JVC®

The Perfect Experience

PTZ NETWORK DOME CAMERA
VN-V686U

OUTDOOR PTZ NETWORK DOME CAMERA
VN-V686WPU

Dual Stream Network Cameras with 36x Optical Zoom and Accurate Direct Drive Motor Mechanism

V.NETWORKS

Reliable Monitoring for a Variety of Environments

36x Zoom · **Direct Drive Motor** · **Full-Frame DUAL STREAM** · **IR Cut filter Day|Night**

■ **0.03° Super Accuracy for Preset Positions**
Direct Drive Mechanism maintains accurate camera positioning even at 36x magnification

■ **0.04°/sec to 400°/sec Pan Speed Flexibility**
Direct Drive Mechanism enables both quick position changes by high-speed panning and detailed monitoring by slow panning

■ **Super Silent Mechanism**
Direct Drive Motor provides minimum-noise operation for use in quiet environments such as museums, libraries and hospitals

■ **Day/Night Function with IR Cut Filter**
Automatic switching between day and night modes for reliable round-the-clock surveillance

■ **Effective Backlight Compensation**
Easy Wide-D Function provides clear images even in backlit situations

■ **Progressive Output Capability**
Can output clear, smooth images without flicker even for moving objects

■ **MPEG-4/Motion JPEG Full-Frame Dual Stream**
Simultaneous distribution of MPEG-4 and Motion JPEG VGA images at full frame rate (30fps for each stream)

■ **Super LoLux™ Sensitivity**
0.04 lx at B&W mode (25 % video level, F1.6, AGC SUPER)
0.5 lx at color mode (25 % video level, F1.6, AGC SUPER)

■ **Quick and Easy Installation**
One-touch lock mechanism for quick and easy installation and maintenance

■ **Dust- and Waterproof Design (VN-V686WPU)**
IP66-standard robust design suitable for outdoor monitoring system

All the Precision and Quality to Capture the Crucial Moment

JVC's new Network Camera offers a Direct Drive Motor and Full-Frame Dual Stream Capability for an Advanced Monitoring System with Maximum Reliability and Versatility.

36x Optical Zoom

0.03° Super Accuracy

MPEG-4 Motion JPEG Dual Stream

Fast/Slow Variable Pan Tilt Speed

Silent Operation

0.04lx* Super LoLux™

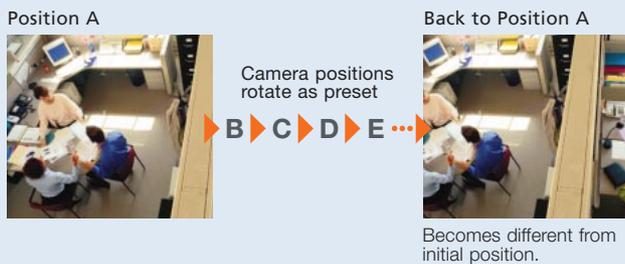**Easy** Installation

★ at B&W mode

Direct Drive Motor – Newly-developed mechanism to offer precise and highly responsive pan/tilt movement

The Direct Drive Motor enables perfect control of camera mechanism speeds, even at high 36x magnification the camera can quickly and accurately capture images, from 400°/sec to 0.04°/sec at the slowest creep speed.
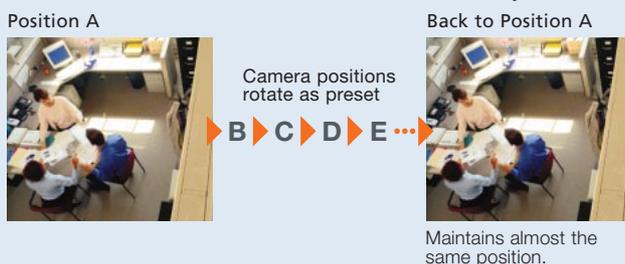
Silent and Accurate Operation for Reliable Monitoring

Instead of a conventional belt-type mechanism, the Direct Drive Motor can greatly increase accuracy and decreasing operation noise. With an accuracy of 0.03°, it can precisely maintain preset camera positions even after frequent panning and tilting, which becomes especially important at high zoom magnifications like 36x.

■ **Conventional belt-type unit with low accuracy**

Position A　　　　　　　　　Back to Position A

Camera positions rotate as preset

B ▶ C ▶ D ▶ E ····

Becomes different from initial position.

