



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.

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



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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 24VAC/12VDC Camera with NV-216A-PV | | |
|---|----------------|----------------|
| Power Supply Voltage | 24 VAC | 28 VAC |
| Minimum Voltage at Camera | 14 VAC | 14 VAC |
| B&W Camera, 2.4 W | | |
| 2-pair 24 AWG | 1,753ft (534m) | 2,454ft (748m) |
| 2-pair 23 AWG | 2,210ft (674m) | 3,094ft (943m) |
| Color Camera, 4.8 W | | |
| 2-pair 24 AWG | 874ft (266m) | 1,223ft (373m) |
| 2-pair 23 AWG | 1,102ft (336m) | 1,542ft (470m) |
| Color Camera, 7.2 W | | |
| 2-pair 24 AWG | 583ft (178m) | 816ft (249m) |
| 2-pair 23 AWG | 735ft (224m) | 1,029ft (314m) |

| P/T/Z 24VAC Camera used with NV-218A-PVD | | |
|--|-------------|-------------|
| Power Supply Voltage | 24 VAC | 28 VAC |
| Minimum Voltage at Camera | 21 VAC | 21 VAC |
| P/T/Z Camera, 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 (748m) | 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 |

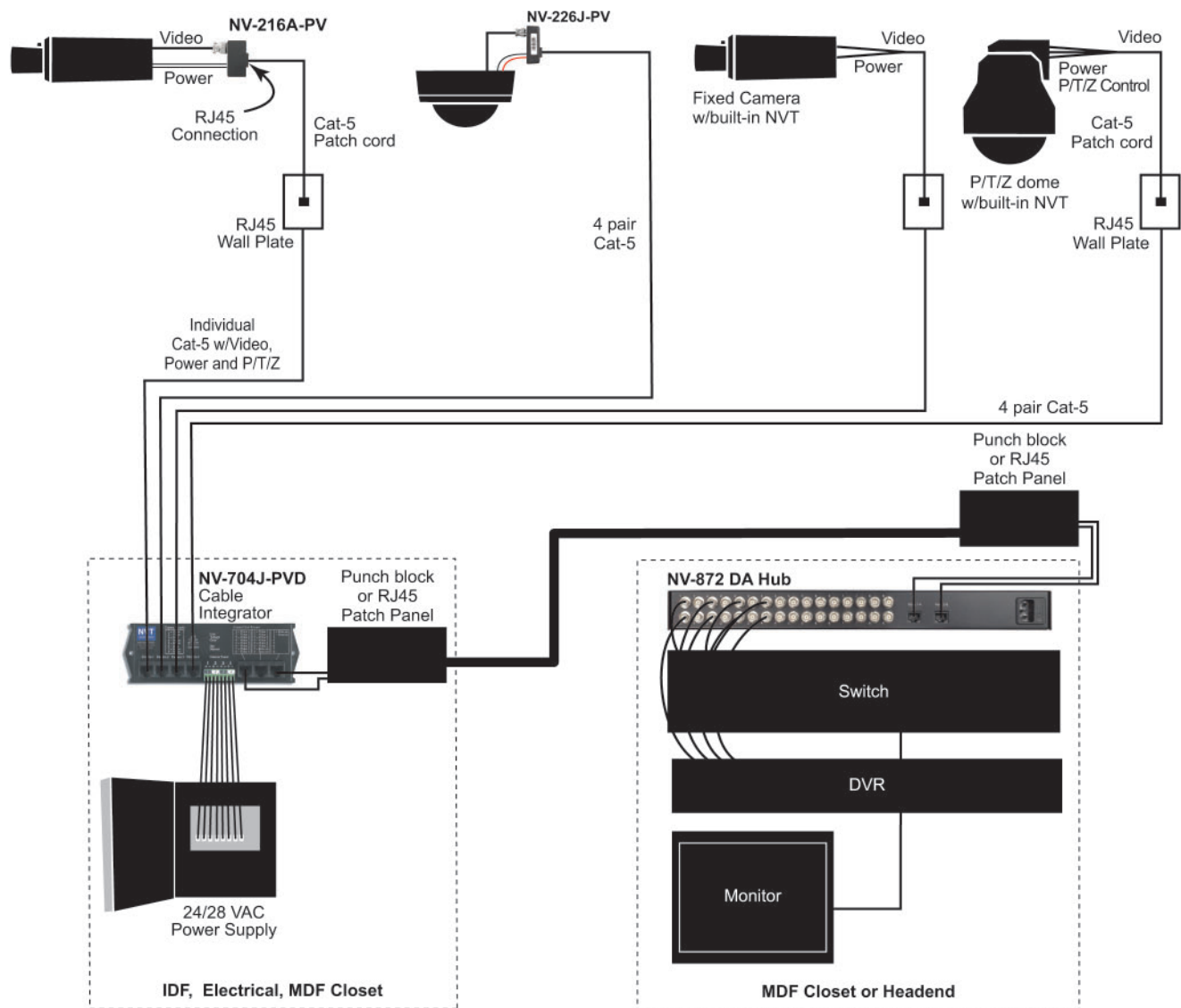
Specifications subject to change without notice.



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Typical Application



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