow you to adjust the signal levels independently while the VU meters make it easy to set the precise recording levels for optimum results. The rugged extruded aluminum chassis has an integrated mounting shoe which can be used to either attach a wireless receiver or as a comfortable hand grip with the supplied rubber insert. Its compact size fits neatly under or over the camera for plenty of flexibility.

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## ***Features***

### **Inputs**

- Two mono mini-jack connectors
- One stereo mini-jack connector

### **Output**

- Unbalanced stereo mini-jack with a detachable output cable

### **Low Noise Preamplifiers**

- Exceptionally low noise circuitry for very clean audio
- Wide bandwidth full rich sound

### **VU Meter**

- Easy to read level meters indicate proper signal levels at a glance

### **Trim Controls**

- Adjusts signal levels independently on each channel

### **Chassis**

- Extruded aluminum chassis
- Integrated front mounting shoe / grip
- Removable top shoe
- Mounts under or over the camera

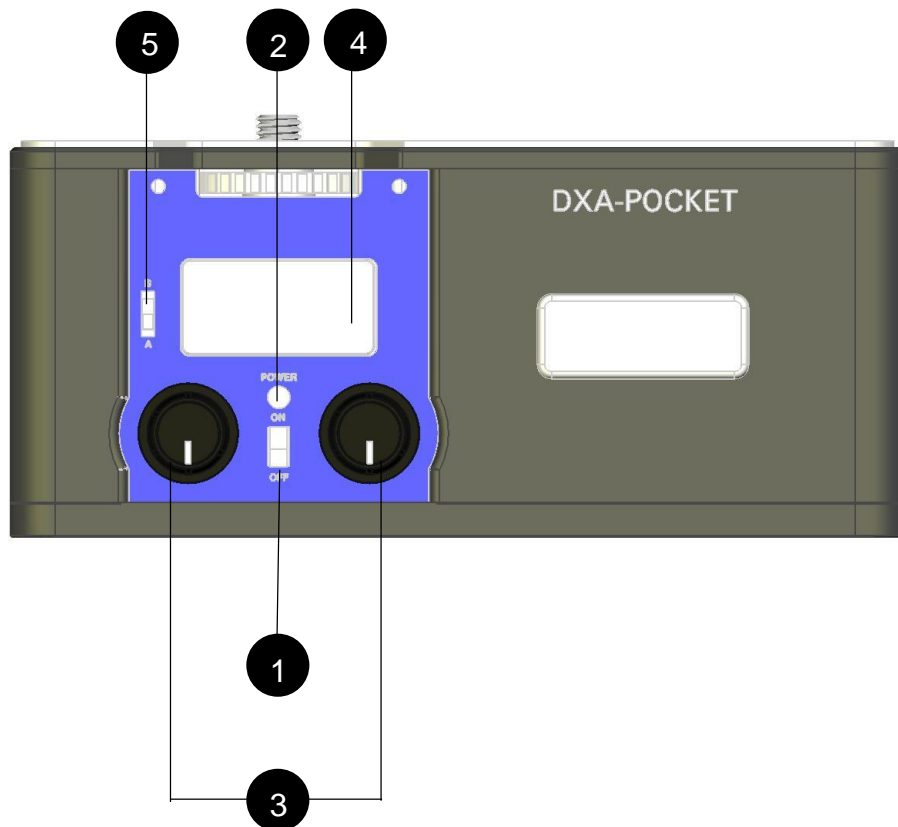
## ***Supplied Accessories***

- 3.5mm to 3.5mm output cable
- Brass mounting foot, bolt and Allen wrench
- Two mounting shoes and four slotted screws
- Quick Setup Guide