■ **VN-V686 Direct Drive Motor with 0.03° accuracy**

Position A　　　　　　　　　Back to Position A

Camera positions rotate as preset

B ▶ C ▶ D ▶ E ····

Maintains almost the same position.

Images are explanatory purposes and are not actual images attained using this product.

MPEG-4/Motion JPEG Full-Frame Dual Stream

The VN-V686 can stream both MPEG-4 and Motion JPEG VGA images simultaneously at the full frame rate (30fps for each stream). MPEG-4 distribution is ideal where monitoring with smooth, high frame rate images is required within a limited bandwidth. Motion JPEG images are useful when you need to record images as evidence data, because of the high quality still pictures it can provide.

MPEG-4 JPEG

MPEG-4 30fps

Live View

JPEG 30fps

Switch

Recorder
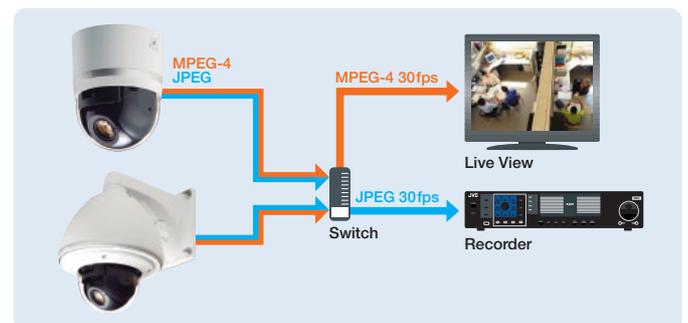
## Progressive Output for Clearer Images

The VN-V686 series progressive output images are optimal for monitoring on LCD or TFT monitors. You can obtain flicker-free noiseless images even for moving objects.

Progressive Output

Interlaced Output

Quick and Easy Installation and Maintenance

Thanks to its "One-touch lock" mechanism, installation is extremely easy. Simply insert the camera unit to the bracket, and that's all, greatly reducing time and cost for installation and maintenance.

■ **VN-V686U** (Eg.: Ceiling recessed installation with WB-S685U*)   * Note: WB-S685U ceiling recessed bracket is not available on the US market due to specific building code regulations.

1 Install the ceiling a bracket (option) on the ceiling, and screw the camera's ceiling mount section onto it at 3 points.

2 Push the camera straight up into the ceiling mount section. If done correctly, you will hear a click as it locks into place.
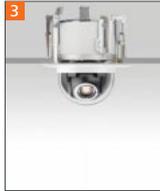
3 Cover the unit with the Ceiling Panel (option), and you're finished.

4 To remove, press the Lock buttons located on both sides of the camera to release the locks, then pull the camera straight down.

■ **VN-V686WPU** (Eg.: Wall mount installation)

1 Insert the camera's mounting hole over the wall's anchor bolt, and tighten the nut to affix. (Bolt in 4 locations to secure the camera.)

2 Run the cable through the inside of the arm and then cap it, and you're finished.

■ **Easy Maintenance and Replacement**

VN-V686's plug-and-play design makes maintenance easy too. You can replace only the camera unit with the base unit remaining attached. All preset settings will resume so that you can minimize operation downtime due to maintenance.

Plug-and-Play !
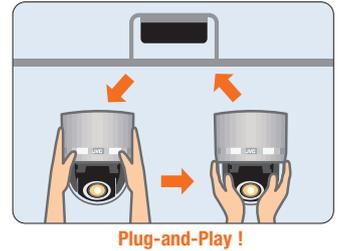
Full-featured intelligent security camera for a variety of environments

■ **Easy Wide-D Function for backlight compensation**

This function is equivalent to the conventional Wide Dynamic Range function, allowing pictures to be adjusted to identify details of the subject even in difficult backlit conditions.

Normal picture   Adjusted with Easy Wide-D

■ **IR Cut filter ON/OFF function for round-the-clock surveillance**

The IR cut filter automatically switches between ON and OFF according to the level of ambient light. In daytime it outputs a high-quality color image, and at night the filter mechanism removes the IR filter to output black-and-white images with greater sensitivity. When utilizing IR lamps, an external trigger for night mode is recommended.

■ **Privacy mask for protecting against intrusive monitoring**

Up to 8 masked areas can be set as hidden areas to protect subjects from invasion of their privacy.

