

LINDY®

CONNECTION PERFECTION

HDMI/DVI-D SDI Converter/Extender

User Manual

English



No. 38196 - 3G SDI to DVI-D
No. 38197 - DVI-D to 3G SDI
No. 38198 - 3G SDI to HDMI
No. 38199 - HDMI to 3G SDI

www.LINDY.com

CE FC

Introduction

Thank you for buying one of the products from the LINDY HDMI/DVI-D SDI Converter/Extender range. This range of products gives you the ability to integrate SDI and DVI-D/HDMI equipment or when used in combination, extend DVI-D or HDMI signals up to 100m using low cost coaxial cable.

This hardware based solution is ideal for professional use to extend DVI-D or HDMI signals over coaxial cable, display SDI signals on DVI-D/HDMI displays or DVI-D/HDMI signals on SDI displays. Auto-video mode detection for SD/HD/3G and Plug & Play installation make for a simple setup; with the added functionality of being able to use either internal or external audio sources at the flick of switch.

Features

- Convert SDI signals for use with DVI-D/HDMI displays or DVI-D/HDMI signals with SDI displays.
- Automatic video mode detection (3G/SD/HD)
- Integrated audio de-embedding for a maximum of 8 channels of 48 kHz audio
- Supports input SDI signal transmission distances up to 300m for SD signals / up to 200m for HD signals / up to 100m for 3G signals
- Supports SMPTE standards 259M-C, at bitrates of 270 Mbit/s, SMPTE 292M, at bitrates of 1.485 Gbit/s or 1.485/1.001 Gbit/s, 424M/425M-AB, at bitrates of 2.970 Gbit/s and 2.970/1.001 Gbit/s
- Up to 100m HDMI/DVI-D signal extension through coaxial cable when used as Extenders

Note – No support for High-Bandwidth Digital Content Protection (HDCP)

Package Contents

- 38196 – SDI to DVI-D Converter / 38197 – DVI-D to SDI Converter / 38198 – DVI-D to HDMI Converter / 38199 – HDMI to DVI-D Converter
- Multi-country DC 5V 2.6A power adapter with locking connector – UK, EURO, US, AUS
- This Manual

Specifications**38196 - SDI to DVI Converter**

- BNC input for SDI signals
- DVI-D Single Link output
- 3.5mm stereo audio output
- SDI input formats - 480i, 576i, 720p at 50/59.94/60fps, 1080i at 50/59.94/60fps, 1080p at 23.98/24/25/29.97/30/50/59.94/60fps, 1080PsF at 25/29.97/30

38197 - DVI to SDI Converter

- DVI-D Single Link input
- 3.5mm stereo audio input
- BNC connector output for SDI signals
- SDI output formats - SD-SDI - 480i, 576i, HD-SDI - 720p at 50/60, 1080i at 50/60fps, 1080p at 23.98/24/25/29.97/30fps, 3G-SDI - 1080p at 50/60fps

38198 - SDI to HDMI Converter

- BNC connector input for SDI signals
- HDMI output
- 3.5mm stereo audio output
- SDI input formats - 480i - 576i, 720p at 50/59.94/60fps, 1080i at 50/59.94/60fps, 1080p at 23.98/24/25/29.97/30/50/59.94/60fps, 1080PsF at 25/29.97/30fps

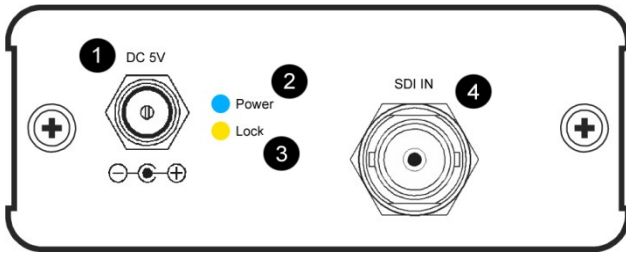
38199 - HDMI to SDI Converter

- HDMI input
- 3.5mm stereo audio input
- BNC connector output for SDI signals
- SDI output formats - SD-SDI - 480i, 576i, HD-SDI - 720p at 50/60fps, 1080i at 50/60fps, 1080p at 23.98/24/25/29.97/30fps, 3G-SDI - 1080p at 50/60fps

