



Model NV-704J-PVD Cable Integrator



Features:

- Connectivity for up to four cameras, each via a single RJ45 4-pair cable
- Use with the NV-216A-PV or NV-218A-PVD transceivers or the NV-226J-PV transmitter at the camera
- Uses any third-party power supply to power cameras via UTP over significant distances (see Power Distance Chart)
- Cable-management solution from the camera to the Wiring Closet and on to the Control Room
- Wall-mountable; rack-mountable using the NV-RM8/10 panel
- Limited lifetime warranty

Typically installed in the Wiring Closet or IDF room, the NV-704J-PVD is a passive “pass-through” wiring device that efficiently consolidates camera power, video, and pan/tilt/zoom telemetry data onto a minimum of 4-pair RJ45 cables.

Power, video and data are converted at the camera using a PVD™ transceiver which utilizes a single 4-pair cable with RJ45 connectors to deliver each camera's signals to the NV-704J-PVD. Up to four cameras are supported. The NV-704J-PVD receives low-voltage camera power from any third-party Class 2 power supply. Control Room video connections are achieved with a single 4-pair RJ45 cable. P/T/Z telemetry data, if required, passes through a second 4-pair RJ45 cable and delivers P/T/Z telemetry. Control Room connections may be made using any multi-channel NVT receiver or hub. All equipment employs industry-standard EIA/TIA 568B pinouts.

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Technical Specifications

WIRE DISTANCE (Power Distance Charts)

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Examples assume a minimum 21 VAC at the 24 VAC camera:

Fixed Camera 24VAC only, used with NV-216A-PV		
Power Supply Voltage	24 VAC	28 VAC
Minimum Voltage at Camera	21 VAC	21 VAC
B&W Camera, 2.4 W		
2-pair 24 AWG	789ft (240m)	1,840ft (561m)
2-pair 23 AWG	994ft (303m)	2,320ft (707m)
Color Camera, 4.8 W		
2-pair 24 AWG	393ft (120m)	916ft (279m)
2-pair 23 AWG	495ft (151m)	1,155ft (352m)
Color Camera, 7.2 W		
2-pair 24 AWG	262ft (80m)	612ft (186m)
2-pair 23 AWG	331ft (101m)	771ft (235m)

Fixed Dual Voltage 24VAC12/VDC Camera with NV-216A-PV		
Power Supply Voltage	24 VAC	28 VAC
Minimum Voltage at Camera	14 VAC	14 VAC
B&W Camera 100 mA, 2.4 W		
2-pair 24 AWG	1,753ft (534m)	2,454ft (748m)
2-pair 23 AWG	2,210ft (674m)	3,000ft (915m)
Color Camera 200 mA, 4.8 W		
2-pair 24 AWG	874ft (266m)	1,223ft (373m)
2-pair 23 AWG	1,102ft (336m)	1,542ft (470m)
Color Camera 300 mA, 7.2 W		
2-pair 24 AWG	583ft (173m)	815ft (250m)
2-pair 23 AWG	735ft (224m)	1,025ft (310m)

P/T/Z 24VAC Camera		NV-218A-PVD	
Power Supply Voltage	24 VAC	28 VAC	
Minimum Voltage at Camera	21 VAC	21 VAC	
P/T/Z Camera 1,000 mA, 21 W			
2-pair 24 AWG	90ft (27m)	210ft (64m)	
2-pair 23 AWG	113ft (35m)	265ft (81m)	

Fixed 12VDC Camera used with NV-226J-PV		
Power Supply Voltage	24 VAC	28 VAC
B&W Camera, 2.4 W		
2-pair 24 AWG	1,586ft (482m)	2,220ft (677m)
2-pair 23 AWG	1,999ft (609m)	2,799ft (853m)
Color Camera 4.8 W		
2-pair 24 AWG	795ft (242m)	1,113ft (339m)
2-pair 23 AWG	1,002ft (306m)	1,403ft (428m)

Notes: Actual distance will depend on the camera's inrush and operating current, minimum operating voltage, and the wire's environmental temperature. Please consult NVT Customer Support for further information.

Wire should be category rated Unshielded Twisted-Pair (UTP) cable. Low voltage camera power, video, and RS-422 or RS-485 telemetry may be sent within the same wire bundle. Do not run 24VAC or 28VAC in the same wire bundle with analog telecom signals. However you may share the same wire/cable tray.

An online wire Power Distance Calculator is available at www.nvt.com under Product Support.

