



Structured Cable Products
Quality Installations Deserve Quality Products



HDMI EXTENDER OVER SINGLE COAXIAL CABLE

PART# 961

OPERATING INSTRUCTIONS



Safety and Notice

SCP's 961- HDMI Extender over Single Coaxial Cable has been tested for conformity to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the 961 should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning

Introduction

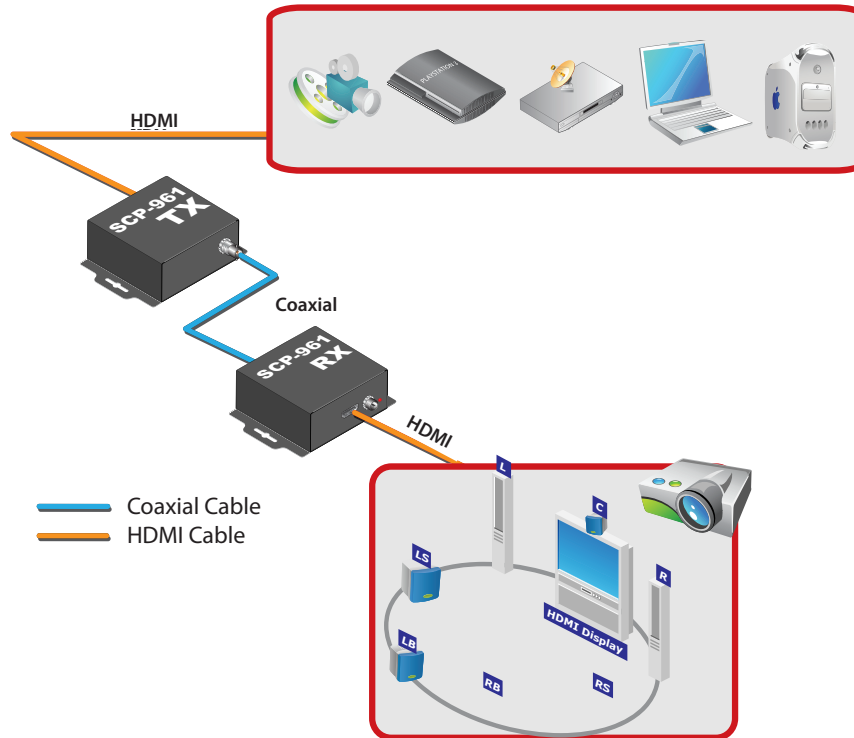
SCP's 961- HDMI Extender over Single Coaxial boosts up your HDMI transmission range up to 60m (180ft) in HDTV 1080p format through a single coaxial cable. The 961 is easy to install and works with any coaxial cable. The transmission distance depends upon the quality and bandwidth of the particular coaxial cable you will be using with SCP's 961.

The 961 includes two units: transmitting (961-TX) and receiving (961-RX) units. The transmitting unit is used to capture the HDMI and HDCP input signals and carry the signals through only coaxial cable. The receiving unit is responsible for auto equalizing the transmitted HDMI multimedia data. The transmission range between the sending and receiving units can be up to 60m (180ft) under Full HD (1080p) with 7.1 channel audio.

Features

- HDMI® High Speed
- HDCP compliant
- Single coaxial cable
- 7.1-channel audio supported
- Extends the transmission range up to 60m (180ft) from the HDMI sources under Full HD resolution 1080p 24-bit color depth.
- Video resolutions support 480i, 576i, 720p, 1080i, and 1080p

Installation



1. Connect a HDMI source to the transmitting unit 961-TX.
2. Connect a HDMI display or projector to the receiving unit 961-RX.
3. Connect a coaxial cable between the transmitting and receiving units.
4. Make sure this coaxial cable is tightly connected and not loose.
5. Plug in 5V DC power supply units to the latch-locking power jack on the both transmitting and receiving units of SCP 961.

