



V1411X-DVC, V1411J-DVC and V1410X-DVC Variable-Speed Keypads

- Variable-speed joystick for pan-and-tilt
- Pushbutton control for lens functions
- Backlit LCD
- Desktop styling
- Large joystick on V1411J-DVC
- Small footprint on V1410X-DVC

The V1411X-DVC, V1411J-DVC and V1410X-DVC keypads are desk-top style multi-function remote keypads designed to operate with Vicon's Surveyor2000 domes and NOVA matrix systems.

The keypads feature a variable-speed joystick for pan-and-tilt control and tactile pushbuttons for camera/monitor selection. Control of zoom, focus, iris, autopan, autoiris, lens speed, preset position and alarm are also pushbutton controlled.

A backlit LCD display provides clear indication of camera, monitor and preset selections made by the operator together with other selected camera features. It also indicates system status. Keypad programming is achieved via the front panel controls with choices and selections displayed in the LCD window.

The keypads are equipped with an internal buzzer that gives the following indications when enabled during programming:

- Key click.
- Error beep (1/2 second beep) - sounds when a key sequence is not completed within 10 seconds, for illegal key presses or (NOVA configuration only) for numeric entries which are out of the acceptable range.

- Preset beep (two 1/2 second beeps) - sounds when presets are stored or a programming selection has been saved.
- Alarm (four 1/2 second beeps) - sounds when an alarm has been received.

Power and data communications are simply installed by means of a supplied RJ45 patch lead. Field wiring is made simple by the inclusion of an RJ45 breakout box. This has screw terminals to simplify the field cabling, and the RJ45 cable simply plugs into the breakout box and the keypad to complete the job.

Two installation configurations are supported:

1. Standalone.
2. NOVA 1300 multi-keypad configuration.

The standalone configuration is designed to allow the keypads to control a system comprised of domes and/or receivers but not a matrix or CPU. A single keypad can control 255 fully-functional variable-speed domes.

In NOVA 1300 multi-keypad configuration, the keypads are designed to communicate with a NOVA matrix system to provide total operational support for the system, whatever the number of inputs and outputs. Up to 64 keypads can be included in a system, depending on matrix type. Control of variable-speed fully-functional domes and cameras is standard.

Reliable serial communications is achieved using a four wire half duplex RS-422 protocol.

In standalone configuration, it is possible to operate in simplex mode, although indications of autoiris, autopan and auxiliary status will not be displayed in the LCD window.

Five modes are available to provide operation, programming and keypad setup. Normal operation mode is always entered after start up of the keypad. A preset store mode saves a programmed pan-and-tilt position for future recall. Sequencing dwell times may be set in the Set Dwell mode used for NOVA 1300 multi-keypad installations only. In a keypad setup mode, the keypad address, baud rate, joystick profile and LCD contrast may be defined. The buzzer, home position (return to preset 1 position upon an active alarm) and alarm acknowledgement requirements may also be enabled or disabled in the keypad setup mode. In a separate keypad test mode, pan and tilt coordinates are displayed and allow for adjustment of deflection and center.

Finished in black "walnut" enamel, the keypads have tactile robust pushbuttons in two shades of gray and a reliable positive variable-speed joystick for precise control.

The keypads are equipped with either a 120 VAC input power supply or a 230 VAC input power supply, depending upon model. See Table 1.

Model Number	Product Code	Input Voltage	Output Voltage
V1411X-DVC	7518	120 VAC	12 VDC at 500 mA
V1411X-DVC-230	7518-01	230 VAC	9 VAC at 600 mA
V1411J-DVC	7832	120 VAC	12 VDC at 500 mA
V1411J-DVC-230	7832-01	230 VAC	9 VAC at 600 mA
V1410X-DVC	7847	120 VAC	12 VDC at 500 mA
V1410X-DVC-230	7847-01	130 VAC	9 VAC at 600 mA

Table 1: Model Numbers and Product Codes

Vicon Product Facts		Model No:	Product Code:	SEC:	SPEC:	REV:
		Refer to Table 1	Refer to Table 1	9	V074	702

Contractors' Specification

Multifunction Remote Keypads

The intelligent keypads shall be a multifunction operation console designed to operate with proprietary programmable camera domes and matrix systems. They shall feature a variable-speed joystick, pushbutton keys, and a backlit LCD display, all integrated into a stylish, compact and lightweight desktop case.

