

FiDO Series Mini-Converter SDI/Optical Fiber Installation & Operation Guide

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AJA
VIDEO SYSTEMS

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Notices

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Contacting 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: <http://www.aja.com>

Support Email: support@aja.com

Sales Email: sales@aja.com

Chapter 1: Introduction

Overview

FiDO is a family of SDI/Optical Fiber converters. FiDO allows the transport of SD-SDI, HD-SDI, and 3G-SDI over distances up to 10km using standard single-mode fiber optic cable. FiDO converters also offer electrical isolation useful for eliminating ground loop problems. Models are available with either LC, SC or ST connectors. FiDO converters meet all relevant SMPTE specifications and are rugged, versatile, and suitable for indoor or outdoor use.

With 11 models, FiDO offers unmatched flexibility and cost efficiency. FiDO dual channel models allow the conversion of two channels – perfect for 3D, dual-link SDI, or two completely independent SDI channels (for example, SD, HD, and 3G can be mixed in any combination). The FiDO four channel models allow conversion of an entire quad link 4K signal (or four independent 3G-SDI signals) using a single converter.

FiDO converters come in a compact, low-profile enclosure for use in tight spaces around and behind equipment racks, trucks and crowded facilities.

Features

- Transport of 3G-SDI over single mode optical fiber
- Auto-detection of video format
- LC, SC, or ST fiber connectors
- Simplex or duplex models available
- All inputs, either SDI or fiber, are equalized and re-clocked
- ASI compatible
- Uses universal input +5V power supply AJA model DWP-U-R1 (included)
- 5 year warranty