# Adapter Connectors and Controls

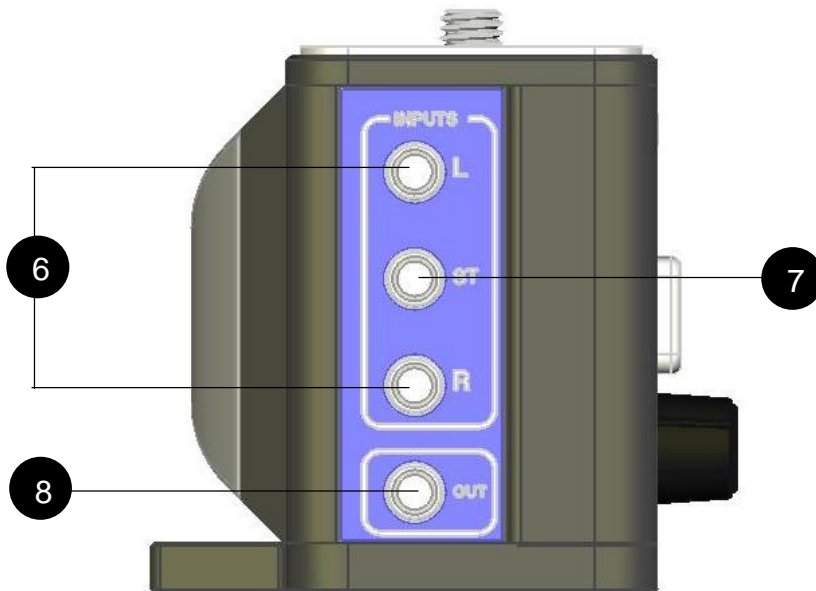
## Front Panel

- 1 POWER Switch**  
Main power switch for adapter
- 2 PWR LED**  
Green indicates power on and good battery condition.  
Red indicated low battery voltage
- 3 L and R Trim Controls**  
Each channel has a trim control that adjusts the input signal,
- 4 VU Meter**  
Indicates the sound level in dB for channel
- 5 A/B Switch**  
Calibrates the VU meter for high or low reading.



## Side Panel

- 6 L and R Inputs**  
Connect mono mics to these inputs.
- 7 ST Input**  
Connect stereo mics to this input
- 8 OUT Jack**  
This jack outputs the amplified mic level signal from the adapter for connection to the camera. Use the supplied output cable to connect to the MIC input on the camera.



## **Setup Guide**

### **Battery Installation**

- 1) The DXA-POCKET operates on one 9 volt battery. We recommend that you use either an alkaline or lithium type battery for the longest operating time.
- 2) To install the battery unlatch the drawer by pushing in and over on the drawer front, releasing and sliding the drawer out. Insert the battery with the “+” positive terminal lined up with the “+” indicator on the battery compartment. Slide the battery drawer closed until it clicks into place.

### **Front Accessory Shoe**

This can be used to mount a wireless receiver – simply remove the rubber insert from the shoe. Alternatively, the accessory shoe can be used as a comfortable grip by adding the supplied rubber insert.

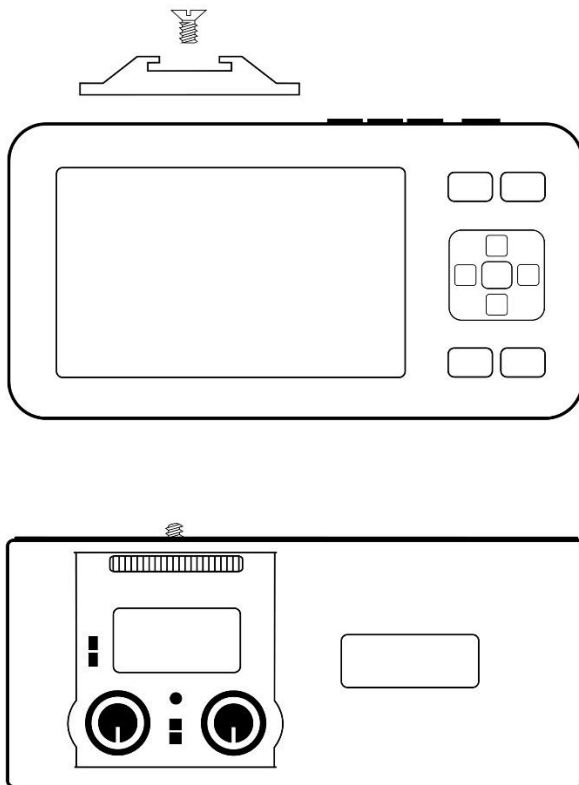
### **Mounting the Adapter to the Camera**

The adapter can be mounted under or over the camera. See the next two pages.



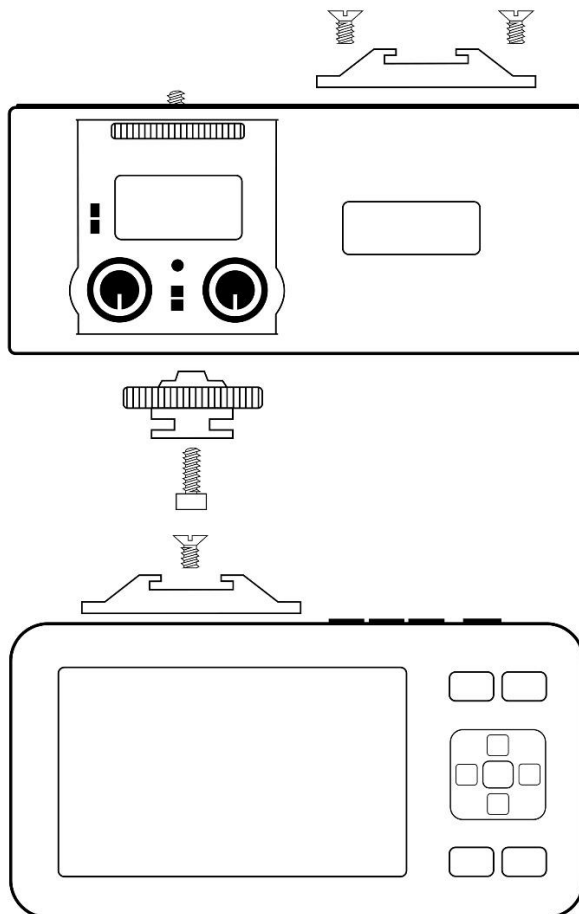
## Mounting Under Camera

- 1) Line up the mounting bolt on top of the adapter to the tripod hole on the underside of the camera. Carefully turn the adapter mounting knob on the front panel to the right, to screw the adapter squarely into the camera. Snug the adapter to the camera, but do not over tighten.
- 2) For the Blackmagic cameras, you can also mount the supplied aluminum shoe to the top of the camera with the slotted screws to be used as an accessory shoe.