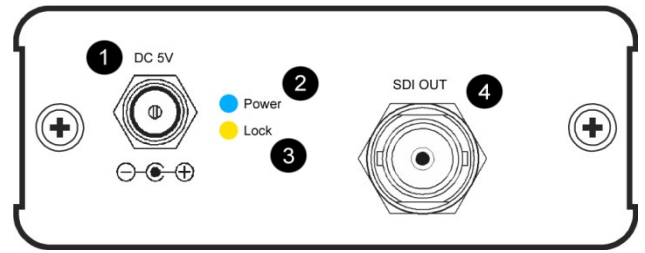
Descriptions

SDI connections

38196 & 38198



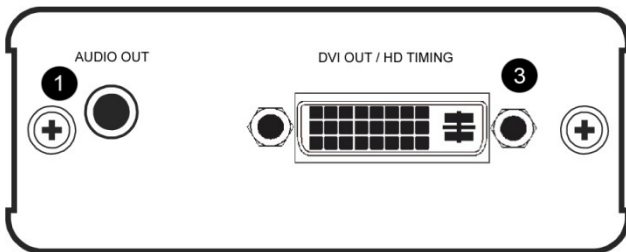
38197 & 38199



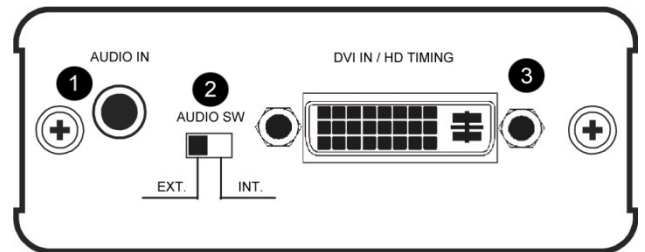
1. Locking 5V DC Power connector - plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet. The locking connector prevents the power connector coming loose accidentally or from exposure to vibration and temperature cycling
2. Power LED - the blue LED will illuminate continuously when the device is connected to the power supply and powered on
3. Lock LED - the yellow LED will flash during the handshaking procedure then illuminate continuously when the devices is powered on and receiving/sending a signal
4. SDI IN/OUT - connects to the SDI input/output with BNC connector – use this connection for Extender setup

DVI-D/HDMI connections

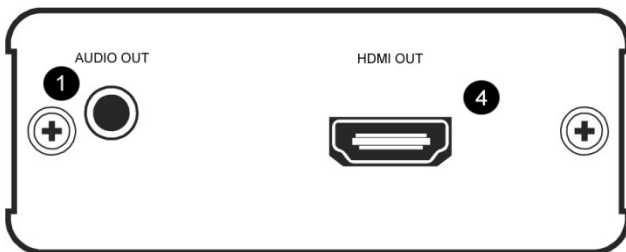
38196 – SDI to DVI-D Converter



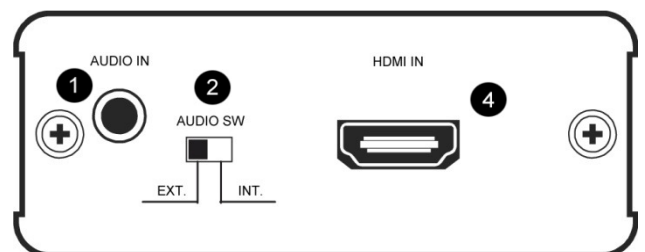
38197 – DVI-D to SDI Converter



38198 – SDI to HDMI Converter



38199 – HDMI to SDI Converter



1. Audio IN/OUT – 3.5mm stereo audio port for input/output of secondary audio stream
2. Audio SW – Select EXT. audio from 3.5mm port or INT. audio from DVI-D/HDMI audio
3. DVI-D IN/OUT / HD TIMING – connects to the DVI-D input/output
4. HDMI IN/OUT - connects to the HDMI input/output

Installation

Before connecting any devices, please ensure everything is powered off.