CONTROL

UTP, RJ45 Connectors 100 ohms

ENVIRONMENTAL

Temperature -22 to +167 °F (-30 to +75 °C)
Humidity (non-condensing) 0 to 95%

VIDEO

UTP, RJ45 Connectors 100 ohms

POWER

16 to 24AWG (0.5mm to 1.3mm)

MECHANICAL

Dimensions, excluding brackets and connectors
7.3in x 2.35in x 1.65in (184mm x 60mm x 41mm)

Material Black ABS

Mounting Two 0.175in (4,4mm diameter holes)
6.75in (171,5mm) apart

Product Weight 0.6lb (0.32kg)

Packaged Weight 0.6lb (0.32kg)

Two NV-704J-PVDs can be mounted to an NV-RM 8/10 Rackmount Panel

RJ45

Camera Pinouts and UTP Color Code



1 + Video	White/Orange
2 - Video	Orange/White
3 + Data	White/Green
4 - Power	Blue/White
5 + Power	White/Blue
6 - Data	Green/White
7 + Power	White/Brown
8 - Power	Brown/White

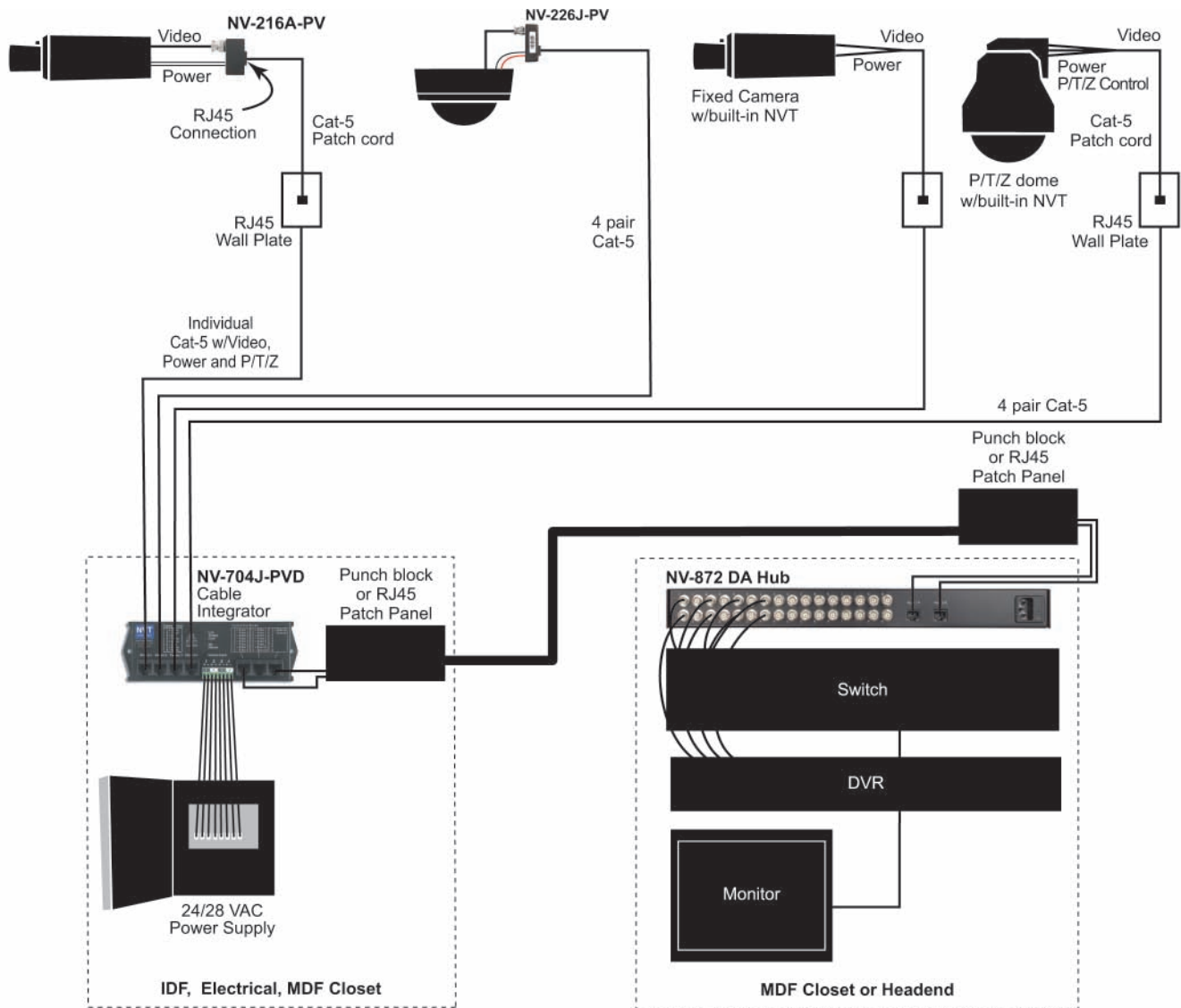
Specifications subject to change without notice.



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Typical Application



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