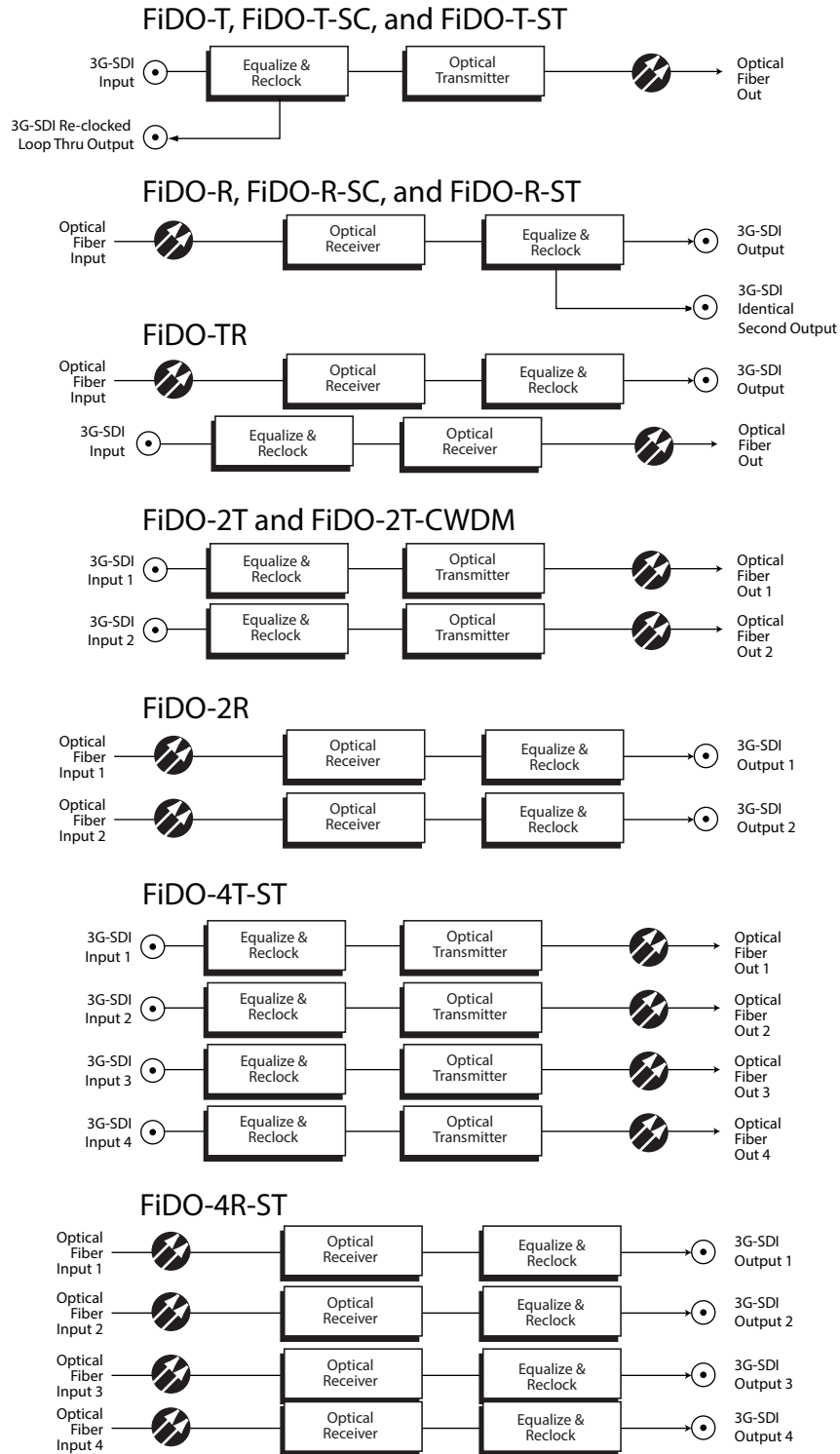
FiDO models

- FiDO-T: Single channel SDI to LC Fiber converter with looping SDI output
- FiDO-R: Single channel LC Fiber to SDI converter with dual SDI outputs
- FiDO-T-SC: Single channel SDI to SC Fiber converter with looping SDI output
- FiDO-R-SC: Single channel SC Fiber to SDI converter with dual SDI outputs
- FiDO-T-ST: Single channel SDI to ST Fiber converter with looping SDI output
- FiDO-R-ST: Single channel ST Fiber to SDI converter with dual SDI outputs
- FiDO-TR: SDI/LC Fiber transceiver
- FiDO-2T: Dual channel SDI to LC Fiber converter
- FiDO-2T-CWDM: Dual Channel SDI to LC Fiber converter (CWDM)
- FiDO-2R: Dual channel LC Fiber to SDI converter
- FiDO-4T-ST: Four channel SDI to ST Fiber converter
- FiDO-4R-ST: Four channel ST Fiber to SDI converter

