

# V2Digital Mini-Converter

## Analog to HD/SD-SDI



## Installation and Operation Guide

Version 2.3r3

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**AJAJ**  
VIDEO SYSTEMS®

# Notices

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## Contacting AJA Support

When calling for support, have all information at hand prior to calling. To contact AJA for sales or support, use any of the following methods:

Telephone	+1.530.271.3190
FAX	+1.530.271.3140
Web	<a href="https://www.aja.com">https://www.aja.com</a>
Support Email	<a href="mailto:support@aja.com">support@aja.com</a>
Sales Email	<a href="mailto:sales@aja.com">sales@aja.com</a>

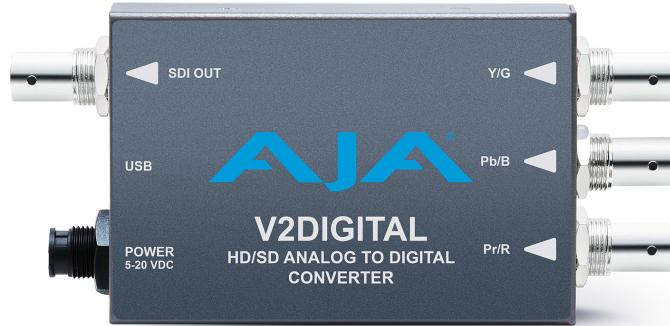
# Contents

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Notices . . . . .	2
Trademarks . . . . .	2
Copyright . . . . .	2
Contacting AJA Support . . . . .	2
Chapter 1 – Introduction . . . . .	4
Features . . . . .	4
Block Diagram . . . . .	4
I/O Connections . . . . .	5
User Controls . . . . .	5
External DIP Switches . . . . .	5
Mini-Config Control . . . . .	5
Installation . . . . .	5
Chapter 2 – Operation . . . . .	7
Default Operational Settings . . . . .	7
DIP Switch Settings . . . . .	7
DIP Switch Settings Summary . . . . .	7
USB Control and Setup—Using AJA Mini-Config . . . . .	8
Acquiring Mini-Config . . . . .	8
Installing Mini-Config . . . . .	9
Running Mini-Config . . . . .	10
Operating Mini-Config . . . . .	11
Tabbed Screens . . . . .	12
Input Tab Screen . . . . .	13
Update Tab Screen . . . . .	14
Info Tab Screen . . . . .	15
Mini-Config Settings Summary . . . . .	16
Appendix A – Specifications . . . . .	17
Appendix B – Safety and Compliance . . . . .	18
Warranty and Liability Information . . . . .	26
Limited Warranty on Hardware . . . . .	26
Limitation of Liability . . . . .	26
Governing Law and Language; Your Rights . . . . .	26
Index . . . . .	28

# Chapter 1 – Introduction

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V2Digital is a high-quality, cost-effective analog to digital video converter that's perfect for facilities needing to integrate signal types. V2Digital provides AJA's high-quality 10-bit conversion of component or composite analog video to SDI at either SD or HD resolutions utilizing a full 10-bit data path and 2x oversampling to ensure a quality conversion all at an extraordinary price. V2Digital accepts YPbPr (SMPTE/EBU-N10), Betacam, or RGB component inputs (HD only) or NTSC/PAL or Y/C (S-Video) composite inputs (SD only). Configuration can be set by on unit DIP switches or remotely via AJA Mini-Config software control over USB.

*NOTE: The V2Digital requires a Time Base Corrected source. Operation is not recommended from VTRs, laser disks, etc., without Time Base Correction (TBC).*

## Features

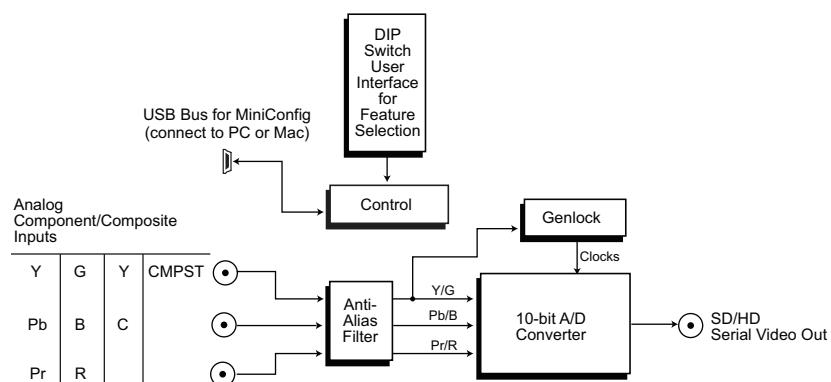
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- 10-bit AJA quality Analog to Digital conversion
- Low power, compact size
- YPbPr/RGB Component or Composite input
- HD/SD-SDI output
- Configurable by DIP switches, or with AJA Mini-Config software for Mac and PC via USB
- DWP-U-R1 Power Supply Included
- 5-year warranty

## Block Diagram

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Figure 1. V2Digital Block Diagram



# I/O Connections

Figure 2. V2Digital, Side View



## User Controls

The V2Digital converter has two user interfaces:

- DIP switch settings
- Mini-Config via USB

The DIP switch 1 setting determines which configuration parameters the converter will use. When Off the unit is set to Local, DIP switches 2-4 will be active. When On the unit is set to Remote and will use the Mini-Config settings. Mini-Config settings are non-volatile and are retained through power cycles.

**NOTE:** *The Beta-J parameter is not available through the DIP switch interface. Use Mini-Config if you need to use the Beta-J format.*

## External DIP Switches

The V2Digital has a 4-switch DIP accessible through a cut-out in the bottom of the unit. For setting information, see "[DIP Switch Settings](#)" on page 7.

## Mini-Config Control

Mini-Config is an AJA application used for configuring and updating the firmware of several AJA products. Configuration set via Mini-Config is stored in the unit through subsequent power cycles. See "[USB Control and Setup—Using AJA Mini-Config](#)" on page 8.

## Installation

Typically, V2Digital installation consists of the following:

1. Disconnect power from the converter.
2. Configure the DIP switches for the desired equipment configuration and video formats.
3. Connect video equipment to the converter BNCs.

4. Apply power to the converter (AJA power supply included).

Alternatively, you can set the unit to Remote operation using DIP switch 1, connect the unit to a PC or Mac via USB, and then use Mini-Config to configure the unit. The Mini-Config application is available for download from the AJA website.