- Connect the 5V DC power supply

Converting video signals

- Connect the video source to the selected Converter using an appropriate cable
- Connect the output device to the Converter using an appropriate cable

Extending video signals

- Connect the DVI-D/HDMI video source to the selected Converter using an appropriate input cable
- Connect coaxial cable to the SDI output of one Converter and the SDI input of the other
- Connect the Converters DVI-D/HDMI output to the display using an appropriate cable

Audio signals

- Audio can either be sent from/via the DVI-D/HDMI or a separate 3.5mm stereo audio input/output by using the Audio SW switch

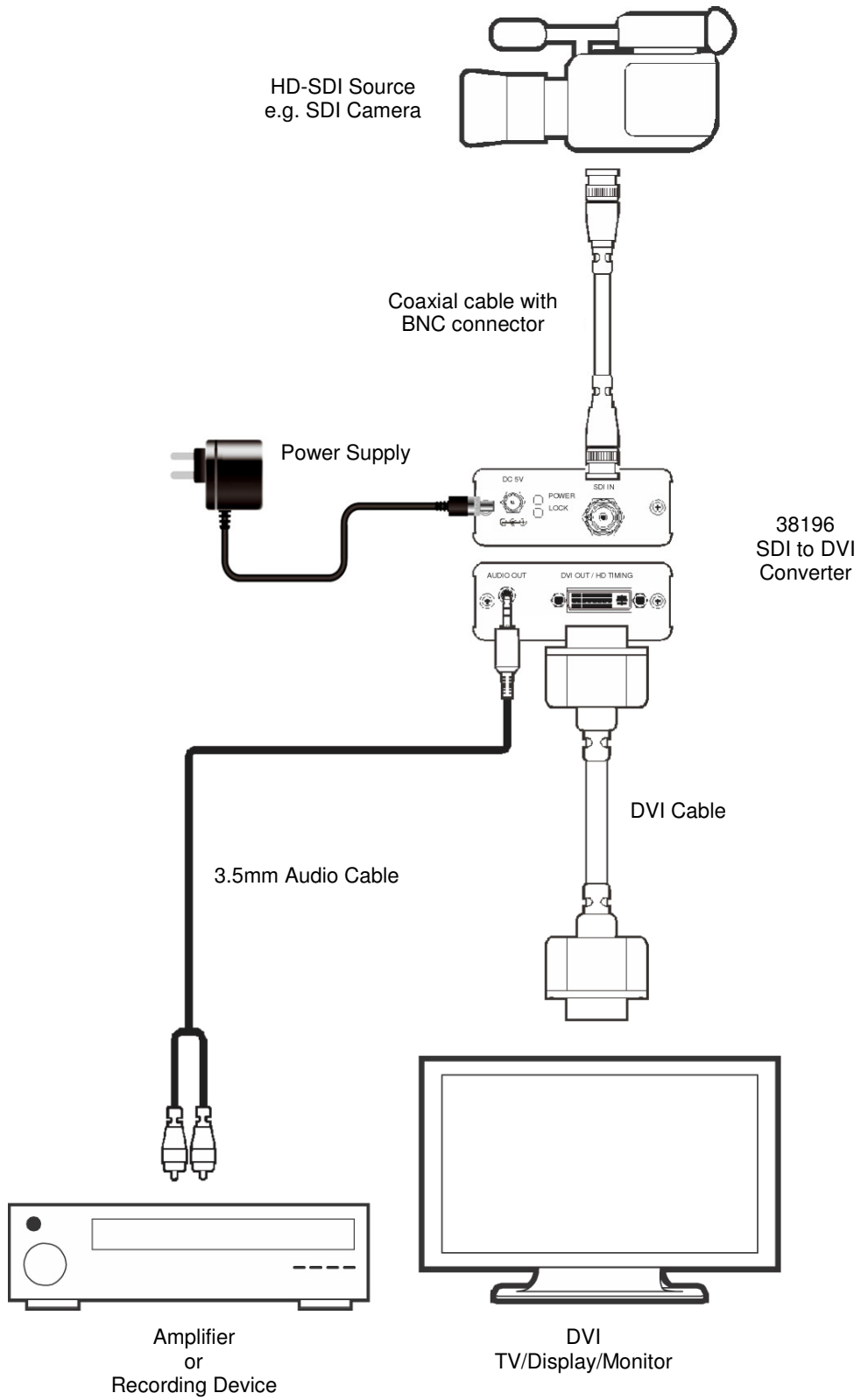
Note – Not all DVI devices support audio – please check with the DVI equipments manufacturer for details.

Once all cables are connected to the Converters, power on all devices.