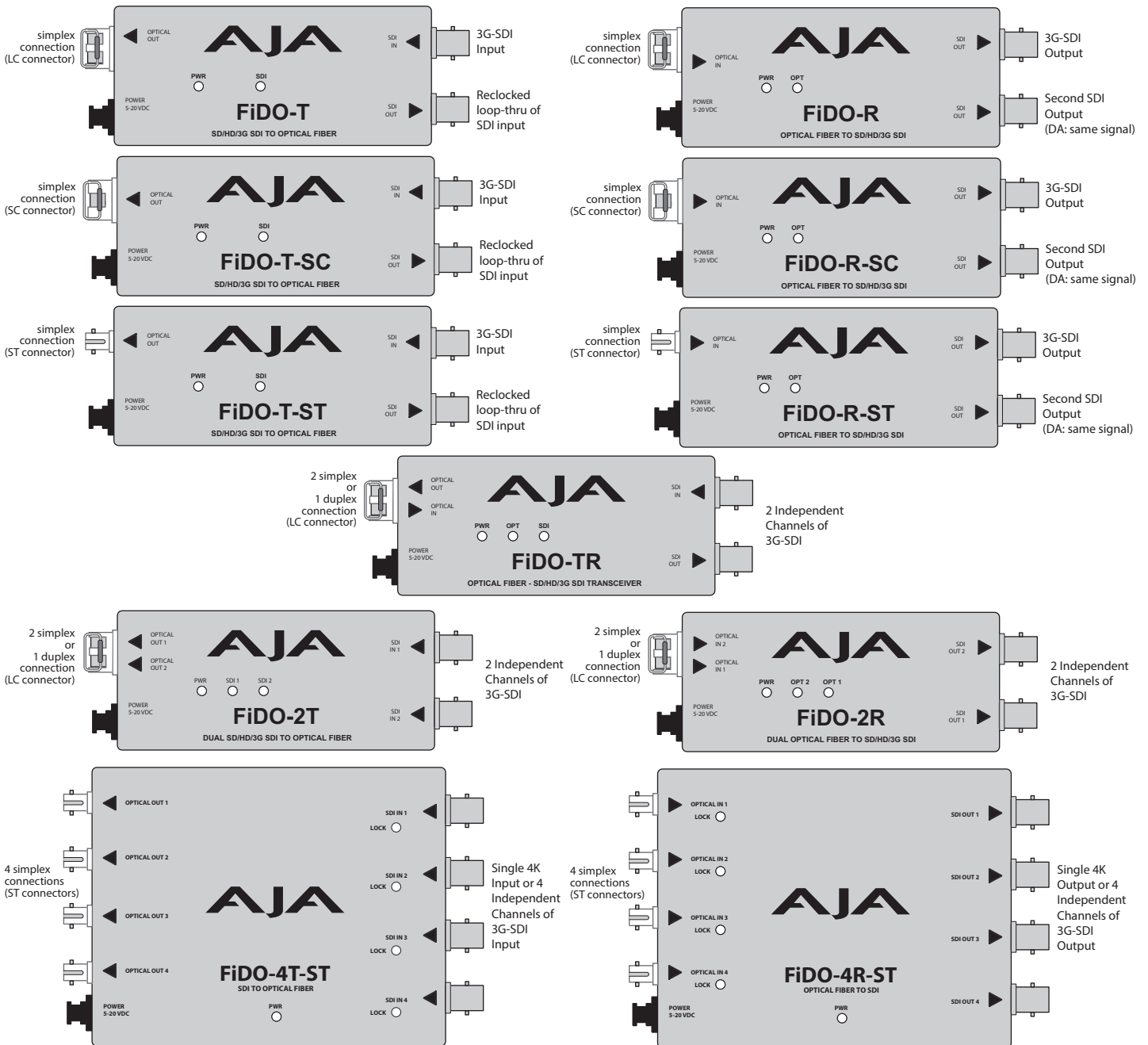
Accessories

- Rack mount bracket

FiDO Converter Simplified Block Diagrams



FiDO Converter I/O Connections



NOTE: Green illuminated LEDs labeled OPT, SDI, or LOCK indicate a signal has been detected and locked for that input.


NOTE: The OPT or LOCK indicator for optical receivers may flicker or glow dim with the optical input disconnected.



Installation

NOTE: AJA does not support use of any SFP modules other than our own; use of any non-AJA SFP module will void the warranty.

Installation consists of the following steps:

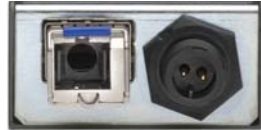
1. Connect video equipment to the FiDO converter BNCs.
2. Connect fiber to the FiDO Optical fiber connectors.

	<p>Caution! All FiDO devices require the use of “single mode 1310nm compatible” fiber optic cable.</p>
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  <p>CLASS 1 LASER PRODUCT</p>	<p>Warning! Active fiber-optic cables emit radiation invisible to the human eye. Do not look directly at the end of an active fiber-optic cable or the fiber connector on a FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, or FiDO-T-ST; these models are Class 1 Laser Products.</p>
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3. Connect single SC style Optical fiber connectors to the SC equipped FiDO converters (FiDO-T-SC, FiDO-R-SC).

Figure 1. SC style Optical Fiber Connector



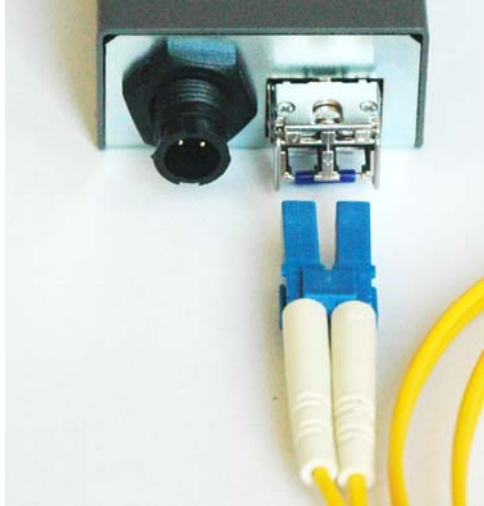
4. Connect ST style Optical fiber connectors to the ST equipped FiDO converters (FiDO-T-ST, FiDO-R-ST, FiDO-4T-ST, FiDO-4R-ST).