Specifications

Role of usage		Transmitter [TX]	Receiver [RX]
HDMI compliance		HDMI High Speed	
HDCP compliance		Yes	
Video bandwidth		Single-link 225MHz [6.75Gbps]	
Video support		480i/480p/ 720p/ 1080i/ 1080 p60	
Audio support		Surround Sound (up to 7.1 channel) or stereo digital audio	
HDMI over Coax transmission range		Full HD [1080p 24-bit color] - 60m (180ft)	
HDMI equalization		Auto	
Input TMDS signal		1.2 Volts [peak to peak]	
Input DDC signal		5 Volts [peak to peak]	
ESD protection		[1] Human body — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±4kV	
PCB stack-up		4-layer board [impedance control Ñ differential 100Ω; single 50Ω]	
Input		1x HDMI	
Output		1x BNC	
IR remote control		N/A	
HDMI connector		Type A [19-pin female]	
BNC connector		75Ω interlocking socket	
2.5mm connector		2.5mm earphone jack for IR receiver to receive IR commands from IR remote	
3.5mm connector		3.5mm earphone jack for IR blaster to control HDMI source device	
MECHANICAL		SCP 961	
Enclosure		Metal Enclosure	
Dimensions (L x W x H)	Model	[TX] Ø75 x 75 x 30mm [3Øx 3Øx 1.2Φ] [RX] Ø55 x 75 x 30mm [2.2Øx 3Øx 1.2Φ]	
	Package	175 x 265 x 80mm [6.9"x10.4"x3.1"]	
	Carton	450 x 370 x 300mm [1'6"x 1'3"x 1']	
Weight	Model	[TX] Ø215g [7.6oz] / [RX] Ø160g [5.6oz]	
	Package	950g [2.1 lbs]	
Fixedness		Interlocking power supply	
Power supply		5V 4A DC	
Power consumption		6 Watts [max]	
Operation temperature		0~40°C [32~104°F]	
Storage temperature		-20~60°C [-4~140°F]	
Relative humidity		20~90% RH [no condensation]	

Panel Descriptions

Transmitter: 961-TX Input Panel



2-pin DIP Switch: Please see below table for detail information

HDMI IN: Connect to a HDMI source device with a HDMI male-male cable here

+5V DC: Connect to a 5V DC power supply unit

LED: Green light means video in Full-HD mode. Orange light means video in SD or HD mode.

DIP Switch

Pin No.	1	2
OFF (↑)	Default EDID (1080p)	7.1ch PCM audio
ON (↓)	Default EDID (720p / 1080i)	stereo PCM audio

1. Factory default: 1.

Factory default: OFF-OFF [↑↑]

Output Panel



COAX OUT: connect to the a high standard coaxial cable here

Receiver: 961-RX Input Panel



COAX IN: Connect to a high standard coaxial cable here

Output Panel

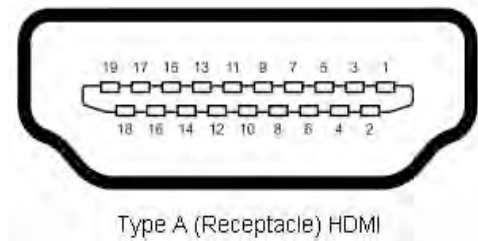


HDMI OUT: Connect to a HDMI display with a HDMI male-male cable here

+5V DCT: Connect to a 5V DC Power Supply Unit

LED: Orange light meas in mormal operation mode

HDMI Pin Definition



Pin 1	TMDS Data2+	Pin 8	TMDS Data0 Shield	Pin 15	SCL
Pin 2	TMDS Data2 Shield	Pin 9	TMDS Data0 \bar{D}	Pin 16	SDA
Pin 3	TMDS Data2 \bar{D}	Pin 10	TMDS Clock+	Pin 17	DDC/CEC Ground
Pin 4	TMDS Data1+	Pin 11	TMDS Clock Shield	Pin 18	+5 V Power
Pin 5	TMDS Data1 Shield	Pin 12	TMDS Clock \bar{D}	Pin 19	Hot Plug Detect
Pin 6	TMDS Data1 \bar{D}	Pin 13	CEC		
Pin 7	TMDS Data0+	Pin 14	Reserved (N.C. on device)		

1. Since SC is sensitive to the HDMI source's input jitters, the input HDMI signals with larger jitters will shorten the transmission distance hugely, especially for full HD 1080p!
2. The lab testing result shows that Belden 1694A coaxial cables can transmit HDMI High Speed 1.3a signals up to 60m (180ft).
3. If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input [HDMI input #1] generally can produce better transmission performance among all HDMI inputs.

Limited Warranty

Structured Cable Products warrants the 961 HDMI Extender over Single Coaxial Cable to be free from defects in the material and workmanship for 1 year from the date of purchase from Structured Cable Products or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, Structured Cable Products, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by **Structured Cable Products** for its buyer with direct transaction only.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the buyer. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, **Structured Cable Products** assumes no responsibility for any inaccuracies that may be contained in this manual. **Structured Cable Products** will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding SCPs' 961 features and specifications is subject to change without further notice.

Thank you for your purchase.

STRUCTURED CABLE PRODUCTS
6228 Hiatus Road
Tamarac FL 33321 - USA

Tel: (954) 327-5770 Fax: (954) 327-8176
Email: sales@scpcat5e.com • <http://www.scpcat5e.com>