

User Manual

HD-SDI Extender over CAT5 / 6



NOTE: The casing design is subject to change without notice.

Our HD-SDI Extender via cat 5/6 allows HD-SDI signal to be transmitted up to 60m / 200ft via CAT6 cable in a point-to-point configuration. The SDI-UTP Extender supports video bandwidth up to $1.485\,$ Gbps uncompressed,un-encrypted digital video (optionally including embedded Audio and/or Time Code), widely applied to television facilities and professional video equipment.

Features

- * Up to 40m / 120ft via CAT5e cable
- * Up to 60m / 200ft via CAT6 cable
- * Supports SDI-SMPTE 259M-C (270Mbps);
- * HD-SDI-SMPTE 292M (1.485 / 1.001 Gbps)
- * LED diagnostics: sync, SDI detect
- * 5V~24V DC



Please read the Manual before attempting to use this product.

Specifications and appearance are subject to change without notice.



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN!



TO REDUCE THE RISK OF ELECTRICAL SHOCK,
DO NOT OPEN COVERS (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).

This symbol on the product or on its pac kaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent pot ential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



1. Handle this product with care

Avoid any shock or bumping of the product. Improper handling could damage the product. Do not handle the unit with wet hands. Provide proper ventilation and air circulation and do not use near water.

2. Requires a proper operating environment

This product is not waterproof and is designed for indoor use. The allowable temperature range for operation of this product is between $0^{\circ}\text{C}^{40^{\circ}\text{C}}/32^{\circ}\text{F}^{104^{\circ}\text{F}}$.

3. Check the power source voltage

The power source voltageshould be within the specified range. (Product must meet the specifications).

4. Objects and liquid entry

Never push objects of any kind into this product as this may touch dangerous voltage points of short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.

5. Cleaning

Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

6. Servicing

Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltage or other hazard s. Refer all service to qualified servicing personnel.

PackageContents

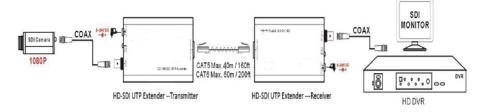
- 1. One (1) transmitter
- 2. One (1) receiver
- 3. One (1) User Manual
- 4. One (1) AC Adapter



For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged.

ApplicationDiagram

* In order to achieve the Best Quality and Long Range cable run of up to 50m / 160ft for CAT5e and 60m / 200ft for CAT6, you will need Good Quality Cable, Good Quality RJ45 Jack, and Good Quality Installation. All these 3 points are important because it affects the transmission distance.



Parts&Functions .



HD- SDI UTP Extender over CAT5/6 (Transmitter)



HD-SDI UTP Extender over CAT5/6 (Receiver)

Name	Color	Status	Description
ACT	Green	Flicker	SDI signal is active status.
		OFF	SDI signal is inactive status.
PWR	Green	ON	Power source has been connected.
		OFF	Power source hasn't been connected.

InstallationGuide

- 1. To open the box, then checking the quality, model no. and quantity of the equipments and accessories according to the picking list, any questions, Please feel free to contact us or the local distributors.
- 2. Connect SDI signal source e.f SDI Camera to SDI- IN port of the transmitter and connect SDI-out port of receiver to other SDI device e.f SDI camera via quality coax cable
- Connect the RJ-45 port of transmitter and RJ-45 port of receiver via quality twist pair cable with RJ-45 connectors
- 4. Power of the transmitter and receiver

Technical Specifications

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Item	HD-SDI UTP Extender		
Model	Transmitter	Receiver	
Input	75 Ohm, BNC	RJ-45	
Output	RJ-45	750hm BNC	
Standard	SMPTE 259M (270Mb/s), SMPTE 292M		
Data Rate (SDI port)	270Mb/s, 1.485Gb/s (automatic selection)		
	SD-SDI : 525i, 59.94 Hz & 625i, HD-SDI : 720P 23.98/24/25/29 1080I 50/59.97/60		
Support Format (SDI)	1080P 23.8/24/25/29.97/30		
Maximum Distance	CAT5e UTP/STP: 40m / 130ft CAT6 UTP/STP: 60m / 200ft		
Power Supply	Two 100-240V/12V DC 1.25A		
Power Consumption	6W		
Dimensions	98 x 65 x 28mm / 3.85x 2.55 x 1.1 inches		