Figure 2. ST Style Optical Fiber Connector

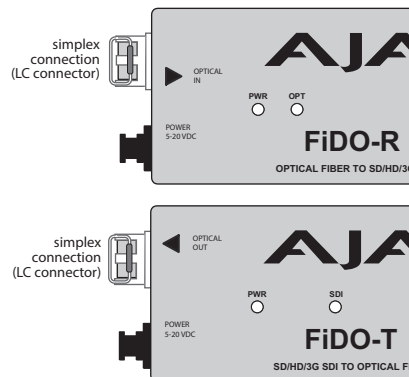


5. FiDO-TR, FiDO-2T, and FiDO-2R all require either a duplex LC cable or two simplex LC cables. Insert each connector until it latches.

Figure 3. FiDO to Duplex LC example.



6. FiDO-T and FiDO-R require a single simplex LC cable connected to the optical port on the converter pointed to by the arrow (lower Optical In on FiDO-R, or higher Optical Out on FiDO-T).



7. Apply +5VDC power to the converter (AJA power supply included).

Operation

FiDO series converters have no user controls. No configuration or settings are required. Once powered, the FiDO converters will begin converting applied fiber/SDI signals.

FiDO-2T-CWDM: FiDO-2T-CWDM Dual Channel SDI to LC Fiber converter is functionally identical to FiDO-2T, except that it uses factory-installed SFP modules providing CWDM wavelength pairs. The FiDO-2T-CWDM is designed for use in CWDM multiplexer/demultiplexer applications.

NOTE: CWDM wavelengths, ranging from 1271 to 1611 nm, are configured only at time of shipment. The available CWDM wavelengths are listed under "Wavelengths (CWDM Models)" on page 9.

Appendix A: Specifications

Video Input and Output

Formats

- 3Gb, 1.5Gb, 270Mb, Auto Select, SDI (SMPTE 259/292/424)

Connectors

- FiDO-T, FiDO-R:* • 2x BNC, 1x Single mode optical fiber, LC connector
- FiDO-T-SC, FiDO-R-SC:* • 2x BNC, 1x Single mode optical fiber, SC connector
- FiDO-T-ST, FiDO-R-ST:* • 2x BNC, 1x Single mode optical fiber, ST connector
- FiDO-TR, FiDO-2T, FiDO-2TR:* • 2x BNC, 2x Single mode optical fiber, LC connectors
- FiDO-4T-ST, FiDO-4R-ST:* • 4x BNC, 4x Single mode optical fiber, ST connectors

BNC

- Cable Equalization (1694 coax):* • 270mb, 400m
- 1.5Gb, 200m
- 3Gb, 140m
- Input/Output Return Loss:* • > 15dB, 5MHz to 1.5GHz
- >10dB, 1.5GHz to 3GHz

Fiber Optical Output

- Output Power** • -2dBm typical
- Wavelength (non CWDM)** • 1310 nm single mode
- Wavelengths (CWDM Models)** (all below single mode)
 - FIB-2CW-2729:* • 1271/1291 nm
 - FIB-2CW-3133:* • 1311/1331 nm
 - FIB-2CW-3537:* • 1351/1371 nm
 - FIB-2CW-3941:* • 1391/1411 nm
 - FIB-2CW-4345:* • 1431/1451 nm
 - FIB-2CW-4749:* • 1471/1491 nm
 - FIB-2CW-5153:* • 1511/1531 nm
 - FIB-2CW-5557:* • 1551/1571 nm
 - FIB-2CW-5961:* • 1591/1611 nm

Physical

Power

- AJA external power supply model DWP-U-R1 (included):
 - 100-240V, 50/60Hz universal input