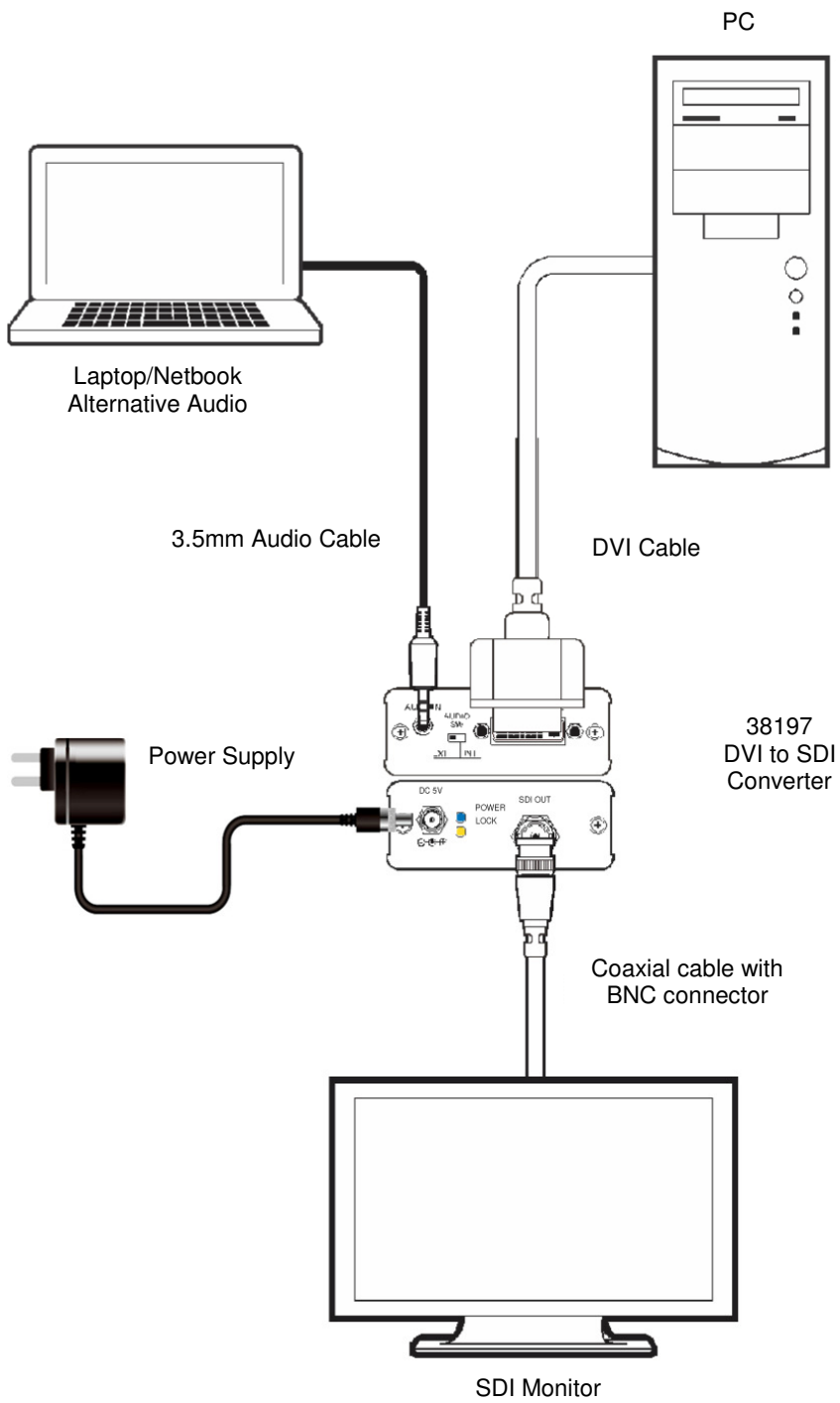
Some connection diagrams are shown on the following pages, to provide some examples of how these products may be installed.

