

# Passive Video Filter Balun

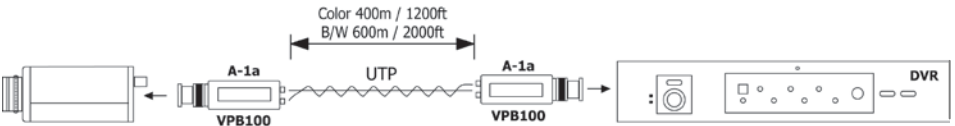
## Model: VPB100P – Pair



### Features:

- Uses an Unshielded Twisted Pair cable (UTP), like CAT5, to transmit full motion camera video signal in Color up to 400 m / 1200 ft and in B/W up to 600 m / 2000 ft.
- **Surge / Lightning Protection:** 10/700  $\mu$ s Pulses: 2kV  
Standard: IEC61000-4-5
- **ESD : Electrostatic Discharge Protection:** Contact Discharge: 6kV / Air Discharge: 8kV / Standard: IEC61000-4-2
- **Wave / Interference Rejection & Noise Filter:** Built-in Filter: 0–6HMz with Extra Interference Rejection <60db
- Passive, no power required
- Fast, easy installation, saving time and money
- Substantial savings on the cost of the cable itself

### Application Diagram



### Package Contents

1. Two (2) VPB100 Passive Video Filter Balun
2. One (1) User Manual



### Caution:

- Do not connect this device to any power source.
- Do not handle the unit with wet hands.
- The unit is not waterproof and should not be used outdoors.

## Specifications

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<b>Model</b>		<b>VPB100P</b>
		Pair
<b>Video Input / Output</b>		BNC Male to 2 push pin terminal
<b>Surge Protections</b>	Video Output Protection	2kV (common mode), 10/700µs IEC61000-4-5
	Video Input Protection for Over Current	100mA
<b>Electrostatic Discharge Protection (ESD)</b>		Contact Discharge: 6kV / Air Discharge: 8kV Standard: IEC61000-4-2
<b>Wave / Interference Rejection &amp; Noise Filter Protection</b>		Built-in Filter: 0~6HMz with Extra Interference Rejection <60db
<b>Video Signal</b>		1V p-p, 75 Ohms
<b>Transmission Distance</b>		Color 400 m / 1200 ft ; B/W 600 m / 2000 ft
<b>Cable</b>		<b>UTP / Twisted Pair CAT5 (AWG24)</b>
<b>Power</b>		No Power Required
<b>Physical Properties</b>	Dimensions W x H x D	15 x 19 x 54 mm 0.59 x 0.75 x 2.13 inches
	Weight	42.5 g / 1.5 oz

\* Specifications are subject to change without notice

R&D Designed in Taiwan  
Assembled in China.

## Limited Warranty

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### LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. **This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance 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 merchantability and fitness of or a particular purpose, is limited to one (1) year. **Manufacturer is not liable for incidental, 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.

# Why Us? Quality

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## A. Passive Video Balun Comparison with Our Competitors

OURS		Other Competitors*		
UTP Balun		Taiwan	China	China
* Lifetime warranty				
	<p><b>A. PCB Placement welding</b> Fewer welding points machinery production High Reliability Vibration Proof</p> <p><b>B. Jumper welding</b> Many welding points Easy to be broken by vibration Complicated production procedure</p>			
YES	Surge / Lightning Protection	NO	NO	NO
YES	ESD Protection	NO	NO	NO
YES	Built-in Filter	YES	YES	NO
Standard for Us		Options for others		

Most of our competitors do not have all multiple protections with Lifetime Warranty

We build all our CCTV video baluns through technologies to protect them with:

### Surge/Lightning Protection

10/700 us Pulses: 2KV  
Standard E06100-4-5

### ESD: Electrostatic Discharge Protection

Contact Discharge: Up to 6KV  
Air Discharge: Up to 8KV Standard: IE061000-4-2

### Wave/Interference Rejection & Noise Filter

Built-in Filter: 0-6MHz with Extra Interference  
Rejection <60db

## B. Even a Small Part Makes a Big Difference!

We care for every small part & we learn from the mistakes we make!

Even a BNC connector can make a BIG difference.

All our BNC connectors have passed the Shaking Test without video loss.

UTP Balun's BNC Connector has a thicker center pin & thicker surrounding. This will avoid video loss while the balun is shaking.

### UTP Balun's BNC

Thicker Center Pin



Thicker Center Pin

### Other Company's BNC



OK! But still not good enough



NO GOOD!  
Thin Pin and Thin Surrounding

## C. On-going Testing for Quality Control

### Comparison with other Name Brand



### Test Instruments



### Multiburst Waveform Test



### Full Field Color Bar Test: Waveform



### Full Field Color Bar Test: Signal Phase Diagram



## Related Products

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### Passive Video Filter Balun

A-1

VPB100P – Pair



### BNC Passive Video Transceiver – K1

A-1b

VPBB-100



### Passive Video Filter Balun with Pigtail

A-2\_ A-2a

VPB100LP – Pair



### Passive Video Balun with Power Connector

A-3\_ A-3a\_ A-3b

VPB110TK = VPB110TM + VPB110TF as a Kit



VPB110TM - Male  
For Camera Side  
A-3a



VPB110TF - Female  
For Using Single Power Adaptor  
A-3b

### Passive Video/Power Lead Balun – RJ45

A-3C\_ A-3d\_ A-3e

VPB110RJK = VPB110RJM + VPB110RJF as a Kit



VPB110RJM - Male  
For Camera Side  
A-3d



VPB110RJF - Female  
For Using Single Power Adaptor  
A-3e

### Passive Video Balun with Video, Power Connector & Data

A-4

VPB111RJ



UTP = Unshielded Twisted Pair