



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
4005 Bohannon Drive • Menlo Park, CA 94025 • USA
(+1) 650.462.8100 • FAX (+1) 650.326.1940
nvt.com • www.nvt.com/email



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 UTP, RJ45 jack	75 ohms 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 3.78 x 2.43 x 0.90in
(96 x 61.72 x 22.9mm)

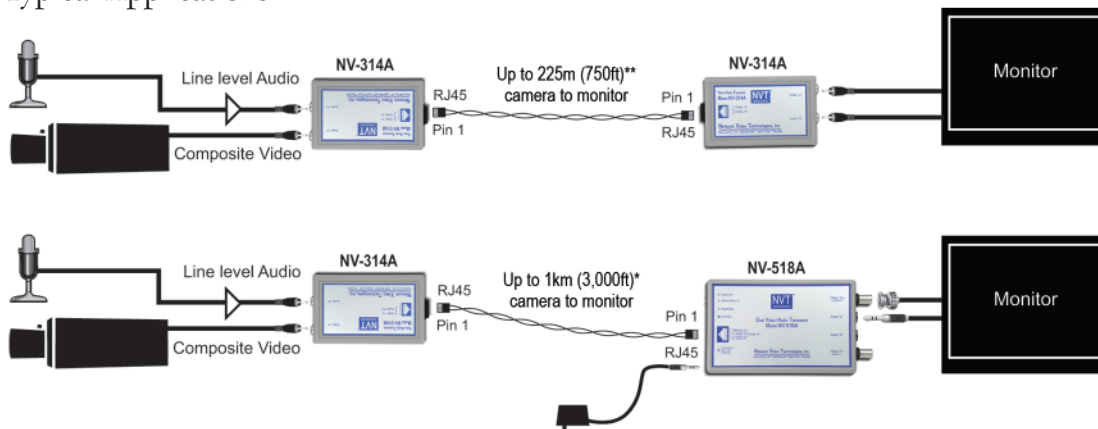
Weight 4.0oz (113g)

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.

Network Video Technologies
4005 Bohannon Drive • Menlo Park, CA 94025 • USA
(+1) 650.462.8100 • FAX (+1) 650.326.1940
nvt.com • www.nvt.com/email

Copyright © 2010 NVT, Inc.
410-91-1-N