

HD-SDI Extra Long Range Repeater

ITEM NO.: SR02



SR02 is a repeater for HD-SDI links operating with 75Ω coax cable. It can be daisy chained together up to 5 pieces of SR02 with working distance 1KM. When using multiple SR02 repeaters installation, the repeater power could be send over coax cable from the remote repeater (nearest the DVR). It also support RS485 data control as well. The application could be using for HD CCTV HD-SDI camera extra long range video monitoring.

Features:

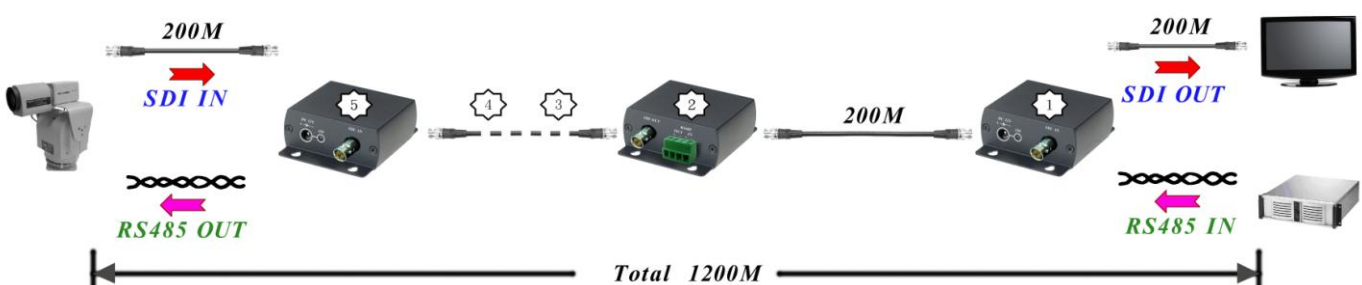
- Extend HD SDI signal over 75Ω coax cable up to 200M.
- Support SDI (SMTPE 259M), HD-SDI (SMTPE 292M), 3G-SDI (SMTPE 424M).
- Support video signal NTSC, PAL, 720p, 1080i, 1080p.
- Built in RS485 control with half duplex speed up to 57,600 bps, but which effects only when using 2 piece or more than 2 pieces SR02 long range installation.
- Ability to do multiple repeaters application up to 5 pieces with distance 1KM (Max.)
- Ability to send power to next SR02 repeater unit over coax cable from the remote repeater (nearest the DVR) when using 2 piece or more than 2 pieces SR02 long range installation.
- Reclocker to resynchronize the signal—bringing it back to its original condition.

Installation:

SR02 single unit application:



SR02 multi units application: (up to 5 pieces Max.)



Recommend Cable:

Link cable recommend to use high quality 75Ω Coaxial Cable, low quality coaxial cable may case signal loss and effect transmission distance and reliability.

Working Distance:

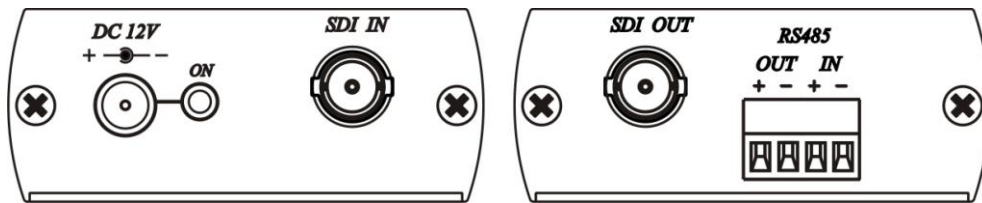
Max. distance via high quality 75Ω Coaxial Cable (Belden 1694A RG6U Testing)		
SD resolution (270Mbps)	400M	
HD resolution (1.45Gbps)	200M	1KM (5 pieces)
Full HD resolution (2.97Gbps)	100M	500M (5 pieces)

Max. distance via high quality 75Ω Coaxial Cable (Belden 1505A RG59 Testing)		
SD resolution (270Mbps)	300M	
HD resolution (1.45Gbps)	150M	750M (5 pieces)
Full HD resolution (2.97Gbps)	80M	400M (5 pieces)

LED Indication:

GREEN Power

Panel View:



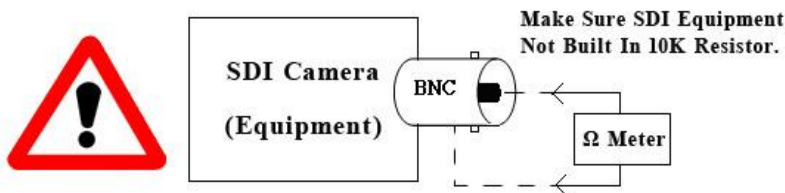
Troubleshooting:

1. Link cable recommend to use high quality “Belden 1694A RG6U” 75Ω Coaxial cable to reach HD resolution at 200M. Use low quality coaxial cable and BNC connectors may case signal loss and effect transmission distance and reliability

2.SR02 repeater: built in “POC” (POWER OVER COAX) function, which will send power automatically to next SR02 repeater via BNC connector. But for a few SDI cameras (equipments) whose BNC connector built in 10K resistor. It will make SR02 send power automatically to your SDI equipments and damage your SDI equipment.

Before installation, we strongly recommend you to measure your SDI equipment BNC connector without built in 10K resistor.

As below diagram:



3. SR02 repeater: RS485 control signal only support one way from monitor control side to SDI equipment (camera), not able to do bi-directional data transmission.

4. SR02 repeater: built in “POC” (POWER OVER COAX) function, which will send power automatically to next SR02 repeater. The Power LED on only effected at last repeater which nearest the camera. All other repeaters the power LED will be off.

Specification:

ITEM NO.	SR02
SDI Standard / Protocol	SMTPE 259M - SDI(143 to 360 Mbps) . SMTPE 344M - (540 Mbps) . SMTPE 292M - HD-SDI(1.485 Gbps) . SMTPE 372M - dual link HD-SDI(2.97 Gbps) . SMTPE 424M - dual speed HD-SDI(2.97 Gbps) .
SDI Input Connector	BNC 75Ω
SDI Output Connector	BNC 75Ω
Power Consumption	70mA (Max)
Power Supply	Switching DC12V 500mA
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%
Dimensions	67 x 91 x 27 (mm)
Weight	200 g

RoHS   

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