Connection Diagrams - Converters

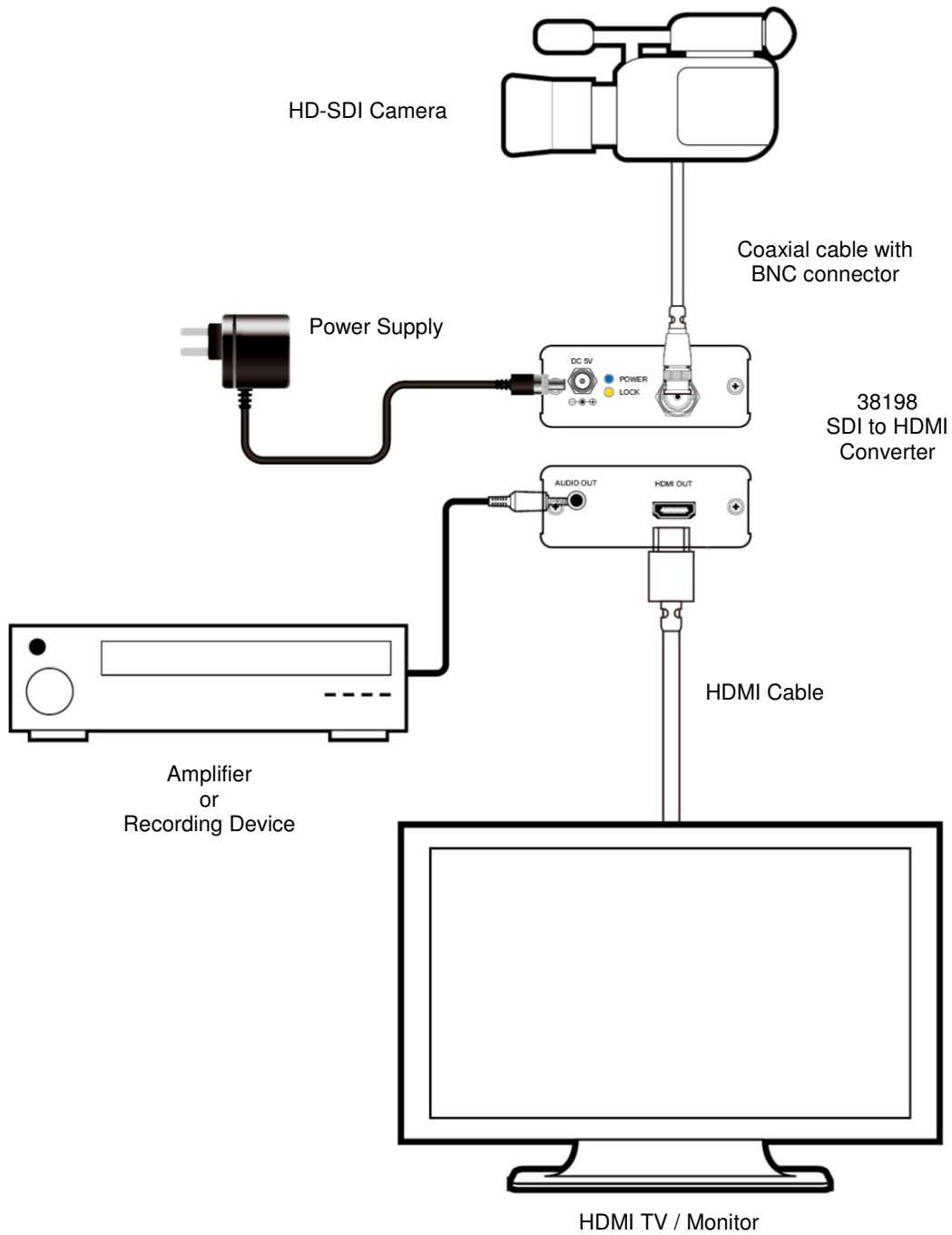
38196 - SDI to DVI Converter



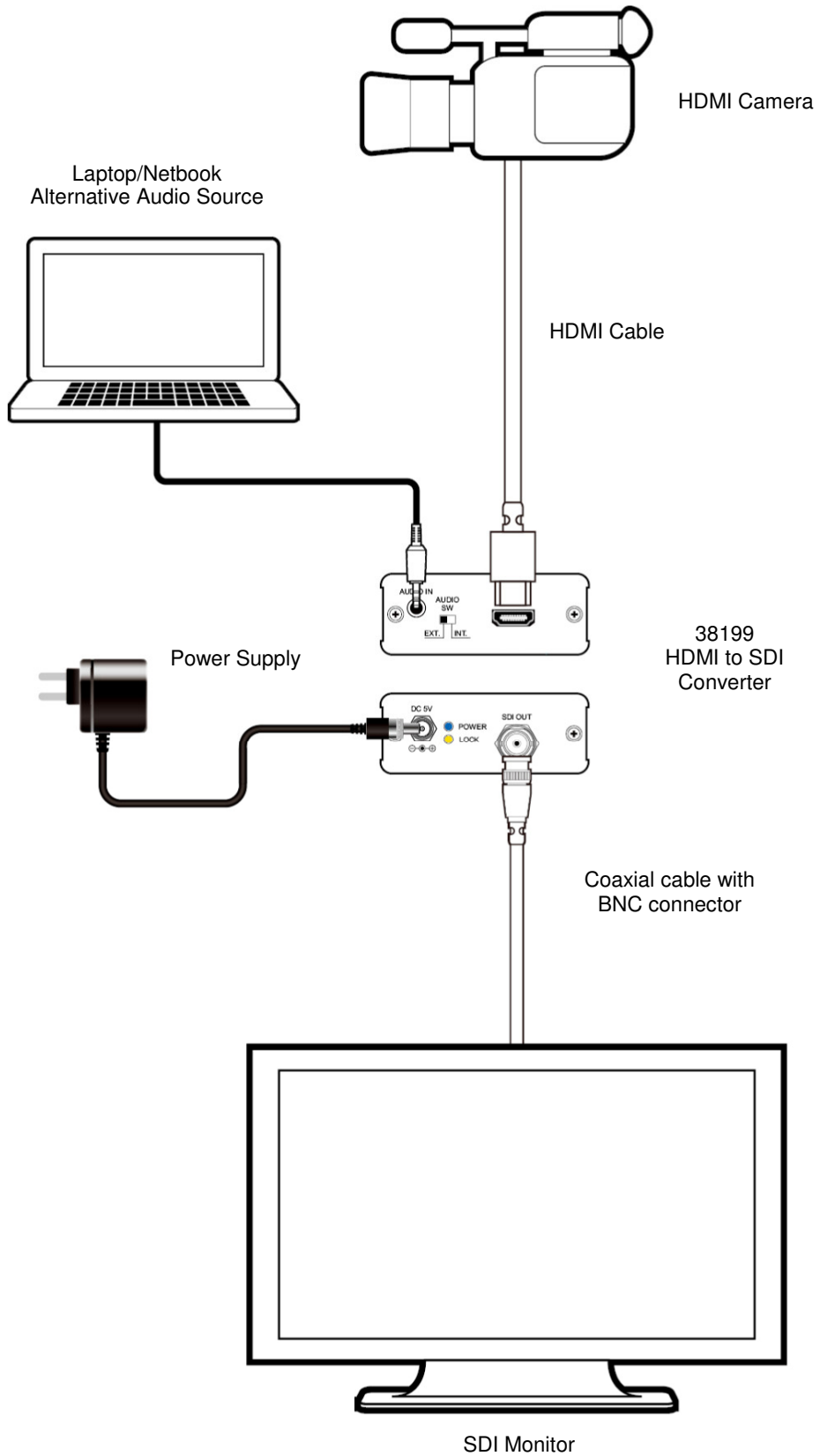
38197- DVI to SDI Converter



38198 - SDI to HDMI Converter



38199 – HDMI to SDI Converter



