



BalunKing

THE KING OF BALUNS

HD RJ45 Passive Power & Video Balun



HD BK PB1

The HD BK PB1 video balun is a passive (non-amplified) device that allows the transmission of real-time CCTV video signal via cost-effective Unshielded Twisted Paired(UTP) cable. Baseband (composite) signals of any type are supported.

Used in pairs, HD BK PB1 eliminates costly and bulky coaxial cable, allowing live CCTV colour video signal up to 1312ft (400m), power transmission up to 820ft(250m).

The superior interference rejection and low emissions of the HD BK PB1 allow video signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant.

HD BK PB1 has built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

KEY FEATURES - 1-CH Passive Video & Power Transmitter & Receiver (12V/24V DC/AC)

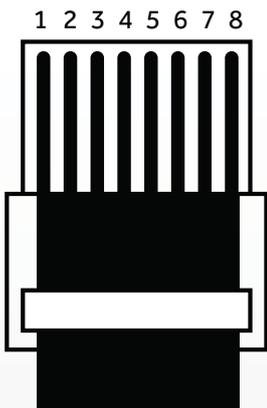
- Colour video signal up to 1312ft(400m)via UTP cat5e/6
- Transmit power signal up to 820ft(250m) in pairs
- Male BNC with extended mini-coax pigtail
- RJ45 Jack for UTP cable
- NTSC, PAL & SECAM video format compatible
- Real-time transmission
- No power required
- Exceptional interference rejection
- Built-in TVS for surge protection
- Lightning protection design Grade:III
- 50 dB crosstalk and noise immunity
- Wave Filter Design, Anti-Static Design
- Compact size and easy installation
- ABS Engineering plastic housing

WIRE AND CABLE RECOMMENDATIONS

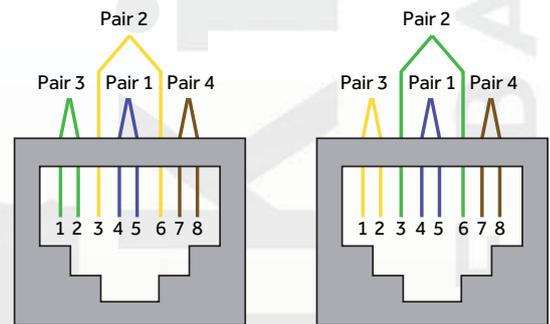
BK PB1 is recommended to use with Unshielded Twisted Paired (UTP) wiring from 24AWG through 22AWG. . Individually shielded pairs should be avoided, as they reduce the operating range of the systems drastically. Multi-pair cable (25-pair or more) with an overall shield are acceptable. Video signals can coexist in the same wire bundle as telephone, datacom, or low-voltages power circuits. While video may be routed through telephone punch-down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices **MUST BE** removed from the pair.

For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.

	1	2	3	4	5	6	7	8
T568A:	White Green	Green	White Orange	Blue	White Blue	Orange	White Brown	Brown
T568B:	White Orange	Orange	White Green	Blue	White Blue	Green	White Brown	Brown



- 1 Video +
- 2 Video -
- 3 4 5 Power -
- 6 7 8 Power +

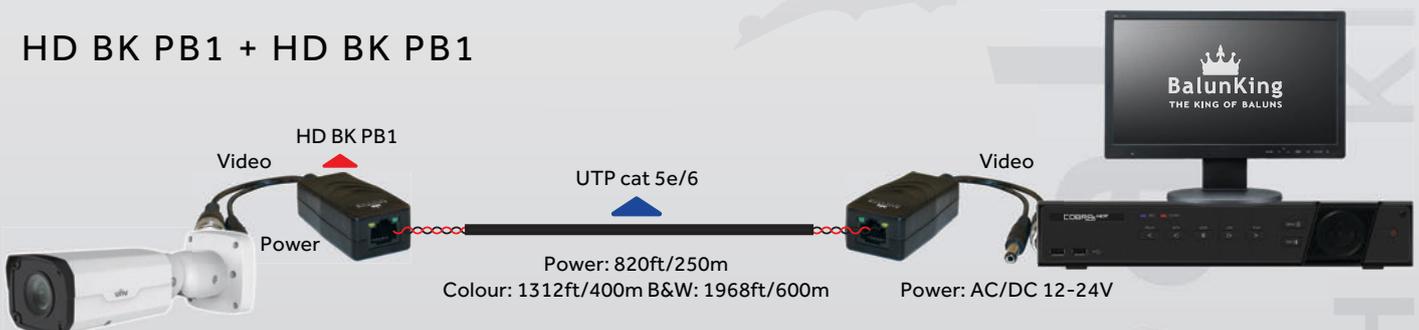


T568A:

T568B:

APPLICATION DIAGRAM

HD BK PB1 + HD BK PB1



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SPECIFICATION

Model	HD BK PB1
Product Name	Single Channel Passive Video and Power Transmitter & Receiver
Applied Devices	CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV equipment
Video	
Video Format	PAL, NTSC, SECAM
Operating Frequency	DC to 5MHz
Max Distance	UTP Category 5e (24AWG) Colour: 1312ft(400m) B&W: 1968ft(600m)
Common-mode/Differential-mode rejection	15 KHz to 5 MHz 60 dB typ
Impedance	Coax, Male BNC 15 KHz to 5 MHz 60 dB typ 75Ω unbalanced UTP,RJ45 100Ω balanced
Attenuation	1.5 dB typ Max
Wire Type	
Network Wiring	One Unshielded Twisted Pair (for each video signal) 24-16 AWG (0.5-1.31mm)
Category Type	2 or better
Impedance	100 ± 20 ohms
DC Loop Resistance	52 ohms per 1,000ft (18 ohms per 100m)
Differential Capacitance	19 pF/ft max (62 pF/m max)
Power	
Power Input	No external power required
Power transmission	12V/24V,DC/AC, up to 820ft(250m) via UTP cat5e/6
Connector	
Video input/output	Male BNC connector
Video input/output	RJ45 Jack
Protection	
Surge Protection	Renewable solid state surge protection
Video Input	2KV(common mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
Video Output	2KV(different mode), 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
Mechanical	
Housing	ABS engineering plastic
Body Colour	Black
Dimensions(L*W*H)	60.4*29*20.4mm (BNC connector & cable excluded)
Net Weight	60g
Environmental	
Operating Temperature	-20° ~ 70° C
Relative Humidity	0-95% (non-condensing)
Storage Temperature	-40° ~ 150° C

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