datavideo®

Audio Delay Box

AD-100

Instruction Manual

Rev 171209

www.datavideo-tek.com

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Warnings and Precautions

1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
    a. When the power cord is damaged or frayed;
    b. When liquid has spilled into the unit;
    c. When the product has been exposed to rain or water;
    d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
    e. When the product has been dropped or the cabinet has been damaged;
    f. When the product exhibits a distinct change in performance, indicating a need for service.

NB: The factory default audio levels on this unit may be louder than expected. Please review and adjust the menu settings *BEFORE* connecting any output connections on the AD-100 rear panel.

The AD-100 is an Audio Delay device and it can also be used as a Tone Generator. Please DO NOT connect the AD-100 directly to a headset or a set of speakers - it should not be used like an Audio AMP.

Warranty

Standard Warranty
- Datavideo equipment is guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered by this warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- Cables & batteries are not covered under warranty.
- Warranty only valid in the country or region of purchase
- Your statutory rights are not affected.

Two Year Warranty
- All Datavideo products purchased after 01-Oct.-2008 qualify for a free one year extension to the standard warranty, providing the product is registered with Datavideo within 30 days of purchase. For information on how to register please visit www.datavideo-tek.com or contact your local Datavideo office or authorized Distributors

- Certain parts with limited lifetime expectancy such as LCD Panels, DVD Drives, Hard Drives are only covered for the first 10000 hours, or 1 year (whichever comes first)

- Any second year warranty claims must be made to your local Datavideo office or one of its authorized Distributors before the extended warranty expires.

Disposal

For EU Customers only - WEEE Marking
This symbol on the product indicates that it should not be treated as household waste. It must be handed over to the applicable take-back scheme for the recycling of waste electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

Packing List

Items	Description	Q'ty
1	AD-100	1
2	AC Power Cord	1
3	Switching Adaptor DC 12V / 1A	1
4	AD-100 Instruction Manual	1

Introduction

The Datavideo AD-100 is an easy to use Audio Delay box that enables you to synchronize video and audio. The AD-100 can also be used as a 1KHz Tone Generator. The unit features traditional RCA (phone) connectors as well as Professional Balanced XLR type connections. Built into a rugged metal housing, it is ideal for use either in the field or in a studio setup.

Features

- Audio Input:
  - ➢ Balanced Audio (XLR) x 2
  - ➢ Unbalanced Audio (RCA) x 2

- Audio delay Output:
  - ➢ Balanced Audio (XLR) x 2
  - ➢ Unbalanced Audio (RCA) x 2

- LCD display for Menu and Mode selection setting
- Output volume attenuating from 0 ~ - 60 dBu
- Audio delay time from 0 ~ 700m SEC
- 1KHZ test tone output attenuating from +26 ~ - 34 dB
- DC 12V input

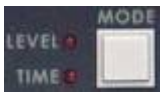# Connections & Controls

Front Panel

Power Switch

Switches the power On / Off.

MENU

This switch allows access to the 9 mode system settings.

MODE

Select **LEVEL** or **TIME** information on LCD Display.

LEVEL will display the audio output dBu level.
TIME will display the AUDIO DELAY & ATTENUATION settings.

ADJUST

The **ADJUST** knob is for mode select and value adjustment.

It can be rotated to display the correct menu option or value and then pressed in to select or confirm a chosen value.

Rear Panel

AUDIO OUT

2 channels XLR balanced audio output.
2 channels RCA unbalanced audio output.

For reference : 4dBu (XLR) = -10dBV (RCA)

AUDIO IN

2 channels XLR balanced audio input.
2 channels RCA unbalanced audio input.

DC In Socket

Connect the supplied 12V 1.5A PSU to this socket. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.

Grounding Terminal

When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm2.

AD-100 MENU Settings
N.B. The unit will automatically exit the MENU settings mode if it is left idle for 12 seconds or more.

1. AUDIO_DELAY
This setting switches the audio delay function on or off.

- Press the **MENU** button to enter the system configuration settings.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to select the setting audio delay **ON** or **OFF**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

2. DELAY_TIME
This setting adjusts the audio delay in 10 millisecond (ms) increments to a maximum delay of 700ms.

NB: 1000ms = 1 second   : 1 frame PAL = 40ms :   1 frame NTSC = 33.333'ms

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select **DELAY_TIME** mode.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to select the **DELAY_TIME** setting value from **0 ~ 700m SEC**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

3. ATTENUATION
This setting adjusts how loud or quiet the audio will be at the output. *0dB=Loud* and *-60dB=Quiet*.

NB: The AD-100 is an Audio Delay device and it can also be used as a Tone Generator. *Please DO NOT connect the AD-100 directly to a headset or set of speakers it should not be used like an Audio AMP.*

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select **ATTENUATION** setting.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to select the **ATTENUATION** setting value from **0 ~ - 60 dB**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

N.B. The unit will automatically exit the MENU settings mode if it is left idle for 12 seconds or more.

4. TONE_OUT

This setting switches the **TONE_OUT** function on or off.

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select **TONE_OUT** setting.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to change the **TONE_OUT** setting between **ON** or **OFF**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

N.B. The test tone will be output at the level set within the TONE_LEVEL menu option. This test tone will also override any audio source already being fed through the AD-100.

5. TONE_MODE

This setting allows the 1KHz test tone to be switched on or muted.

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select **TONE_MODE** setting.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to change the **TONE_MODE** setting between **MUTE** or **1KHZ**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

N.B. The MUTE value will silence the test tone but will not restore any audio source being fed into the AD-100. Please set the TONE_OUT menu option to OFF to switch back to an audio input source instead.