## Mounting Over the Camera

- 1) Attach the supplied brass mounting foot to the underside of the adapter with the Allen head bolt. Tighten with the supplied Allen wrench.
- 2) Slide the adapter onto the camera hot shoe and lock in place. For the Blackmagic cameras, attach the supplied aluminum shoe to the top of the camera with either one or two of the supplied slotted screws. Slide the adapter onto this shoe and lock in place.
- 3) You can also mount the second supplied aluminum shoe to the top of the adapter with the 2 slotted screws to be used as an accessory shoe.



## Initial Setup

- 1) Be sure that the camera and adapter are switched off.
- 2) Connect the supplied output cable from the OUT of the DXA-POCKET to the MIC in on the camera.
- 3) If your camera has manual audio controls, set the gain to a low setting. See Advanced Operation for more details.
- 4) For the Blackmagic Pocket Camera set the audio menu as follows:

a)	Microphone Input	<b>0%</b>
b)	Ch 1 and Ch 2 Input Levels	<b>Mic</b>
c)	Ch 1 Input	<b>50% *</b>
d)	Ch 2 uses Ch 1 Input	<b>No</b>
e)	Ch 2 Input	<b>50% *</b>
f)	Speaker Volume	<b>50 to 100%</b>

\*(see Blackmagic Firmware)

- 5) Set the A/B VU meter calibration switch on the adapter to A for Blackmagic cameras, or to B for all other cameras.
- 6) Connect mono mics to the L and / or R inputs on the adapter. Connect stereo mics to the ST input. Note that if you only using a single mono mic that has a TRS connector like the popular Rode VideoMic, you can plug this into the ST input. This way you can record audio to both channels at the same time at different audio levels. You should set one channel at a slightly lower level to use as a fallback channel in case the other one gets distorted from an overly hot signal.
- 7) Plug your headphones into the phone jack on the camera to monitor the audio.

## ***Basic Operation***

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

- 1) Turn the adapter PWR switch ON. The power LED should light green indicating good battery voltage. Red indicates low battery warning.
- 2) Adjust the LEFT and RIGHT level controls to give you an average reading of between 0dB and -12dB on the VU Meter. Be sure not to exceed 0dB. This will provide a good signal level to the camera and still offer plenty of headroom for higher transient signals.
- 3) Adjust the headphone volume control on the camera to a comfortable listening level.
- 4) You are ready to record.

## ***Advanced Operation***

### **Using Cameras that have Manual Audio Controls**

If your camera allows you to disable the AGC feature we recommend that you do so to get the best performance. Set the camera to manual audio mode and adjust the camera gain so that the VU meter on the camera matches the VU meter on the adapter. This will usually be at a gain setting of 5 to 25% of maximum.

### **Notes on Getting the Best Audio Performance**

The most common problem in recording professional audio on today's DSLR cameras is the hiss generated by the camera preamplifiers. You will never completely eliminate all hiss, which is normal, but you can reduce it so that it is no longer a problem. You can maximize the signal to noise ratio by reducing the relatively noisy camera gain and replacing it with the very clean gain in the adapter. The lower the camera gain, the lower the noise.

The most important thing to remember when recording audio is to set the signal levels correctly on the VU meter between 0 and -12dB.

Setting the recording levels too low will give you a poor signal to noise ratio and lead to poor results. Also, setting the levels too high will cause clipping and distortion. Having the proper levels will ensure that good clean audio signals are being sent to the camera for the highest quality audio.

### **Blackmagic Firmware**

Blackmagic often changes the input sensitivity of their cameras with new firmware releases. On firmware 1.7 and under, the audio setting for Pocket camera should be set to 80% gain. On the current 1.8 firmware it should be set to 50% gain.

## ***Specifications***

Input Level	Typically -60 to -30 dBu
Output Level	-25dBu at 0dB on the VU meter (A/B switch set to A) -35dBu at 0dB on the VU meter (A/B switch set to B)
Gain	+30 dB
Frequency Response	20 Hz to 20 kHz (+/- 0.5 dB)
THD	Less than 0.01% @ 1kHz, -30 dBu input
S/N Ratio	86dB @ 1kHz, -30dBu input
Battery Type	One 9 volt alkaline or lithium battery
Battery Duration	Over ten hours typical
Dimensions	5" x 2" x 2.25" (L / W / H) (127 x 51 x 75 mm)
Weight	10 oz (0.28 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 for an RMA Request before returning the unit. 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.

## ***Contact Information***

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