FiDO-T, FiDO-R (all models): • +5 to 20V DC regulated, 2 watts max

*FiDO-TR, FiDO-2T,
FiDO-2T-CWDM,
FiDO-2R:* • +5 to 20V DC regulated, 3 watts max

FiDO-4T-ST, FiDO-4R-ST: • +5 to 20V DC regulated, 4 watts max

Size

*FiDO-T, FiDO-R (all models),
FiDO-TR, FiDO-2T,
FiDO-2T-CWDM, FiDO-2R:* • 4.6" x 1.71" x 0.8" (117 x 43.5 x 20 mm)

FiDO-4T-ST, FiDO-4R-ST: • 5.8" x 3.9" x 0.8" (147 mm x 99 mm x 20 mm) including connectors

Environment

Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)

Operating Relative Humidity: 10-90% non-condensing

Operating Altitude: <2,500 meters (<8,000 feet)

*Safe Storage Temperature
(Power OFF):* -40 to 60 degrees C (-40 to 140 degrees F)

Appendix B: Safety and Compliance

Federal Communications Commission (FCC) Compliance Notices

Class B Interference Statement

This equipment has been tested and found to comply with the limits for a Class B 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

Canadian Department of Communications Radio Interference Regulations

This digital apparatus does not exceed the Class B 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 B 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 B prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada. Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

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

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, LICHTENSTEIN, NORWAY, SWITZERLAND

Declaration of Conformity

Marking by this symbol indicates compliance with the Essential Requirements of the EMC Directive of the European Union 2004/108/EC.



This equipment meets the following conformance standards:


Safety: CB-IEC 60065:2001 +A1:2005 +A2:2010
NRTL-UL 60065:2003 R9.12, CAN/CSA C22.2 No. 60065-03 +A1:06 (R2012) +A2:12
GS-EN 60065:2002 +A1:2006 +A11:2008 +A2:2010 +A12:2011
Additional licenses issued for specific countries available on request.

Emissions: EN 55103-1: 2009
CISPR 22: 2008
EN 55022: 2010
EN 61000-3-2: 2009, EN 61000-3-3:2008

Immunity: EN 55103-2: 2009
EN 61000-4-2:2009, EN 61000-4-3:2010,
EN 61000-4-4:2010, EN 61000-4-5:2005, EN 61000-4-6:2009
EN 61000-4-11:2004

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

Recycling Notice

	<p>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.</p>
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Korea KCC Compliance Statement

<p>B급 기기 (가정용 방송통신기자재)</p>	<p>이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.</p>
<p>Class B (Broadcasting Communication Equipment for Home Use)</p>	<p>As an electromagnetic wave equipment for home use (Class B), this equipment is intended to use mainly for home use and may be used in all areas.</p>

Taiwan Compliance Statement

This is a Class B product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438, Class B.

Japanese Compliance Statement

2. Class B ITE

この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

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

	<p>Warning! Read and follow all warning notices and instructions marked on the product or included in the documentation.</p> <p>Avertissement ! Lisez et conformez-vous à tous les avis et instructions d'avertissement indiqués sur le produit ou dans la documentation.</p> <p>Warnung! Lesen und befolgen Sie die Warnhinweise und Anweisungen, die auf dem Produkt angebracht oder in der Dokumentation enthalten sind.</p> <p>¡Advertencia! Lea y siga todas las instrucciones y advertencias marcadas en el producto o incluidas en la documentación.</p> <p>Aviso! Leia e siga todos os avisos e instruções assinalados no produto ou incluídos na documentação.</p> <p>Avviso! Leggere e seguire tutti gli avvisi e le istruzioni presenti sul prodotto o inclusi nella documentazione.</p>
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	<p>Warning! Do not use this device near water and clean only with a dry cloth.</p> <p>Avertissement! N'utilisez pas cet appareil près de l'eau et nettoyez-le seulement avec un tissu sec..</p> <p>Warnung! Das Gerät nicht in der Nähe von Wasser verwenden und nur mit einem trockenen Tuch säubern.</p> <p>¡Advertencia! No utilice este dispositivo cerca del agua y límpielo solamente con un paño seco.</p> <p>Aviso! Não utilize este dispositivo perto da água e limpe-o somente com um pano seco.</p> <p>Avviso! Non utilizzare questo dispositivo vicino all'acqua e pulirlo soltanto con un panno asciutto.</p>
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**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 rimanere 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 éclairso 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 ! Référéz-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!**

This device is a Class B product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

Attention! Le périphérique est un produit de Classe B. Le fonctionnement de cet équipement dans une zone résidentielle risque de causer des interférences nuisibles, auquel cas l'utilisateur devra y remédier à ses propres frais.