The variable-speed joystick shall be a mechanical stick, large and small versions, used to control pan-and-tilt camera functions. They shall be used as a setup configuration tool. The pushbutton keys shall be large, square, preprinted type used for camera/monitor selection, zoom control, focus control, autopan control, autoiris control, lens speed control, preset position control, and alarm control. The backlit display shall be an LCD type providing clear indication of camera, monitor and preset selections. In addition, it shall display other selected camera functions, system status and currently selected keys. The intelligent keypads shall also be equipped with an internal buzzer that provides annunciation of key presses, errors, preset selections and alarms.

The intelligent keypads shall have two installation configurations, standalone and multi-keypad. In standalone operation, the keypads shall emulate a CPU controller and be used to control a complete system comprised of 255 camera domes and receivers. In multi-keypad operation, the keypads shall emulate a CPU operation console attached to a large matrix system and allow total control of that system. The intelligent keypads shall utilize reliable 4-wire, half-duplex RS-422 communications protocol. The intelligent keypads shall operate in simplex mode when in standalone operation and lose the capability to display autoiris, autopan and auxiliary functions.

The intelligent keypads shall have five modes of operation; normal operation mode, preset store mode, setup mode, set dwell mode and test mode. The normal operation mode shall allow full normal operation in either of the two installation configurations. The preset store mode shall allow programming of known pan-and-tilt positions. The setup mode shall allow configuration of the keypad address, baud rate, joystick profile, LCD contrast, buzzer annunciation and alarm acknowledgement. The set dwell mode shall allow programming the internal sequencing dwell times for tours. The keypad test mode shall provide a self-diagnostic mode for the keypads.

The intelligent keypads shall be finished in black "walnut," have pushbuttons in two shades of gray and provide a rugged joystick. The dimensions and weights shall be: Basic Unit: Height: 2.25 in. (57 mm), Width: 11.5 in. (292 mm), Depth: 6.9 in. (175 mm), Weight: 3.0 lb (1.4 kg); Large Joystick Unit: Height: 3.0 in. (75 mm), Width: 11.5 in. (292 mm), Depth: 6.9 in. (175 mm), Weight: 3.0 lb (1.4 kg); Small Unit: Height: 2.0 in. (50 mm), Width: 6.5 in. (164 mm), Depth: 7.0 in. (180 mm), Weight: 2.1 lb (0.9 kg)

The intelligent keypads shall be Vicon models V1400X-DVC, V1411X-DVC-230, V1411J-DVC, V1411J-DVC-230, V1410X-DVC and V1410X-DVC-230.

Technical Information

ELECTRICAL

AC Input: 120 VAC: 12 VDC at 500 mA.
230 VAC: 9 VAC @ 600 mA.
Provided by a desktop style power supply unit from the main supply.

Fuse: Self resetting on power down.

Communications: RS-422, 4 wire half duplex.

Cabling: RJ45 socket on rear of keypad connected via 2m RJ45 cable (included) to a breakout box. In NOVA 1300 mode, the connection from breakout box to matrix CPU must be a dual twisted pair, individually shielded cable such as Belden 8723. In Standalone mode, cabling requirements are the same, although simplex communications (a single twisted shielded pair) can be used.

Radio-Frequency Emission Standard: FCC Class A.

CONTROLS

Numerical Keypad: Camera/monitor selection, dwell time, input, mode selection, preset number, auxiliary numbers, etc.

Camera Key: Assigns selected camera to selected monitor.

Monitor Key: For monitor selection enabling.

Cancel Key: Used to clear data entries.

Sequencing Key: Starts camera sequencing.

Programing Key: Used to change keypad-operating mode.

Preset Key: Recalls or stores preset position, depending on operating mode.