*NOTE: Threaded holes (unified 4-40) located on the bottom of the unit can be used for mounting.*

# Chapter 2 – Operation

## Default Operational Settings

The V2Digital converter ships from the factory with the following configuration:

- Local (DIP switch) control
- Component video input
- YPbPr format
- Pedestal Off

If these settings apply to your requirements, you can simply connect the video input and output signal cables and power up the V2 Digital unit.

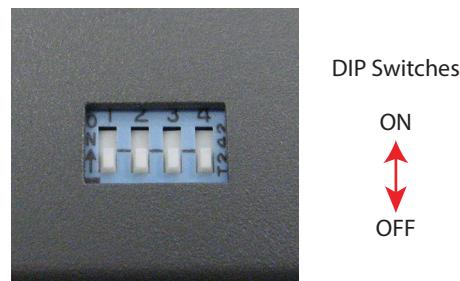
For other applications, you can configure the unit using its DIP switch settings, or by using Mini-Config and a PC or Mac via USB. When configured for “component” V2DIGITAL will auto detect between various component standards.

## DIP Switch Settings

Four DIP switches are located on the bottom of the unit. The label on the bottom of the unit identifies the functions of the switch positions. The default shipping position for these switches is Off (down). By default, DIP switch configuration is enabled, and Mini-Config control is disabled.

Use a pen-point or paper clip to change DIP switch positions.

*Figure 3. DIP Switches*



*Table 1. DIP Switch Setting Descriptions*

SWITCH	FUNCTION	OFF (Down)	ON (Up)
1	Control	Selects Local (DIP), and blocks Mini-Config control	Selects Remote (Mini-Config), and disables DIP switches 2-4.
2	Input	Selects Component	Selects Composite
3	Color Space	Selects YPbPr in Component mode, S-Video in Composite mode	Selects RGB in Component mode, Composite in Composite mode
4	Pedestal	Selects Off	Selects On

*NOTE: BetaJ is only accessible via Mini-Config.*

## DIP Switch Settings Summary

DIP switch settings for various input analog formats are shown in [Table 2](#)

*Table 2. Input Analog Format DIP Switch Settings*

		DIP Switch Settings			
Input Standard	Input Analog Format	2	3	4	Notes
525i59.94	Composite NTSC	ON	ON	ON	
	NTSC S-Video	ON	OFF	ON	
	Composite NTSC-J	ON	ON	OFF	
	NTSC-J S-Video	ON	OFF	OFF	
	Component YPbPr SMPTE/ EBU-N10	OFF	X	OFF	
	Component YPbPr Betacam	OFF	X	ON	
	Component YPbPr Betacam-J	-	-	-	Only selectable via Mini-Config
625i50	Composite PAL + S-Video	ON	ON	X	
	PAL S-Video	ON	OFF	X	
	Component YPbPr SMPTE/ EBU-N10	OFF	X	X	
720p *	Component YPbPr SMPTE/ EBU-N10	X	OFF	X	
	Component RGB	X	ON	X	
1080i/psf *	Component YPbPr SMPTE/ EBU-N10	X	OFF	X	
	Component RGB	X	ON	X	
*= all supported frame rates		Note: X = don't care			

## USB Control and Setup—Using AJA Mini-Config

Your AJA Mini-Converter can be used right out of the box for some applications since it is designed to recognize inputs and perform standard actions automatically by default. However, to use its full capability, you must use AJA's Mini-Config software application for PCs and Macs. This same application can be used to update to new Mini-Converter software released by AJA.

*NOTE: DIP switch 1 must be ON (Remote, Right) to permit Mini-Config control of the unit.*

### Acquiring Mini-Config

AJA's Mini-Config application is available for download from the AJA website.

To download the latest Mini-Config package, which includes the Mini-Config application, Mini-Converter firmware, and documentation, go to:

<https://www.aja.com/products/mini-config-software>

Select either the Windows or Mac icon to download the desired version.

### Mini-Converter Documentation

Included with the Mini-Config package is a complete set of documentation for all Mini-Converters supported by Mini-Config. A .PDF of the *Installation and Operation Guide* for the currently connected Mini-Converter can be accessed from the Mini-Config UI via the **Help/Manual** drop-down menu.

Documentation for all AJA Mini-Converters that use Mini-Config can also be accessed directly in the Mini-Config download package Documentation folder, and via the Documentation icon available on the Mac installer.

Documentation (and firmware) included with the Mini-Config application are the versions available at the time of distribution. However, Mini-Converter software, firmware and documentation are updated regularly, so newer versions may exist.

To download the latest documentation for an individual Mini-Converter, go to:

<https://www.aja.com/family/mini-converters>

and navigate to the Support web page of that Mini-Converter.

## Installing Mini-Config

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### PC Installation

To install Mini-Config on a Windows PC:

1. Download the application from the AJA website (select the Windows icon on the Mini-Config Support web page).
2. Open the AJA\_MiniConfig.zip file
3. Double-click on the **MinInstaller.msi** file.
4. A Setup Wizard will guide you through the installation.

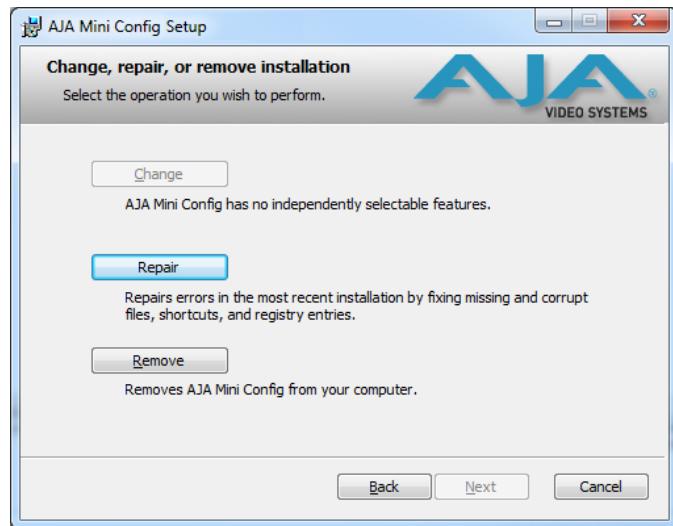
*Figure 4. Mini-Config PC Setup Wizard*



5. Click **Next** to begin. Answer the questions in the subsequent dialogues.  
When finished, an AJA Mini-Config shortcut will be installed on the desktop, and you will be able to locate the Mini-Config application in the AJA folder in the Programs listing.