6. TONE_LEVEL

This setting adjusts how loud or quiet the test tone will be at the output. *+26dBu=VERY Loud* and *-34dBu=Quiet*.

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select **TONE_LEVEL** setting.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to select the **TONE_LEVEL** setting value from **+26 ~ - 34 dBu**.

- Press the **ADJUST** knob in to save or confirm the chosen setting.

- The flashing cursor will return to the beginning of this menu option.

- Rotate the **ADJUST** knob to choose another menu option or press the mode button.

N.B. The unit will automatically exit the MENU settings mode if it is left idle for 12 seconds or more.

7. RESET ALL

Please remove all output connections before using this feature.

This option restores the factory defaults which may be louder than expected. Please review and adjust the default menu settings before re-connecting any output connections on the AD-100 rear panel.

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- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** Knob to select the **RESET ALL** setting.

- The cursor will flash at the beginning of this menu option.

- Press **MENU** button again to move the flashing cursor to the setting position.

- Turn the **ADJUST** knob to change the **RESET ALL** setting from **NO** to **YES**.

- Press the **ADJUST** knob in for 2 seconds, the system will return to the factory defaults.

- The setting will return to **NO**.

- Press the **MENU** or **MODE** button to start to review the units default settings.

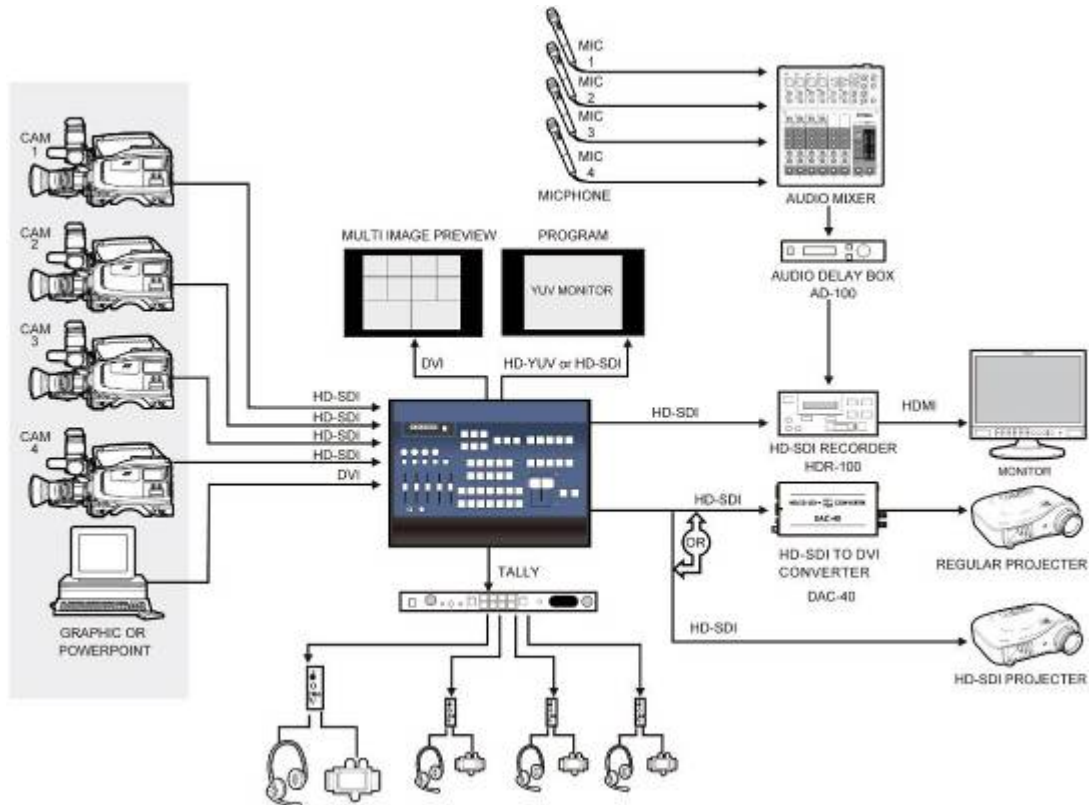| Factory Default Settings	
AUDIO_DELAY	OFF
DELAY_TIME	10ms
ATTENUATION	-0dB
TONE_OUT	OFF
TONE_MODE	1KHz
TONE_LEVEL	+4dBu

8. SOFTWARE VERSION

- Press the **MENU** button to enter the system configuration settings.

- Turn the **ADJUST** knob to select **SOFTWARE VERSION**.

- The firmware version of the AD-100 is displayed for 12 seconds.

9. ESCAPE

- After reviewing or changing the system configuration settings.

- Turn the **ADJUST** knob to select **ESCAPE**.

- Press the **ADJUST** knob in to exit the system configuration settings mode.

- Alternatively press the **MODE** button to exit the system configuration settings instantly.

Example Set Up

Specification

Audio inputs	• 2 x balanced stereo audio, XLR connectors • 2 x unbalanced stereo audio, RCA / Phone sockets
Audio Output	• 2 x balanced stereo audio, XLR connectors • 2 x unbalanced stereo audio, RCA / Phone sockets
Audio Spec	• Bandwidth 20~20KHz < +/- 3dB • S/N Ratio > 70 dB • THD. < 0.1% (This spec must use precision to analyze data inside of signal)
Operating Temperature	• 0°C to 40°C (32°F to 102°F)
Humidity	• 10% to 90% (non condensing)
Dimension & Weight	• 205mm (W) x 235mm (D) x 45mm (H) / 2.8 lbs/ 1.3 Kgs
Power	• DC 12V / 1A

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo-tek.com for answers to common questions, support requests or contact your local office below.

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