Connection Diagrams– Extenders

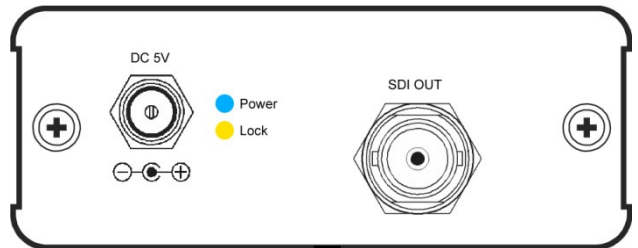
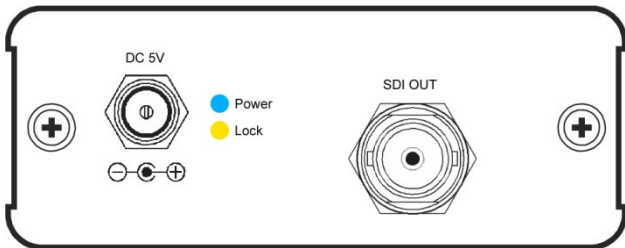
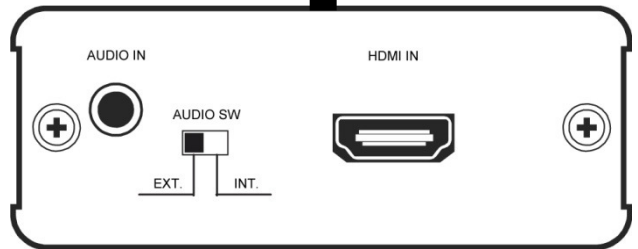
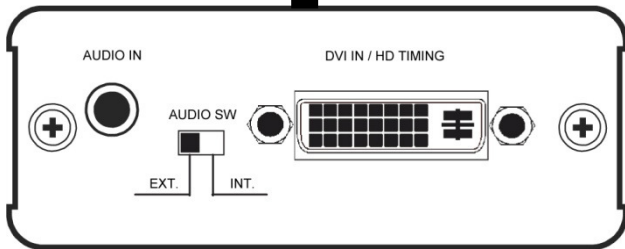
Provide power to both sender and receiver using the 5V DC power adapter