*NOTE: If the Mini-Config application already exists on the PC, a different Setup Wizard appears.*

Figure 5. Mini-Config Setup Wizard, Reinstallation



With this screen you can **Repair** (reinstall) or **Remove** (uninstall) Mini-Config on the PC.

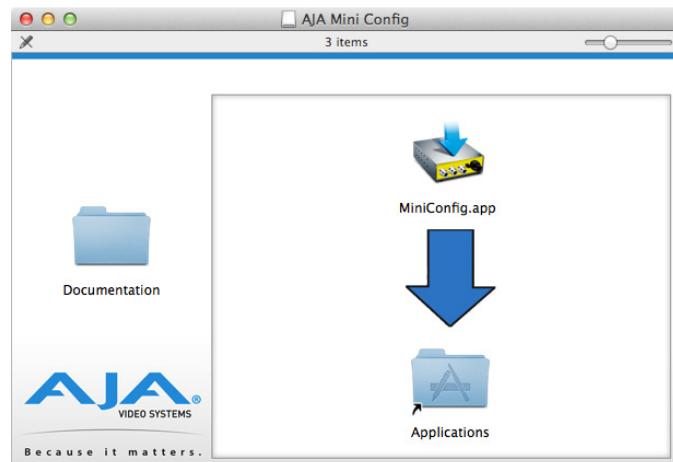
## Mac Installation

To install the application on a Mac:

*NOTE: Mac computers must be Intel-based (G5, G4 and earlier models will not work with Mini-Config).*

1. Download the application from the AJA website (select the Apple icon on the Mini-Config Support web page).
2. Open the AJA\_MiniConfig folder.
3. Double-click on the **AJAMiniConfig.dmg** file.
4. Answer the prompt and a utility program will be launched.

Figure 6. Mini-Config Mac Installer



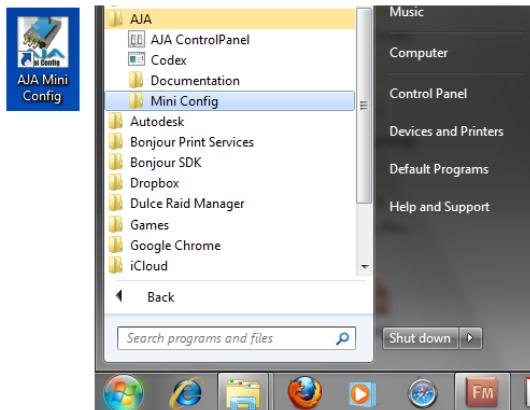
5. To complete the installation drag the **MiniConfig.app** icon to the Applications folder.

## Running Mini-Config

Connect the Mini-Converter to the PC or Mac via the supplied USB cable. Connect the external power supply (supplied) to the Mini-Converter.

## PC Startup

To run Mini-Config on a PC, double-click on the AJA Mini-Config icon on your desktop, or open the AJA folder in the program list and click on the AJA Mini-Config application located inside the Mini-Config folder.

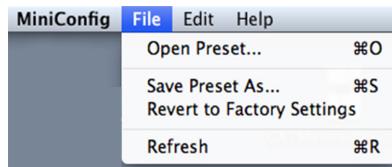


## Mac Startup

To run Mini-Config on a Mac, open the Applications folder and locate the AJA Mini-Config application. Double-click the application to launch it.

## Saving Setups

A **File** drop down menu on the Mini-Config application bar allows you to save the current state of the Mini-Converter to a preset file for later recall.



Using this feature you can set up the converter for different applications, storing each configuration (**Save Preset As...**) with a unique name for easy recall (**Open Preset...**).

A **Revert to Factory Settings** menu item similarly allows you to change the settings back to AJA's factory defaults.

## Operating Mini-Config

The Mini-Config application provides a graphic interface for viewing settings and updating software. It consists of an information area at the top that shows the available Mini-Converters attached to the computer via USB, with a graphical rendering of the selected Mini-Converter showing all the connectors and their current state.

Colored text next to the connectors indicates the signal type and what the Mini-Converter is doing:

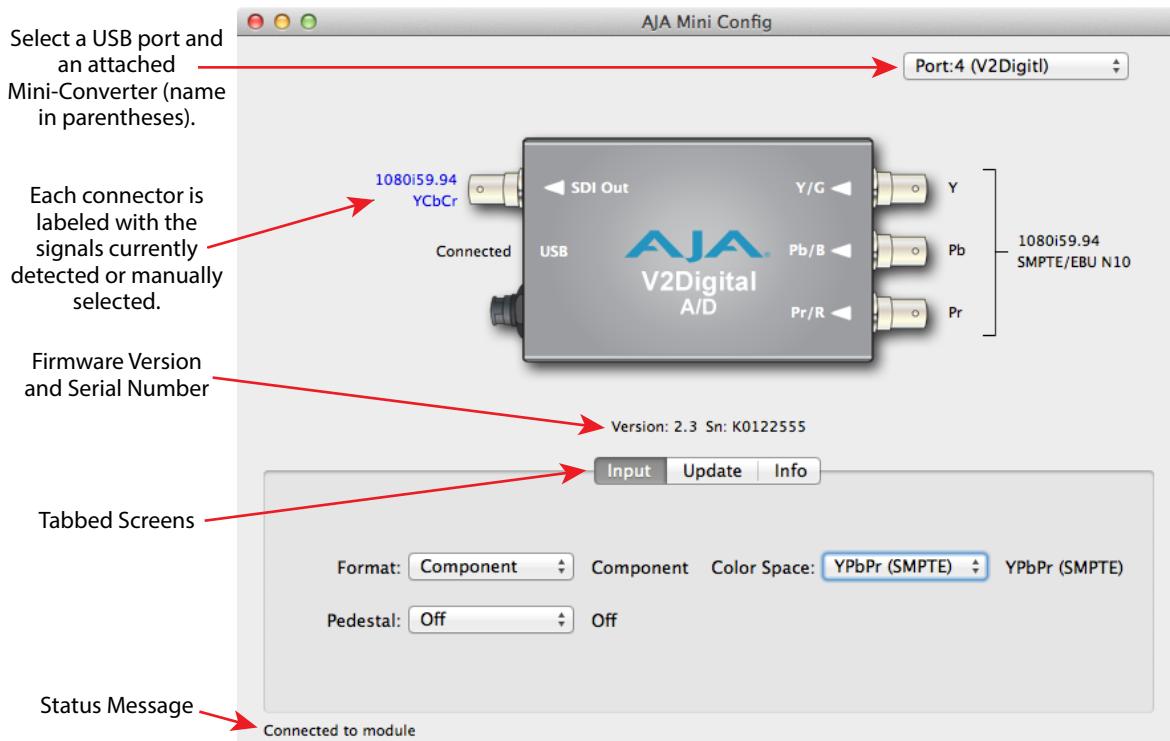
- Blue text indicates the values automatically selected
- Black text indicates values that you have manually selected
- Red text indicates the Mini-Converter is not detecting a signal, or cannot operate with the current user settings.

