



## Model NV-314A

### Passive Video/Audio Transceiver



#### Features:

- Full-motion monochrome or color video and audio at distances up to:
  - 750ft (225m) when used with another passive transceiver
  - 3,000ft (1km) when used with an active receiver such as the NV-518A
- No power required
- Built-in transient protection
- Exceptional interference rejection
- Supports “up-the-coax” type control signals
- RJ45 and RCA jack connections
- Limited lifetime warranty

The NVT Model NV-314A Video/Audio Transceiver is a passive (non-amplified) device that allows transmission of real-time monochrome or color video and audio over Unshielded Twisted-Pair (UTP) telephone wire. Baseband (composite) signals of any type are supported.

Applications include Security/Surveillance, Video Distribution, or Distance Learning.

The unparalleled interference rejection and low emissions of the Model NV-314A allow video signals to co-exist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant. “Up-the-coax” type signal may be sent over the same wire pair.

The NV-314A comes with an RJ45 patch-cord. For rack-mounting, use the NV-418AR (which contains hardware equivalent to two NV-314As) with the NV-RM15 rack system.

#### Network Video Technologies

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# Model NV-314A

## Passive Video/Audio Transceiver

### Technical Specifications

#### VIDEO

Attenuation		
DC to 5 MHz	0.5 dB typ	
Common-mode rejection		
15 KHz to 5 MHz	60 dB typ	
Impedance		
Coax, RCA jack	75 ohms	
UTP, RJ45 jack	100 ohms	

#### AUDIO

Attenuation		
20 Hz to 20 KHz	1.5 dB typ	
Impedance	600 ohms	
Signal: Line level	+4 dBm max	

#### WIRE TYPE

Network Wiring	Two Unshielded Twisted Pairs
	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)
Wire length	see below

#### CONNECTOR INTERFACES

Video, Audio  
Twisted pair interface

Female RCA jacks  
RJ45 non-keyed jack wired  
for two twisted-pairs, as shown:



3ft (0,9) RJ45 patch cord included

#### POWER

No external power required

#### ENVIRONMENTAL

Ambient temperature -20 to +75 °C  
Humidity (non-condensing) 0 to 95%  
Transient Immunity per ANSI / IEEE 587 C62.41

#### MECHANICAL

Dimensions 3.75 x 2.50 x 0.40in  
(95,2 x 63,5 x 10,1mm)

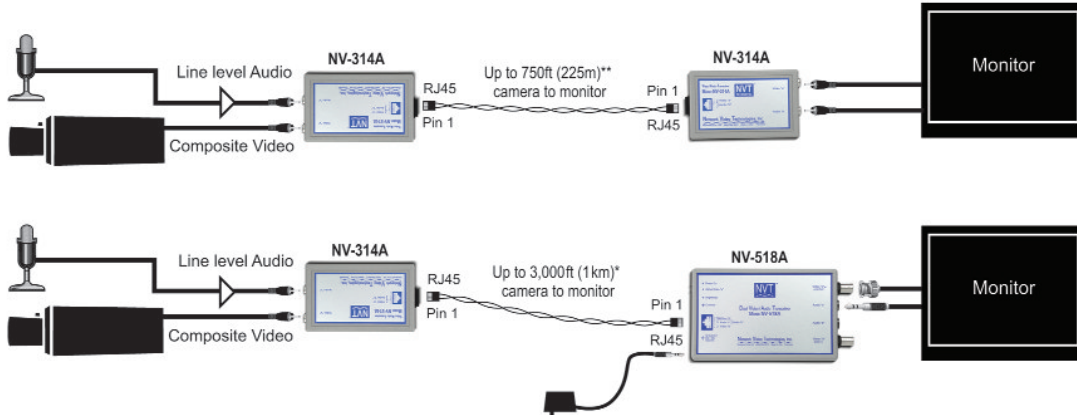
Weight 4.0oz (113g)

Material Gray ABS

Mounting Two 3M Dual Lock™ adhesive strips

Specifications subject to change without notice.

### Typical Applications



\*Video signals traveling in opposite directions may co-exist in the same wire bundle up to 1,000 ft (300m), 2,000ft (600m) if Cat5 or better is used.

\*\*For Digital Recording applications, it is recommended that Passive to Passive transmission (Example: NV-314A to NV-314A) distances be limited to no more than 750 ft. For distances greater than 750 ft. please use an NVT Active Receiver product like the NV-518A.

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