DVI-D
Source

HDMI
Source

38197

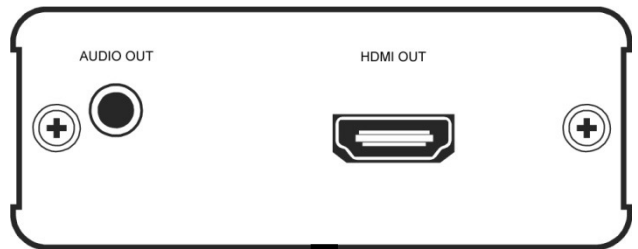
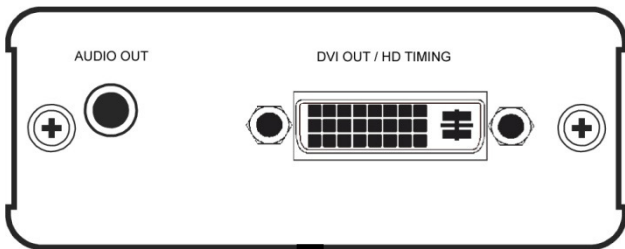
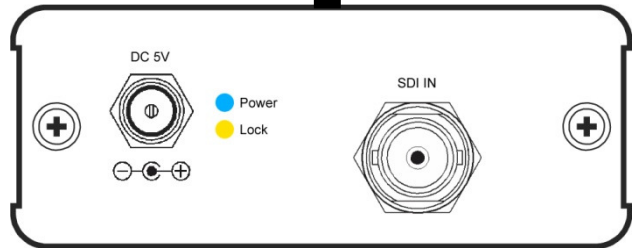
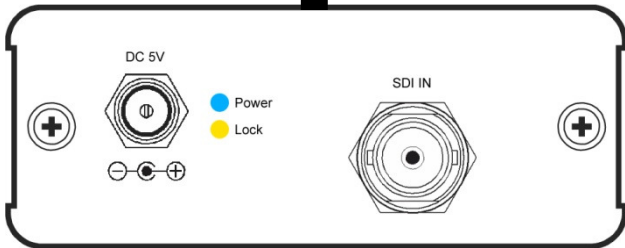
38199



Extension via coaxial cable with BNC connectors
up to 100m

38196

38198



DVI-D
Output

HDMI
Output

CE / FCC Statement

CE Certification

This equipment complies with the requirements relating to Electromagnetic Compatibility Standards EN55022/EN55024 and the further standards cited therein. It must be used with shielded cables only.
It has been manufactured under the scope of RoHS compliance.

CE Konformitätserklärung

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU für IT-Equipment und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

Diese Geräte wurden unter Berücksichtigung der RoHS Vorgaben hergestellt.
Die formelle Konformitätserklärung können wir Ihnen auf Anforderung zur Verfügung stellen.

FCC Certification

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 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.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under 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.

LINDY Herstellergarantie – Hinweis für Kunden in Deutschland

LINDY gewährt für dieses Produkt über die gesetzliche Regelung in Deutschland hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.



**WEEE (Waste of Electrical and Electronic Equipment),
Recycling of Electronic Products**

Europe, United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

Die Europäische Union hat mit der WEEE Richtlinie Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet das Entsorgen von entsprechenden, auch alten, Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique. Chaque Etat membre de l' Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate. Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico. Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

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