*NOTE: Even if no output device is detected, the SDI connector text still shows the signal it is outputting.*

**NOTE:** Configuration settings in red will change based on the attached output device as well as input signals. For improved accuracy and reliability, you should configure the Mini-Converter only when the target output device is attached and input signals are supplied at the inputs.

Screens are virtually the same on both PC and Mac, with subtle differences that reflect the general look of the platform environment.

*Figure 7. Example Mini-Config Screen*



Selecting a Mini-Converter with the pulldown menu causes this application to connect to the selected converter. The graphic of Mini-Converter and text below it provides:

- Type of converter
- Firmware version
- Serial number of the unit.

A status field at the bottom of the screen shows if your application is connected and communicating with the Mini-Converter.

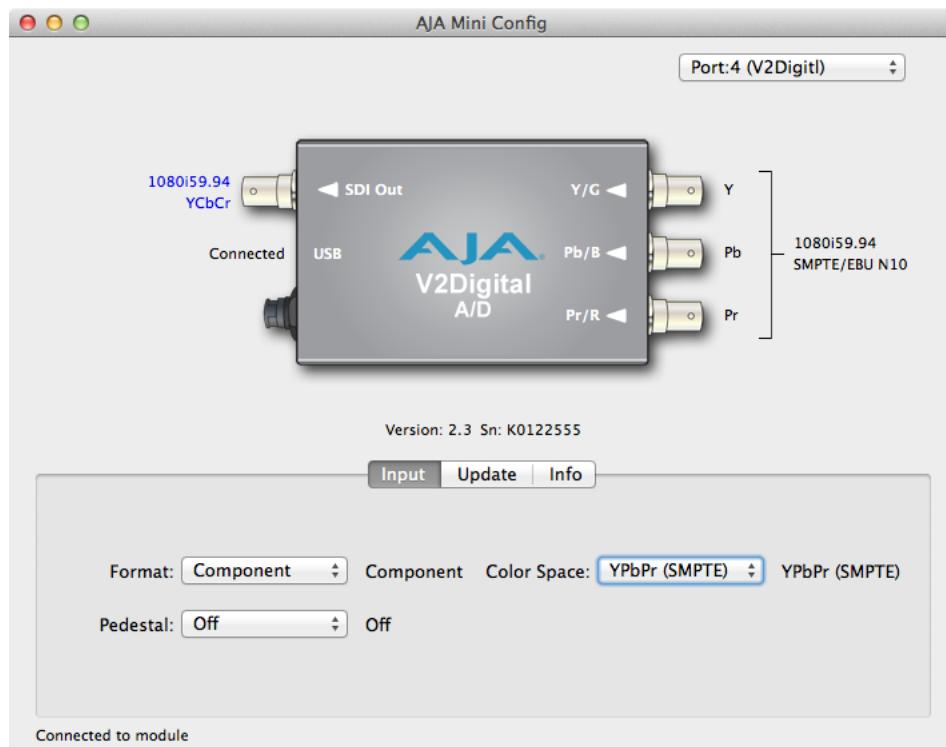
When configuring the Mini-Converter, select it from the top pulldown, view the current settings and change any values. Making a change communicates that new value to the Mini-Converter's non-volatile memory.

## Tabbed Screens

The Tabs delineate control screens with groups of controls for each type of task to be performed.

The controls for the actual configuration parameters are specific to each Mini-Converter type. When you Click on any of the tab buttons, the pane below the tabs will change to match your tab selection. Any changes you make are immediately applied and will be saved, overwriting previous settings.

# Input Tab Screen



Click on the Input tab to view and make changes to the V2Digital Input settings.

## Format

Selects the input video format. Only applies if in SD mode. Choose from the following:

- Component
- Composite
- S-Video

## Color Space

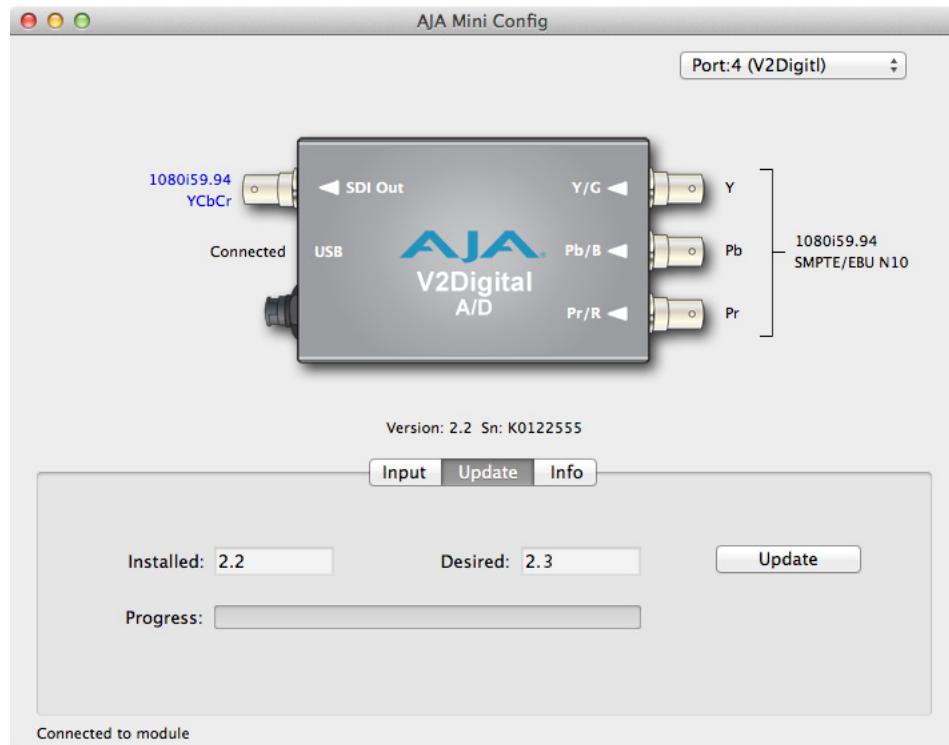
Selects the Input Video Color Space. RGB only applies to HD input video. YPbPr (Betacam) only applies to SD input video. Choose from the following:

- RGB
- YPbPr (SMPTE)
- YPbPr (Betacam)

## Pedestal

Choose On or Off. Only applies in SD mode. On means the input video has 7.5 IRE pedestal, Off means the input has 0 IRE pedestal.