**Zoom In/
Zoom Out Keys:** Manually zoom camera view closer or farther away.
Momentary switch.

**Focus Near/
Focus Far Keys:** Manually focus camera view.
Momentary switch.

**Iris Open/
Iris Close Keys:** Manually open or close current camera's iris.
Momentary switch.

Alarm Key: Acknowledges alarm circuits.

Auxiliary Key: Used to control auxiliary equipment in conjunction with number key.

Technical Information (cont'd)

Autoiris Key: Engages or disengages automatic iris adjustment function.

Autopan Key: Engages or disengages automatic panning function.

Lens Speed Key: Changes lens speeds. Dependent on receiver.

Pan-and-Tilt Joystick: V1411X-DVC/V1410X-DVC: causes pan-and-tilt mechanism to pan and tilt at varying speed. V1411J-DVC: causes pan-and-tilt mechanism to pan and tilt at varying speed. Used to zoom in/out at a selected fixed speed.

Pan-and-Tilt Speed Key: Reduces maximum pan-and-tilt speed by a factor of 4.

Display: Backlit LCD displays 2 lines of 20 characters.

Indicators in Display: MON ###.
CAM #####.
PP (preset) ##.
AUX (auxiliary) 1 2 3 4.
Al.
AP.
ALARM.
SNGL (standalone).
DWELL.
1300 (multi-keypad mode).
P (preset programming mode).

Audio Indicators: Buzzer (beep) indicators include: key click, error beep (1/2 second beep), preset beep (two 1/2 second beeps) and alarm beep (four 1/2 second beeps).

MECHANICAL - V1411X-DVC/V1411X-DVC-230

Dimensions: Height: 2.25 in. (57 mm).
Width: 11.5 in. (292 mm).
Depth: 6.9 in. (175 mm).

Weight: 3.0 lb (1.4 kg).

Construction: Zinc plated steel.

Finish: Black "walnut".

Shipping Dimensions: See Table 2.

Shipping Weight: See Table 2.

MECHANICAL - V1411J-DVC/V1411J-DVC-230

Dimensions: Height: 3.0 in. (75 mm).
Width: 11.5 in. (292 mm).
Depth: 6.9 in. (175 mm).

Weight: 3.0 lb (1.4 kg).

Construction: Zinc plated steel.

Finish: Black "walnut".

Shipping Dimensions: See Table 2.

Shipping Weight: See Table 2.

MECHANICAL - V1410X-DVC/V1410X-DVC-230

Dimensions: Height: 2.0 in. (50 mm).
Width: 6.5 in. (164 mm).
Depth: 7.0 in. (180 mm).

Weight: 2.1 lb (0.9 kg).

Construction: Zinc plated steel.

Shipping Dimensions: See Table 2.

Shipping Weight: See Table 2.

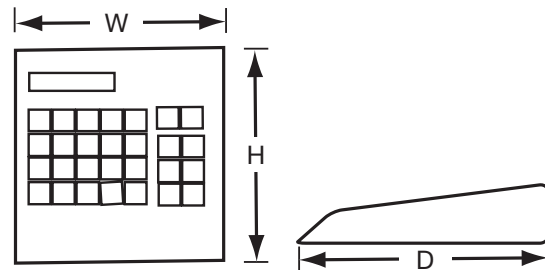
ENVIRONMENTAL

Operating Temperature: 32 - 122° F (0 - 50° C).

Operating Humidity: Up to 90% relative, noncondensing.

Storage Temperature: -20 to 140° F (-29 to 60° C).

Storage Humidity: Up to 85% relative, noncondensing.



Model	Dimensions (H x W x D)	Weight lb (kg)
V1411X-DVC	6.0 x 16.0 x 8.75 in. (152 x 410 x 222 mm)	5.0 (2.3)
V1410X-DVC	4.75 x 9.75 x 8.5 in. (121 x 248 x 216 mm)	2.9 (1.3)
V1411J-DVC	5.25 x 16.5 x 8.75 in. (133 x 419 x 222 mm)	4.9 (2.2)

Table 2: Shipping Dimensions and Weights