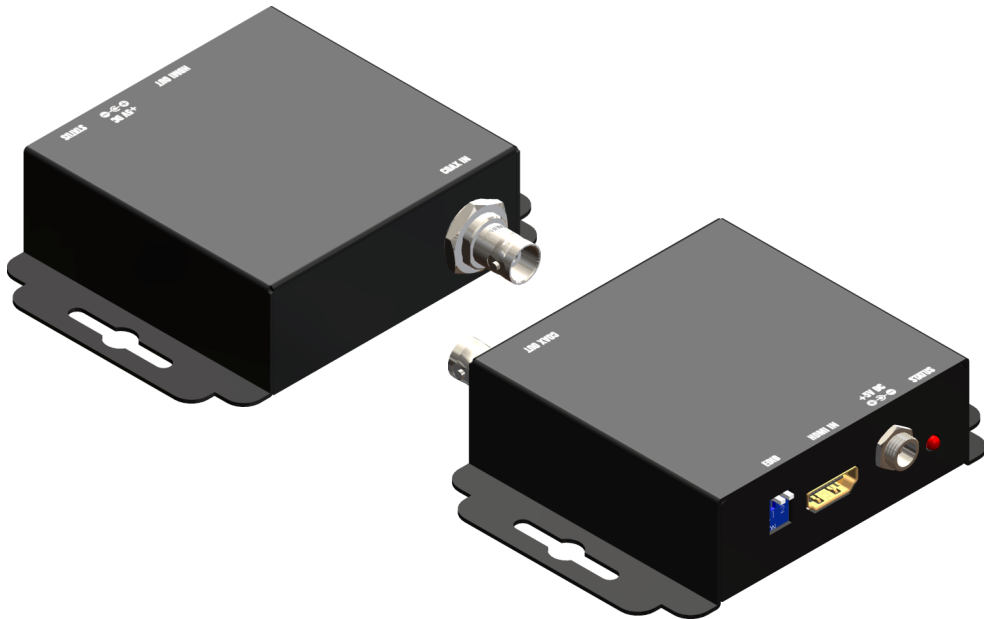


CV-54G

HDMI Extender over Single Coax

User Manual



Safety and Notice

The **CV-54G HDMI Extender over Single Coax** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CV-54G** 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.



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rev: 121114
Made in Taiwan

INTRODUCTION

The **CV-54G HDMI Extender over Single Coax** boosts up your HDMI transmission range up to 120m (394ft) in HDTV 1080p format through single coaxial cable. CV-54G is easy to install and works perfectly with Belden 1694A coaxial cables. Other coaxial cables can also work with CV-54G and the transmission distance depends upon the quality and bandwidth of coaxial cables.

The CV-54G includes two units: transmitting (CV-54G-TX) and receiving (CV-54G-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 120m (394ft) under Full HD (1080p) with 7.1 channel audio.

FEATURES

- Support HDMI Deep Color
- HDCP compliant
- Single coaxial cable
- 7.1-channel audio supported
- Extends the transmission range up to 120m (394ft) from the HDMI sources under Full HD resolution (1080p60 24-bit color depth) through Belden 1694A coaxial cable.
- Video resolutions support 480i, 576i, 720p, 1080i, and 1080p



The claimed transmission distance here is subject to the grade of installed cable(s), source device and display.

For over Cat.X/COAX transmission, the cable(s) has to be solid, not stranded. Any keystone jack along the transmission path will kill the transmission performance significantly!

PACKAGE CONTENTS

- 1x CV-54G [TX & RX]
- 2x DC 5V 2A wall wart
- 1x User Manual

SPECIFICATIONS

Model Name		CV-54G	
Technical		CV-54G[Tx]	CV-54G[Rx]
Role of usage		Transmitter [TX]	Receiver [RX]
HDMI compliance		HDMI Deep Color	
HDCP compliance		Yes	
Video bandwidth		Single-link 225MHz (6.75Gbps)	
Video support		480i / 480p / 720p / 1080i / 1080p60 up to 36-bit color	
HDMI over Coax transmission range		Full HD [1080p 24-bit color] – up to 120m [394ft]	
Audio support		Surround sound (up to 7.1 ch) or stereo digital audio	
HDMI Equalization		Auto	
Input TMDS signal		1.2 Volts [peak-to-peak]	
Input DDC signal		5 Volts [peak-to-peak, TTL]	
ESD protection		[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±8kV	
PCB stack-up		6-layer board [impedance control — differential 100Ω; single 50Ω]	
Input		1x HDMI	1x BNC
Output		1x BNC	1x HDMI
IR remote control		N/A	
HDMI connector		Type A [19-pin female]	
BNC connector		75Ω interlocking socket	
Mechanical			
Housing		Metal enclosure	
Dimensions [L x W x H]	Model	75 x 75 x 30mm [3" x 3" x 1.2"]	55 x 75 x 30mm [2.2" x 3" x 1.2"]
	Package	270 x 175 x 80mm [10.6" x 6.9" x 3.1"]	
	Carton	450 x 370 x 300mm [1'6" x 1'3" x 11.8"]	
Weight	Model	215g [7.6 oz]	160g [5.6 oz]
	Package	950g [2.5 lbs]	
Fixedness		Interlocking power supply	
Power supply		5V 2A DC	
Power consumption		3 Watt [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