# Update Tab Screen



Use this Update tab screen to view the software version currently installed on the converter or install new software.

**NOTE:** When discussing Mini-Converters, "Firmware" is software that will be stored in the Mini-Converter's non-volatile memory and used when it is powered up. This is something different than the Mini-Config application software. The version numbers shown in the Update screen refer only to the firmware.

## Installed

This field shows the version of the firmware currently installed inside the Mini-Converter.

## Desired

This field shows the version of firmware embedded in the Mini-Config application which you can install into the Mini-Converter by clicking the Update button.

## Update

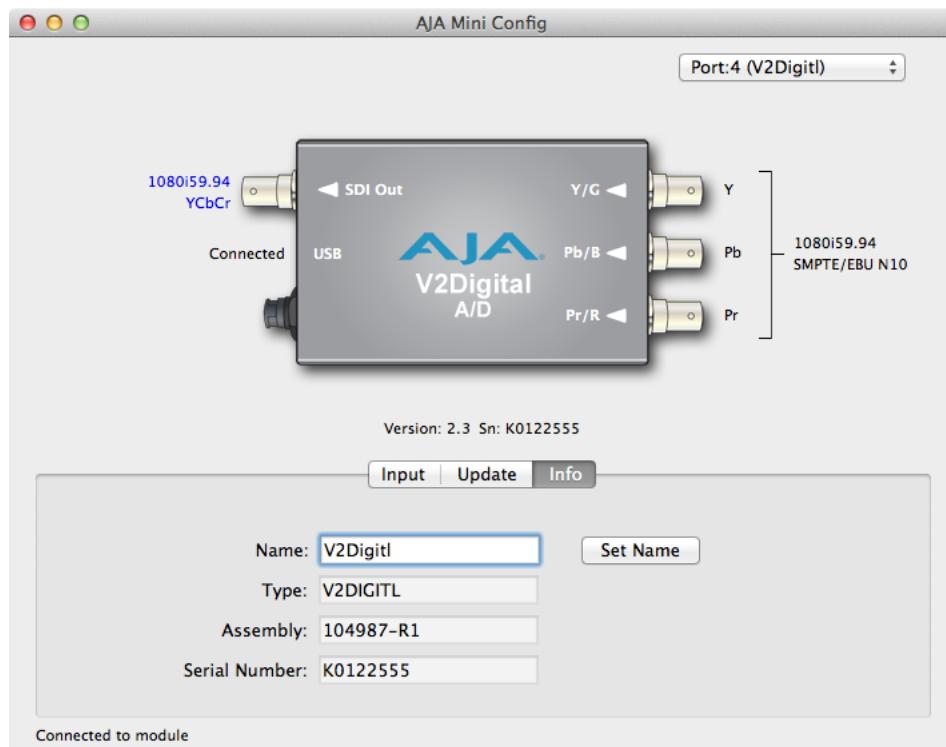
This button initiates a software update operation loading the "Desired" version of firmware into the Mini-Converter's non-volatile memory.

## Progress

This indicator bar shows the progress of firmware installation.

See "[Acquiring Mini-Config](#)" on page 8 and "[Installing Mini-Config](#)" on page 9 for more information.

# Info Tab Screen



This screen provides basic information about the Mini-Converter. This information is mostly useful when calling AJA Support for service or technical support.

## Name

This field allows you to give your Mini-Converter a name. This may be useful if you have several Mini-Converters attached to a Mac/PC via USB so you can distinguish one of them easily (especially if they're the same model).

## Type

This is the factory set model name of the Mini-Converter.

## Assembly

This is the factory assembly number.

## Serial Number

This is the factory set unique serial number of your unit. If you ever call AJA Support for service, you may be asked for this number.

# Mini-Config Settings Summary

Table 3. Input Analog Formats, DIP Switch Settings, and SDI Output Formats

		Mini-Config Controls				Notes
Input Standard	Input Analog Format	Format	Color Space	Pedestal		
525i59.94	Composite NTSC	Composite	X	On		
	NTSC S-Video	S-Video	X	On		
	Composite NTSC-J	Composite	XV	Off		
	NTSC-J S-Video	S-Video	X	Off		
	Component YPbPr SMPTE/EBU-N10	Component	YPbPr (SMPTE)	X		
	Component YPbPr Betacam	Component	YPbPr (Betacam)	On		
	Component YPbPr Betacam-J	Component	YPbPr (Betacam)	Off	Only selectable via Mini-Config	
625i50	Composite PAL + S-Video	Composite	X	X		
	PAL S-Video	S-Video	X	X		
	Component YPbPr SMPTE/EBU-N10	Component	X	X		
720p *	Component YPbPr SMPTE/EBU-N10	X	YPbPr (SMPTE)	X		
	Component RGB	X	RGB	X		
1080i/psf *	Component YPbPr SMPTE/EBU-N10	X	YPbPr (SMPTE)	X		
	Component RGB	X	RGB	X		
*= all supported frame rates		Note: X = don't care				

# Appendix A – Specifications

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## V2Digital Tech Specs

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### Video Formats

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- (HD) 1080i 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25
- (HD) 720p 50, 59.94, 60
- (SD) 625i
- (SD) 525i

### Video Inputs

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- HD component YPbPr, RGB (SMPTE-274), 1x BNC
- SD component (Betacam, EBU-N10)/composite/YC(S-Video), 1x BNC

### Video Output

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- HD/SD-SDI, SMPTE-259/292/296M, 1x BNC

### User Controls

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- External Dipswitch
- Control (Local/Remote)
- Component/Composite (SD Only)
- Format (YPbPr/YC or RGB)
- Pedestal Present (on/off) (SD Only)

### Size (w x d x h)

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- 5.1" x 2.4" x 1.0" (129.54 x 60.96 x 25.4 mm)

### Power

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- +5-20 VDC, 3 watts

### Operating Temperature Range

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- Safe Operating Temperature: 0 to 40 C (32 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

# Appendix B – Safety and Compliance

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## Federal Communications Commission (FCC) Compliance Notices

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### Class A Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Canadian ICES Statement

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#### Canadian Department of Communications Radio Interference Regulations

This digital apparatus does not exceed the Class A limits for radio-noise emissions from a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications. This Class A digital apparatus complies with Canadian ICES-003.

#### Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada. Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

### European Union and European Free Trade Association (EFTA) Regulatory Compliance

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This equipment may be operated in the countries that comprise the member countries of the European Union and the European Free Trade Association. These countries, listed in the following paragraph, are referred to as The European Community throughout this document:

AUSTRIA, BELGIUM, BULGARIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, UNITED KINGDOM, ICELAND, LIECHTENSTEIN, NORWAY, SWITZERLAND

## Declaration of Conformity

Marking by this symbol indicates compliance with the Essential Requirements of the EMC Directive of the European Union 2014/30/EU.



This equipment meets the following conformance standards:

Safety:

EN 60065: 2014 (T-Mark License)

IEC 60065: 2014 (CB Scheme Report/Certificate)

Additional licenses issued for specific countries available on request.

Emissions:

EN 55032: 2012, CISPR 32: 2015,

EN 61000-3-2: 2014, EN 61000-3-3: 2013

Immunity:

EN 55103-2: 2009

EN 61000-4-2: 2009, EN 61000-4-3: 2006 + A1: 2008 + A2: 2010,

EN 61000-4-4: 2004 + A1: 2010,

EN 61000-4-5: 2006, EN 61000-4-6: 2009, EN 61000-4-11: 2004

Environments: E2, E3 and E4

The product is also licensed for additional country specific standards as required for the International Marketplace.



**Warning!** This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.

**Achtung!** Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmaßnahmen verantwortlich ist.

**Attention!** Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées..

## Recycling Notice



This symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

## Korea KCC Compliance Statement

A급 기기 (업무용 방송통신기자재)	이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.
Class A (Broadcasting Communication Equipment for Office Use)	As an electromagnetic wave equipment for office use (Class A), this equipment is intended to use in other than home area. Sellers or users need to take note of this.

## Taiwan Compliance Statement

### 警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

This is a Class A product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438, Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## Japan Compliance Statement

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

This is a Class A product based on the standard of the VCCI Council (VCCI 32: 2016). If this equipment is used in a domestic environment, radio interference may occur, in which case, the user may be required to take corrective actions.

## Translated Warning and Caution Messages

The following caution statements, warning conventions, and warning messages apply to this product and manual.



Warning Symbol



Caution Symbol

## Before Operation Please Read These Instructions



**Warning!** Read and follow all warning notices and instructions marked on the product or included in the documentation.

**Avertissement!** Lisez et conformez-vous à tous les avis et instructions d'avertissement indiqués sur le produit ou dans la documentation.

**Warnung!** Lesen und befolgen Sie die Warnhinweise und Anweisungen, die auf dem Produkt angebracht oder in der Dokumentation enthalten sind.

**Advertencia!** Lea y siga todas las instrucciones y advertencias marcadas en el producto o incluidas en la documentación.

**Aviso!** Leia e siga todos os avisos e instruções assinalados no produto ou incluídos na documentação.

**Avviso!** Leggere e seguire tutti gli avvisi e le istruzioni presenti sul prodotto o inclusi nella documentazione.



**Warning!** Do not use this device near water and clean only with a dry cloth.

**Avertissement!** N'utilisez pas cet appareil près de l'eau et nettoyez-le seulement avec un tissu sec.

**Warnung!** Das Gerät nicht in der Nähe von Wasser verwenden und nur mit einem trockenen Tuch säubern.

**Advertencia!** No utilice este dispositivo cerca del agua y límpielo solamente con un paño seco.

**Aviso!** Não utilize este dispositivo perto da água e limpe-o somente com um pano seco.

**Avviso!** Non utilizzare questo dispositivo vicino all'acqua e pulirlo soltanto con un panno asciutto.



**Warning!** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

**Avertissement!** Ne bloquez aucune ouverture de ventilation. Suivez les instructions du fabricant lors de l'installation.

**Warnung!** Die Lüftungsöffnungen dürfen nicht blockiert werden. Nur gemäß den Anweisungen des Herstellers installieren.

**Advertencia!** No bloquee ninguna de las aberturas de la ventilación. Instale de acuerdo con las instrucciones del fabricante.

**Aviso!** Não obstrua nenhuma das aberturas de ventilação. Instale de acordo com as instruções do fabricante.

**Avviso!** Non ostruire le aperture di ventilazione. Installare in conformità con le istruzioni del fornitore.



**Warning!** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

**Avertissement!** N'installez pas l'appareil près d'une source de chaleur telle que des radiateurs, des bouches d'air de chauffage, des fourneaux ou d'autres appareils (amplificateurs compris) qui produisent de la chaleur.

**Warnung!** Nicht in der Nähe von Wärmequellen wie Heizkörpern, Heizregistern, Öfen oder anderen Wärme erzeugenden Geräten (einschließlich Verstärkern) aufstellen.

**Advertencia!** No instale cerca de fuentes de calor tales como radiadores, registros de calor, estufas u otros aparatos (incluidos amplificadores) que generan calor.

**Aviso!** Não instale perto de nenhuma fonte de calor tal como radiadores, saídas de calor, fogões ou outros aparelhos (incluindo amplificadores) que produzam calor.

**Avviso!** Non installare vicino a fonti di calore come termosifoni, diffusori di aria calda, stufe o altri apparecchi (amplificatori compresi) che emettono calore



**Warning!** Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

**Avertissement!** La sécurité de la prise polarisée ou de la prise de type mise à la terre ne doit en aucun cas être empêchée de fonctionner. Une prise polarisée a deux broches, l'une étant plus large que l'autre. Une prise de type mise à la terre a deux broches et une troisième broche pour la mise à la terre. La broche large ou la troisième broche sont fournies pour votre sécurité. Si la prise fournie ne s'insère pas dans votre prise femelle, consultez un électricien pour le remplacement de la prise femelle obsolète.

**Warnung!** Der Sicherheitszweck des gepolten bzw. Schukosteckers ist zu berücksichtigen. Ein gepolter Stecker verfügt über zwei Pole, von denen einer breiter als der andere ist. Ein Schukostecker verfügt neben den zwei Polen noch über einen dritten Pol zur Erdung. Der breite Pol bzw. der Erdungspol dienen der Sicherheit. Wenn der zur Verfügung gestellte Stecker nicht in Ihren Anschluss passt, konsultieren Sie einen Elektriker, um den veralteten Anschluss zu ersetzen.

