

# QUESTTEL

Broadcast Systems

## 3G/HD-SDI 1x8 Splitter Amplifier

# User Manual

## B-8SDI-SPL

Distribute 1 SDI Signal to 8 SDI Monitors



## **Intended Audience**

This user manual has been written to help people who have to use, to integrate and to install the product. Some chapters require some prerequisite knowledge in electronics and especially in broadcast technologies and standards.

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## Product Overview

The QuestTel 1x8 SDI Splitter which make it possible to transfer 1SDI signal to 8 SDI outputs providing full HD 1080p resolution to up to 8 displays simultaneously for faster broadcasting and production.

The splitter accepts one SDI input from the SD-SDI, HD-SDI, or 3G-SDI video source such as VTR, SDI recorders and other sources. After replicating the signal perfectly, it automatically deploys cable equalization to simultaneously transmit SDI signals as far as 1000 feet (300 m) over 8 x BNC coax runs to 8 monitors. For HD-SDI video, the splitter goes up to 500 feet (150 m) and for 3G-SDI video, up to 328 feet (100 m).

Ideally used with SDI based surveillance systems, rental & staging facilities, post-production, TV studio, digital cinema, or other A/V applications where you need to split and extend from a camera or other device equipped with 3G/HD/SD-SDI outputs to 8 SDI-compliant displays or video processors.

## Features

- Get the highest quality 3G SDI distribution to 8 SDI monitors
- Outputs video on 8 separate buffered and re-clocked BNC ports.
- Built-in equalizer for I/O drive at long distances over RG6
- Supports Embedded- Audio
- Supports multiple video resolutions:
  - SDI 525i, 625i
  - HD: 720p 24, 25,30,50 & 60 Hz.
  - HD: 1080i 50 & 60 Hz.
  - HD: 1080p 24, 25,30, 50 & 60 Hz.
  - 3G: 1080p 50/60Hz.
- Compatible with HDcctv 1.0, HD-SDI (ST 292), 3G-SDI (ST 424) and SD-SDI (ST 259)
- Supports Multiple Color Space: RGB or YCbCr 4:4:4 sampling
- Support for YCbCr: 4:2:2 sampling
- Data rates up to 2.97 Gbps
- Color Depth Support: 8 bit, 10 bit & 12 bit
- LED's for power and input signal
- Automatically switches between SD, HD and 3 Gb/s SDI standards

## Tech Specs

### Video Input

Input: 1xSDI Male  
Input Connector: 1xBNC Male  
Input Video Signal: SD/HD/3G SDI

### Video Output

Output: 8 x SDI Male  
Output Connector: 8xBNCs  
Output Video Signal: 3G/HD/SD-SDI

### Resolutions (HDTV)

1080p, 1920x1080  
720p; 1280x720  
1280x720, 480i (NTSC mode) 576i Standard PAL mode

### 3G(1080p 60Hz) Mode:

Input: up to 328 feet (100m)  
Output: up to 295 feet (90m)

### HD (720p60Hz) Mode:

Input: up to 722 feet (220m)  
Output: up to 590 feet (180m)

### SD (480i) Mode:

Input: up to 1050 feet (320m)  
Output: up to 918 feet (280m)

### Operating Specs:

Operating Temperature: 0°C to +70°C  
Operating Humidity: 10% to 85 % RH (no condensation)  
Storage Temperature: +1°C to +70°C  
Storage Humidity: 5% to 90 % RH (no condensation)

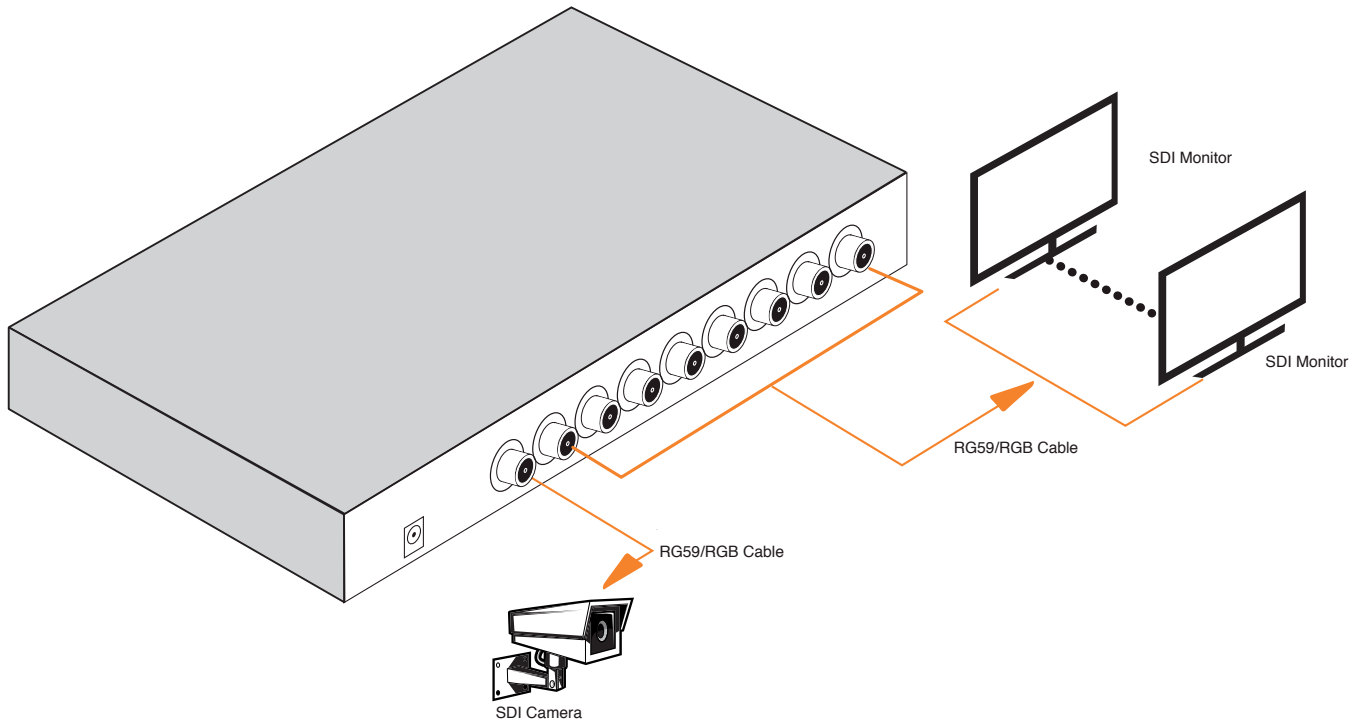
### Size:

Size: (LWH): 13.79 x 6.0 x 1.80 inches  
Weight: 3.63 lbs

### Power:

External power supply: 5VDC@2A

## Application Drawing



Read before operating equipment.

1. **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
2. **Power Sources** - Use supplied or equivalent UL/CSA approved low voltage DC plug-in transformer.
3. **Outdoor Antenna Grounding** - If you connect an outside antenna or cable system to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
4. **Lightning** - Avoid installation or reconfiguration of wiring during lightning activity.
5. **Power Lines** - Do not locate an outside antenna system near overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, refrain from touching such power lines or circuits, as contact with them might be fatal.
6. **Overloading** - Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
7. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts, resulting in a fire or electric shock. Never spill liquid of any kind on the product.
8. **Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
9. **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - When the power supply cord or plug is damaged.
  - If liquid spills or objects fall into the product.
  - If the product is exposed to rain or water.
  - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. An improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  - If the video product is dropped or the cabinet is damaged.
  - When the video product exhibits a distinct change in performance, this indicates a need for service.