^{*}Specifications are subject to change without notice

KeyComponents

Components Made in USA for this product:

Name of Component	Manufacturer			
Multi-Rate SDI Adaptive Cable Equalizer	Mindspeed & Gennum			
Multi-Rate SDI Automatic Reclocker	Mindspeed & Gennum			
Multi-Rate Dual Slew-Rate Cable Driver	Mindspeed & Gennum & National Semiconductor			
Data Communication IC	MAXIM			

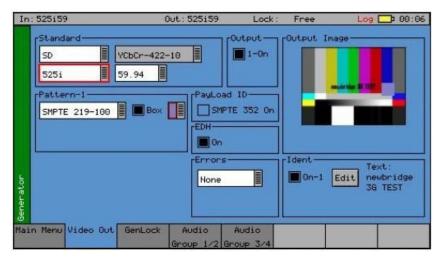
Components Made in Chira for this product:

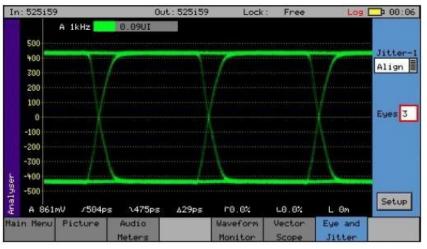
Name of Component	Manufacturer
DC/DC Converter	Richtek

 $[\]ensuremath{^{*}}$ Key components are listed by the manufacturer and are subject to change without notice

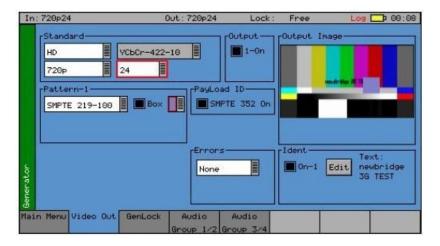
EveDiagram&JitterPerformance

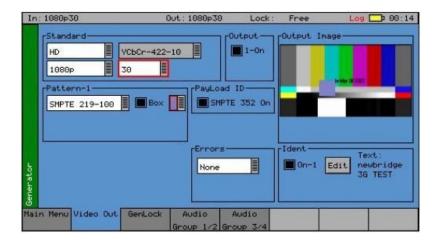
SD Mode





HD Mode



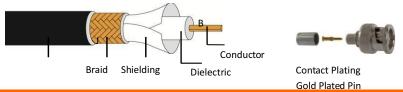




IMPORTANT NOTE: Cable & Connector for SDI HD Camera

In order to achieve the <u>Best Quality</u> and <u>Long Range</u> coax cable run of up to 200m / 600ft, you will need:

- Good Quality Cable: We suggest using RG6 Belden 1694A <u>Low Loss Serial</u>
 <u>Digital</u> coax cable because RG6 cables have better grounding than RG59 cables.
 RG6 is for Digital Signal and RG59 is for Analog Signal.
- Good Quality BNC Connectors: Contact Plating Gold plated pins provide exceptional conductivity.
- Good Quality Installation: Do not over cut the braid because it will affect the grounding. The image will have lines and noise. are opper acket



LimitedWarranty

LIMITEDONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer pur chaser and not for the benefit of anyone else th at this product at the time of its sale by Manufacturer is free of defec ts in materials and workmanship under normal and pro per use for one (1) ye ar from the purchase date. Manufacturer's only oblig ation is to correct such defects by rep replacement, at its option, if within such on e (1) year period the product is returned prepaid, with proof of purchase date, and a desc ription of the proble m. Th is warran t excludes and there is disclaimed lia bility for labor for remov al of this pro duct o r reinstallation. This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, ab used, or al tered in any manner, or is not used under normal operating conditions or not in accord ance with any labels or instructions. There are no other implied warranties of any kind, including merchantability and fitness or a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warrant, including merchanta bility and fitness of or a particular purpose, is limited to one (1) year.

Manufacturer is not I iable for inciden tal, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation. The remedies, provided therein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.