**¡Advertencia!** No eche por tierra la finalidad del tipo de enchufe polarizado con conexión a tierra. Un enchufe polarizado tiene dos espigas, una más ancha que la otra. Un enchufe con conexión a tierra tiene dos espigas iguales y una tercera espiga que sirve para la conexión a tierra. La espiga ancha, o la tercera espiga, sirven para su seguridad. Si el enchufe suministrado no encaja en el tomacorriente, consulte con un electricista para reemplazar el tomacorriente obsoleto.

**Aviso!** Não anule a finalidade da segurança da ficha polarizada ou do tipo ligação terra. Uma ficha polarizada tem duas lâminas sendo uma mais larga do que a outra. Uma ficha do tipo de ligação à terra tem duas lâminas e um terceiro terminal de ligação à terra. A lâmina larga ou o terceiro terminal são fornecidos para sua segurança. Se a ficha fornecida não couber na sua tomada, consulte um electricista para a substituição da tomada obsoleta.

**Avviso!** Non compromettere la sicurezza della spina polarizzata o con messa a terra. Una spina polarizzata ha due spinotti, di cui uno più largo. Una spina con messa a terra ha due spinotti e un terzo polo per la messa a terra. Lo spinotto largo o il terzo polo sono forniti per motivi di sicurezza. Se la spina fornita non si inserisce nella presa di corrente, contattare un elettricista per la sostituzione della presa obsoleta.



**Warning!** Since the Mains plug is used as the disconnection for the device, it must remain readily accessible and operable.

**Avertissement!** Puisque la prise principale est utilisée pour débrancher l'appareil, elle doit rester aisément accessible et fonctionnelle.

**Warnung!** Da der Netzstecker als Trennvorrichtung dient, muss er stets zugänglich und funktionsfähig sein.

**¡Advertencia!** Puesto que el enchufe de la red eléctrica se utiliza como dispositivo de desconexión, debe seguir siendo fácilmente accesible y operable.

**Aviso!** Dado que a ficha principal é utilizada como a desconexão para o dispositivo, esta deve manter-se prontamente acessível e funcional.

**Avviso!** Poiché il cavo di alimentazione viene usato come dispositivo di sconnessione, deve rimane prontamente accessibile e operabile.



**Warning!** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the device.

**Avertissement!** Protégez le cordon d'alimentation pour que l'on ne marche pas dessus ou qu'on le pince, en particulier au niveau des prises mâles, des réceptacles de convenance, et à l'endroit où il sort de l'appareil.

**Warnung!** Vermeiden Sie, dass auf das Netzkabel getreten oder das Kabel geknickt wird, insbesondere an den Steckern, den Steckdosen und am Kabelausgang am Gerät.

**¡Advertencia!** Proteja el cable de energía para que no se le pise ni apriete, en especial cerca del enchufe, los receptáculos de conveniencia y el punto del que salen del equipo.

**Aviso!** Proteja o cabo de alimentação de ser pisado ou de ser comprimido particularmente nas fichas, em tomadas de parede de conveniência e no ponto de onde sai do dispositivo.

**Avviso!** Proteggere il cavo di alimentazione in modo che nessuno ci cammini sopra e che non venga schiacciato soprattutto in corrispondenza delle spine e del punto in cui esce dal dispositivo.



**Warning!** Unplug this device during lightning storms or when unused for long periods of time.

**Avertissement!** Débranchez cet appareil pendant les orages avec éclairsou s'il est inutilisé pendant de longues périodes.

**Warnung!** Das Gerät ist bei Gewitterstürmen oder wenn es über lange Zeiträume ungenutzt bleibt vom Netz zu trennen.

**¡Advertencia!** Desenchufe este dispositivo durante tormentas eléctricas o cuando no se lo utilice por largos periodos del tiempo.

**Aviso!** Desconecte este dispositivo da tomada durante trovoadas ou quando não é utilizado durante longos períodos de tempo.

**Avviso!** Utilizzare soltanto i collegamenti e gli accessori specificati e/o venduti dal produttore, quali il treppiedi e l'esoscheletro.



**Warning!** Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Avertissement!** Référez-vous au personnel de service qualifié pour tout entretien. L'entretien est exigé quand l'appareil a été endommagé de quelque manière que ce soit, par exemple lorsque le cordon d'alimentation ou la prise sont endommagés, que du liquide a été versé ou des objets sont tombés dans l'appareil, que l'appareil a été exposé à la pluie ou à l'humidité, ne fonctionne pas normalement ou est tombé.

**Warnung!** Das Gerät sollte nur von qualifizierten Fachkräften gewartet werden. Eine Wartung ist fällig, wenn das Gerät in irgendeiner Weise beschädigt wurde, wie bei beschädigtem Netzkabel oder Netzstecker, falls Flüssigkeiten oder Objekte in das Gerät gelangen, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht ordnungsgemäß funktioniert oder fallen gelassen wurde.

**Advertencia!** Consulte al personal calificado por cuestiones de reparación. El servicio de reparación se requiere cuando el dispositivo ha recibido cualquier tipo de daño, por ejemplo cable o espigas dañadas, se ha derramado líquido o se han caído objetos dentro del dispositivo, el dispositivo ha sido expuesto a la lluvia o humedad, o no funciona de modo normal, o se ha caído.

**Aviso!** Remeta todos os serviços de manutenção para o pessoal de assistência qualificado. A prestação de serviços de manutenção é exigida quando o dispositivo foi danificado mediante qualquer forma, como um cabo de alimentação ou ficha que se encontra danificado/a, quando foi derramado líquido ou caíram objectos sobre o dispositivo, quando o dispositivo foi exposto à chuva ou à humidade, quando não funciona normalmente ou quando foi deixado cair.

**Avviso!** Fare riferimento al personale qualificato per tutti gli interventi di assistenza. L'assistenza è necessaria quando il dispositivo è stato danneggiato in qualche modo, ad esempio se il cavo di alimentazione o la spina sono danneggiati, è stato rovesciato del liquido è stato rovesciato o qualche oggetto è caduto nel dispositivo, il dispositivo è stato esposto a pioggia o umidità, non funziona correttamente o è caduto



**Warning!** Do not open the chassis. There are no user-serviceable parts inside. Opening the chassis will void the warranty unless performed by an AJA service center or licensed facility.

**Avertissement!** Ne pas ouvrir le châssis. Aucun élément à l'intérieur du châssis ne peut être réparé par l'utilisateur. La garantie sera annulée si le châssis est ouvert par toute autre personne qu'un technicien d'un centre de service ou d'un établissement agréé AJA.