Without Privacy mask   With Privacy mask
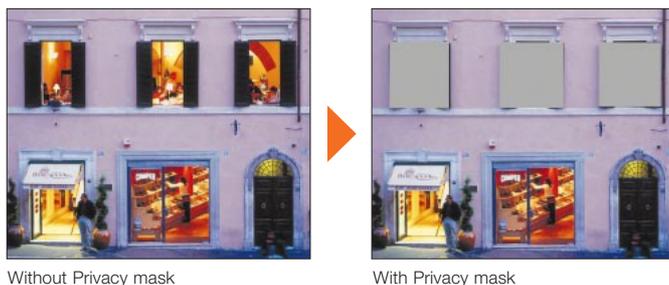
■ **Open architecture API for easy customization**

The VN-V686 employs the open architecture API (Application Program Interface) which allows higher flexibility with simple command system and HTTP-based protocol. Various settings and customization are possible via network.

■ **Display mode for CRT and LCD**

By choosing the display mode that matches the monitor being used, you'll get images with optimal brightness regardless of whether you are using a CRT or LCD monitor.

■ **Image Stabilizer to correct image blur**

Even in cases where the camera is shook by the wind or vibrations coming from its surroundings, the Image Stabilizer function helps reduce image blur. This function is invaluable in outdoor setups, such as Pendant mount style installations which are especially susceptible to the effects of vibrations.

■ **Motion Detect and Tracking function**

This function outputs an alarm whenever movement is detected within a pre-specified area of the image. It can also be used to automatically track a moving object or person for about 30 seconds. (The red frame of the detected subject is shown only in Demonstration Mode.)

■ **Proven reliability with JVC standard**

JVC inspects every single product based on our strict quality standards. You can count on its precision and durability against long-term usage. Both models have been designed to endure 2 million times of zooming and 4 million times of focusing*. For the VN-V686WPU outdoor model, severe tests against water and dust are applied to ensure stable performance that conforms to the IP66 Standard.

* Numbers are guides and may vary depending on the usage conditions.

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VN-V686U Indoor model
Ready for direct mount

VN-V686WPU Outdoor model
With wall mount housing

■ Specifications

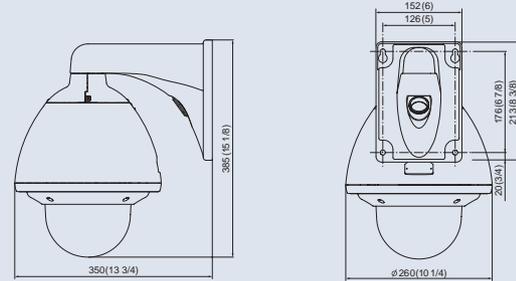|		
Image device		1/4" IT CCD
Lens		F1.6 (wide) to F4.5 (tele) f=3.4mm to f=122mm Automatic Day/Night IR cut filter Focus: Manual/Easy AF/One push Max. close-range: Approx. 1.8m (tele), 0.6m (wide)
Zoom		36x optical and 32x digital, total 1152x
Minimum illumination	Color	1.0 lx (F1.6, 50% video, AGC SUPER) 0.5 lx (F1.6, 25% video, AGC SUPER)
	B&W	0.08 lx (F1.6, 50% video, AGC SUPER) 0.04 lx (F1.6, 25% video, AGC SUPER)
Pan/Tilt range		Pan: 360° endless / Tilt: -5 ° to 185°
Pan/Tilt speed		0.04°/sec to 400°/sec
Picture compression		Motion JPEG: Variable (VFS)/Average (AFS) selectable MPEG-4: Part 2 (ISO/IEC 1449602) CBR/VBR selectable, Profile: SP
Picture resolutions		640 x 480, 320 x 240
Frame rate and streaming		Up to 30fps per each stream of Motion JPEG and MPEG-4 in 640x480 resolution simultaneously (Full frame dual stream)
Image settings		Compression levels: VFS 7 steps, AFS 10KB-100KB (Motion JPEG)/ Bit rate adjustable (MPEG-4) Image stabilizer Monitor type Other settings: AGC, BLC, White level, Black level, Gamma, Enhance, Color level, Shutter speed, Day/Night Overlay capabilities: Time, Date, Text (Camera ID, Preset title), Privacy mask (8 areas), Motion Detection
PTZ function		100 preset positions, Auto flip, Auto pan, Auto trace, Auto patrol, Auto return, Motion detect, Auto tracking
Security		3 levels password, IP address filtering, HTTPS encryption (for setting)
Shutter speed		2 sec to 1/10000 sec
Max. clients		20 simultaneous users, Unlimited users by multicast
Alarm/Event management		Events triggered by built-in motion detection, external inputs or according to schedule. Image upload over FTP, e-mail Notification over TCP, UDP, e-mail and external outputs Pre-and post alarm buffer of up to 8MB (approx. 2min. of 640x480 at 3 fps/JPEG stream)
Connectors		RJ-45 for Ethernet 10Base-T/100Base-TX Terminal block for 2 alarm input, 2 output Alternative power connection
Dust and water protection		IP66 (VN-V686WPU only)
Power		VN-V686U: 24 VAC (50Hz/60Hz), 1.6A VN-V686WPU: 24 VAC (50Hz/60Hz), 3A
Operating temperature		VN-V686U: -10°C to 50°C/14°F to 122°F (0°C to 40°C/32°F to 104°F recommended) VN-V686WPU: -40°C to 50°C/14°F to 122°F, always power on (0°C to 40°C/32°F to 104°F recommended)
Installation and maintenance		Web based setting tool, Camera search tool, Firmware update over HTTP
Minimum web browsing requirements		Windows XP Pro (SP2)/Home (SP2), IE6.0, Pentium4 (1.5GHz), 1GB memory Display and video card: 1024x768 True color (24bit or 32 bit) 256MB VRAM
System integration support		Open API for application integration, ActiveX Viewer, QoS, Embedded Linux operating system
Supported protocols		TCP/IP, UDP/IP, FTP, ICMP, ARP, DHCP, SNTP, HTTP, DSCP, SMTP, RTP, IGMP
Video management hardware and software		VR-N900U/1600U/1600E: JVC Network video recorder for viewing, recording and archiving up to 9/16 cameras. VN-RS800U: JVC free video management software for viewing, recording up to 32 cameras (JPEG stream only)
Dimensions (WxHxD)		VN-V686U: Φ160mm x 201mm (H) VN-V686WPU: Φ260mm (incl. housing) x 385mm (H: incl. bracket) x 350mm (D: incl. bracket)
Weight		VN-V686U: 1.9kg (4.2lbs) VN-V686WPU: 5.5kg (12.2lbs)