Achtung! Dies ist ein Gerät der Klasse B. Bei Einsatz des Geräts in Wohngebieten kann es Störungen des Radio- und Fernsehempfangs verursachen. In diesem Fall muss der Benutzer alle notwendigen Maßnahmen ergreifen, die möglicherweise nötig sind, um die Störungen auf eigene Rechnung zu beheben.

¡Precaución! Este es un producto clase B. El uso de este equipo en áreas residenciales puede causar interferencias nocivas, en cuyo caso, se requerirá que los usuarios tomen cualquier medida necesaria para corregir la interferencia por cuenta propia.

Cuidado! Este dispositivo é um produto Classe B. Operar este equipamento em uma área residencial provavelmente causará interferência prejudicial; neste caso, espera-se que os usuários tomem as medidas necessárias para corrigir a interferência por sua própria conta.

Attenzione! Questo dispositivo è un prodotto di Classe B. Il funzionamento di questo apparecchio in aree residenziali potrebbe causare interferenze dannose, nel cui caso agli utenti verrà richiesto di adottare tutte le misure necessarie per porre rimedio alle interferenze a proprie spese.

**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.

Advertência! 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!**

Active fiber-optic cables emit radiation invisible to the human eye. Do not look directly at the end of an active fiber-optic cable or the fiber connector on a FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, or FiDO-T-ST; these models are Class 1 Laser Products.

Avertissement! Les câbles fibre optique émettent des radiations invisibles à l'oeil humain. Ne regardez pas directement l'extrémité d'un câble fibre optique ou d'un connecteur de fibre d'un FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, ou FiDO-T-ST; ces modèles sont des produits laser de Classe 1.

Warnung! Glasfaserkabel emittieren im Betrieb Strahlung, die für das menschliche Auge unsichtbar ist. Nicht direkt in das Ende eines im Betrieb befindlichen Glasfaserkabels bzw. den Glasfaserkabelanschluss am FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, oder FiDO-T-ST schauen; diese Modelle sind Lasergeräte der Klasse 1.

¡Advertencia! Los cables de fibra óptica activos emiten radiación invisible al ojo humano. No mire directamente hacia el extremo de un cable de fibra óptica activo o hacia el conector de fibra óptica del FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, o FiDO-T-ST; estos modelos están clasificados como Productos Láser Clase 1.

Advertência! Os cabos de fibra óptica emitem radiação invisível para o olho humano. Não olhe diretamente para a extremidade de um cabo de fibra óptica ativo ou para o conector da fibra em um FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, ou FiDO-T-ST; esses modelos são Produtos de Laser Classe 1.

Avvertenza! I cavi a fibre ottiche emettono radiazioni invisibili all'occhio umano. Non guardare direttamente l'estremità di un cavo in fibra ottica attivo o il connettore in fibra su un FiDO-TR, FiDO-T, FiDO-2T, FiDO-4T-ST, FiDO-T-SC, o FiDO-T-ST; questi modelli sono prodotti laser di classe 1.

Warranty Information

Limited Warranty

AJA Video Systems, Inc. (AJA Video) warrants that this product will be free from defects in materials and workmanship for a period of five years from the date of purchase. If a product proves to be defective during this warranty period, AJA Video, at its option, will either repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, you the Customer, must notify AJA Video of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The Customer shall be responsible for packaging and shipping the defective product to a designated service center nominated by AJA Video, with shipping charges prepaid. AJA Video shall pay for the return of the product to the Customer if the shipment is to a location within the country in which the AJA Video service center is located. Customer shall be responsible for paying all shipping charges, insurance, duties, taxes, and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. AJA Video shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than AJA Video representatives to install, repair or service the product, b) to repair damage resulting from improper use or connection to incompatible equipment, c) to repair any damage or malfunction caused by the use of non-AJA Video parts or supplies, or d) to service a product that has been modified or integrated with other products when the effect of such a modification or integration increases the time or difficulty of servicing the product.

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