**Warnung!** Öffnen Sie das Gehäuse nicht. Keine der Geräteteile können vom Benutzer gewartet werden. Durch das Öffnen des Gehäuses wird die Garantie hinfällig, es sei denn, solche Wartungsarbeiten werden in einem AJA-Service-Center oder einem lizenzierten Betrieb vorgenommen.

**Advertencia!** No abra el chasis. El interior no contiene piezas reparables por el usuario. El abrir el chasis anulará la garantía a menos que se lo haga en un centro de servicio AJA o en un local autorizado.

**Advertência!** Não abra o chassi. Não há internamente nenhuma peça que permita manutenção pelo usuário. Abrir o chassi anula a garantia, a menos que a abertura seja realizada por uma central de serviços da AJA ou por um local autorizado.

**Avvertenza!** Non aprire lo chassis. All'interno non ci sono parti riparabili dall'utente. L'apertura dello chassis invaliderà la garanzia se non viene effettuata da un centro ufficiale o autorizzato AJA.



**Warning!** Disconnect the external AC power supply line cord(s) from the mains power before moving the unit.

**Avertissement!** Retirez le ou les cordons d'alimentation en CA de la source d'alimentation principale lorsque vous déplacez l'appareil.

**Warnung!** Trennen Sie die Wechselstrom-Versorgungskabel vom Netzstrom, bevor Sie das Gerät verschieben.

**Advertencia!** Cuando mueva la unidad desenchufe de la red eléctrica el/los cable(s) de la fuente de alimentación CA tipo brick.

**Adverténcia!** Remova os cabos CA de alimentação brick da rede elétrica ao mover a unidade.

**Avvertenza!** Scollegare il cavo dell'alimentatore quando si sposta l'unità.



**Warning!** Only use attachments and accessories specified and/or sold by the manufacturer.

**Avertissement!** Utilisez seulement les attaches et accessoires spécifiés et/ou vendus par le fabricant.

**Warnung!** Verwenden Sie nur Zusatzgeräte und Zubehör angegeben und / oder verkauft wurde durch den Hersteller.

**Advertencia!** Utilice solamente los accesorios y conexiones especificados y/o vendidos por el fabricante.

**Aviso!** Utilize apenas equipamentos/acessórios especificados e/ou vendidos pelo fabricante.

**Avviso!** Utilizzare soltanto i collegamenti e gli accessori specificati e/o venduti dal produttore.

# Warranty and Liability Information

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## Limited Warranty on Hardware.

AJA Video Systems, Inc. (AJA Video) warrants that the hardware product, not including software components, will be free from defects in materials and workmanship for a period of five years from the date of purchase. AJA Video provides a separate software warranty as part of the license agreement applicable to software components.

If the Customer brings a valid claim under this limited warranty for a hardware product (hereafter, a "product") during the applicable warranty period, AJA Video will, at its sole option and as the Customer's sole remedy for breach of the above warranty, provide one of the following remedies:

- Repair or facilitate the repair the product within a reasonable period of time, free of charge for parts and labor.
- Replace the product with a direct replacement or with a product that performs substantially the same function as the original product.
- Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

To obtain service under this warranty, the Customer must notify AJA Video of the defect before expiration of the warranty period and make suitable arrangements for the performance of service by contacting AJA Video support through the channels set forth on the support contacts web page at <https://www.aja.com/support>. Except as stated, the Customer shall bear all shipping, packing, insurance and other costs, excluding parts and labor, to effectuate repair. Customer shall pack and ship the defective product to a service center designated by AJA Video, with shipping charges prepaid. AJA Video shall pay to return the product to Customer, but only if to a location within the country in which the AJA Video service center is located. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER, SO SOME OR ALL OF THE TERMS OF THIS PARAGRAPH MAY NOT APPLY TO YOU.

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Under no circumstances shall AJA video BE LIABLE IN ANY WAY FOR ANY LOST, CORRUPTED OR DESTROYED DATA, FOOTAGE OR WORK, OR FOR ANY OTHER INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS, OR FOR ANY THIRD PARTY CLAIM, IN CONNECTION WITH THE PRODUCT, WHETHER RESULTING FROM DEFECTS IN THE PRODUCT, SOFTWARE OR HARDWARE FAILURE, OR ANY OTHER CAUSE WHATSOEVER, EVEN IF AJA VIDEO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. AJA VIDEO'S LIABILITY IN CONNECTION WITH THE PRODUCT SHALL UNDER NO CIRCUMSTANCES EXCEED THE PURCHASE PRICE PAID FOR THE PRODUCT. The foregoing limitations apply even if any remedy set forth in this LIMITED WARRANTY fails of its essential purpose. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF LIABILITY FOR PERSONAL INJURY, OR OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SOME OR ALL OF THE TERMS OF THIS PARAGRAPH MAY NOT APPLY TO YOU.

## Governing Law and Language; Your Rights.

This limited warranty is the only warranty provided by AJA Video on the hardware product. It supersedes all prior or contemporaneous understandings regarding such subject matter. No amendment to or modification of this warranty will be binding unless in writing and signed by AJA Video. The laws of the State of California, USA will govern this warranty and any dispute arising from it. Any translation of this

Agreement is intended for convenience and to meet local requirements and in the event of a dispute between the English and any non-English versions, the English version of this warranty will govern. This limited warranty gives you specific legal rights and you may have other rights that vary from jurisdiction to jurisdiction, some of which are noted above.

# Index

---

## A

AJA Support 2

## C

Color Space 13

## D

Default Operational Settings 7

DIP Switch 5

DIP Switch Settings 7

Documentation

    Downloading 9

    Mini-Converter 8

## U

Update Tab Screen 14

User Controls 5

## V

V2Digital Block Diagram 4

## F

Features 4

Firmware Version 14

Format 13

## I

Info Tab Screen 15

Input Tab Screen 13

Installation 5

I/O Connections 5

## M

Mini-Config

    Installation on Mac 10

    Installation on PC 9

    Operation 11

    Screen Description 12

    Startup on Mac 11

    Startup on PC 11

    Mini-Config Settings Summary 16

    Mini-Converter Documentation 8

## N

Name 15

## P

Pedestal 13

Progress Bar 14

## S

Saving Setups 11

Serial Number 15

Software Update 14

Software Version 14

## T

Technical Support 2

Time Base Corrected Source 4

Type: 15