Transmitting unit ▶ CV-54G-TX



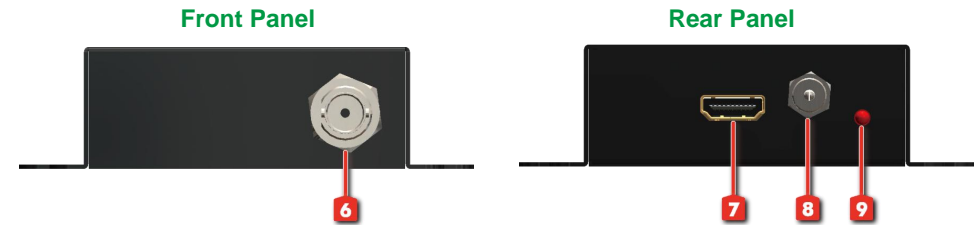
- COAX OUT:** Connect to a high standard coaxial cable here
- EDID MODE:** Please see below table for detail information

Pin #1	Pin #2	EDID feature
OFF (↑)	OFF (↑)	3G/HD/SD-SDI with multi-channel audio except DTS-HD Master & Dolby TrueHD
OFF (↑)	ON (↓)	3G/HD/SD-SDI With stereo PCM audio
ON (↓)	OFF (↑)	HD/SD-SDI With stereo PCM audio
ON (↓)	ON (↓)	EDID Learning Mode

Factory default: OFF-OFF [↑-↑]

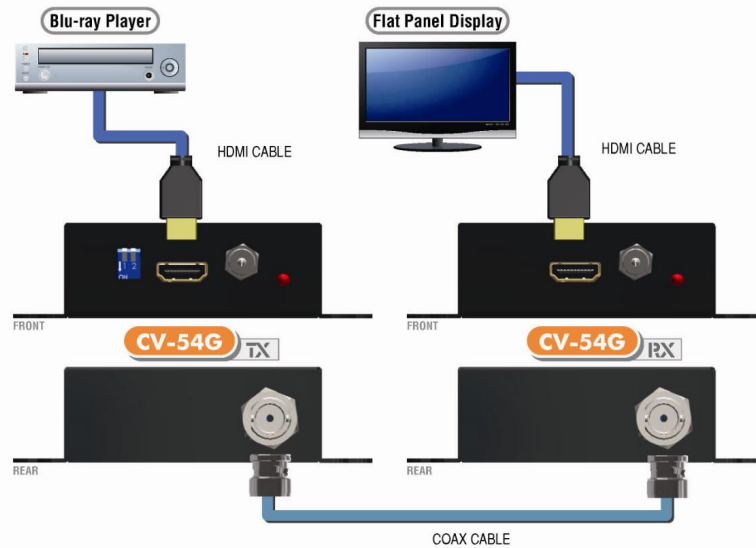
- HDMI IN:** Connect to a HDMI source device with a HDMI male-male cable here
- +5V DC:** Connect to a 5V DC power supply unit
- STATUS:** Yellow-green light means video in 3G mode. Orange light means video in SD/HD mode

Receiving unit ▶ CV-54G-RX



- COAX IN:** Connect to a high standard coaxial cable here
- HDMI OUT:** Connect to a HDMI display with a HDMI male-male cable here
- +5V DC:** Connect to a 5V DC power supply unit
- STATUS:** Yellow-green light means video in 3G mode. Orange light means video in SD/HD mode

→ HDMI
→ COAXIAL



The SELLER warrants the **CV-54G HDMI Extender over Single Coax** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, 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 the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

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. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and 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, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER 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 the **CV-54G** features and specifications is subject to change without further notice.

NOTICE

1. Since CV-54G 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@60P
2. The lab testing result shows that Belden 1694A coaxial cables can transmit HDMI signals up to 120m (394ft).
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.