■ Dimensions

VN-V686U

Camera front
Camera unit diameter
φ160 (6 1/4)
φ140 (5 1/2)
Screw hole
Installation hole φ80 (3 1/8)
φ160 (6 1/4)
199(7 7/8)
201(7 7/8)
90.5 (3 5/8)
SR72.5 (2 7/8)
Screw holes
Position to pull out cables
23(7/8)
22.5 (7/8)
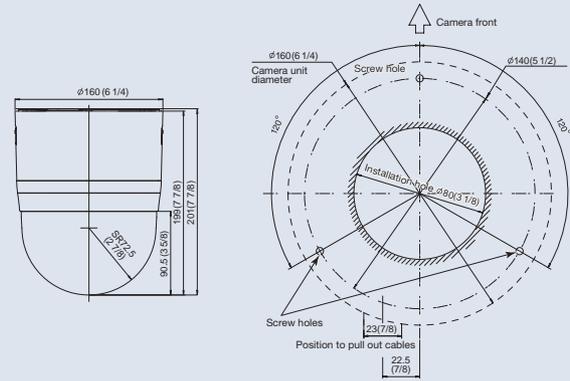
Unit: mm (inch)

VN-V686WPU

152 (6)
126 (5)
176(6 7/8)
213(8 3/8)
20(3/4)
385 (15 1/8)
350(13 3/4)
φ260(10 1/4)

Unit: mm (inch)

■ Optional Accessories

For VN-V686U
- WB-S682U Wall mount
- WB-S685U* Ceiling recessed
- WB-S681U Pendant mount

For VN-V686WPU
- WB-S684U Outdoor pendant mount

* Note: WB-S685U ceiling recessed bracket is not available on the US market due to specific building code regulations.

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ISO 14001 JACO
UKAS ENVIRONMENTAL MANAGEMENT 051
JQA QUALITY SYSTEM JQA-0288
UKAS QUALITY MANAGEMENT 091-A

■ Hachioji Business Centre of Victor Company of Japan, Ltd. has received ISO14001 Certification for environmental management and ISO9001 Certification for quality assurance management.

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