



V1305R-DC

- **Variable-speed control**
- **Compatible with NOVA and Vicoax II**
- **120 and 230 VAC input available**

The V1305R-DC receiver is designed to provide variable-speed control of Vicon's ViStar 25 series of pan-and-tilt devices. The receiver controls pan, tilt, zoom and focus as well as providing an autoiris drive. The receiver may be used with any NOVA control system or a Vicoax II (V1422) control system. Refer to Table 1 for model/system compatibility. The term V1305R-DC is used to refer to all versions of the receiver unless specifically stated otherwise.

The receiver is designed to work in two modes, velocity mode and preset position mode. In velocity mode, pan and tilt can operate together at any required combination of velocities. The maximum velocity is determined by the pan-and-tilt drive. The velocity mode allows smooth motion at very low velocity. Using this mode, a complete scan in the pan axis can be programmed to take up to 5 minutes. Focus and zoom can be operated concurrently with pan and/or tilt. Two-speed operation of zoom and focus is provided.

The V1305R-DC can store up to 79 preset positions. Positions are stored in nonvolatile memory. A preset position defines zoom and focus as well as pan and tilt. In preset position mode, software insures smooth acceleration and deceleration, preventing the premature wearing out of the pan-and-tilt when using successive preset position recalls to implement camera tours or using this mode on a long term basis.

The receiver allows a direct interface with continuous pan rotation units. Two relays are provided in the receiver; two additional relays can be added with an optional board (Model V1305R-R), which is mounted on the inside of the receiver cover. The relays operate remotely. Each relay output may be configured separately to operate in either momentary or latching mode.

The V1305R-DC is encased in a metal weatherproof enclosure. A 25 W heater, V1305R-H, is available as an option. Seven compression fittings are provided for routing cable.

The V1305R-DC complies with FCC requirements for a Class A device and with European Community EMC directive 89/336. The product was subjected to the testing outlined in European Normalization Standard EN 50081-1 (Electromagnetic Compatibility - General Emissions Standard Part 1: Residential, Commercial, and Light Industry), and EN 50082-1 (Electromagnetic Compatibility - Generic Immunity Standard Part 1: Residential, Commercial, and Light Industry).

ASSOCIATED EQUIPMENT AND ACCESSORIES

Model V1305R-H Heater, Product Code 6604: A 25 Watt heater option for the V1305R-DC receiver that increases the operating temperature to a range of -40 to 140° F (-40 to 60° C). The option works with 120 or 230 VAC input. The heater's thermostat is set to generate heat when the temperature falls below 32° F (0° C) and turns off when the temperature reaches 86° F (30° C).

Model V1305R-R Relay Option Board, Product Code 6606: Provides two additional relays for the V1305R-DC. Mounts inside the cover of the receiver.

Notes: SUPERSEDES PRODUCT SPECIFICATION 992-1299

Model Number	Product Code	Description
V1305R-DC1	5044	120 VAC input/24 VDC variable output, NOVA RS-422
V1305R-DC1-230	5044-01	230 VAC input/24 VDC variable output, NOVA RS-422
V1305R-DC2	5078	120 VAC input/24 VDC output, Vicoax II
V1305R-DC2-230	5078-01	230 VAC input/24 VDC variable output, Vicoax II

Table 1: Product Codes and Descriptions

Contractors' Specification

Variable-Speed Receiver

Standard receiver functions shall include pan-and-tilt operation, zoom and focus operation, and autoiris control. The receiver shall have two auxiliary functions installed which can be set for momentary or latching operation; two additional driver outputs shall be available on an optional relay board. The receiver shall offer preset position operation including memory for 79 presets; the RS-422 version shall feature a selectable communications baud rate of 600 or 4800 baud. The receiver shall offer a test mode, which tests pan, tilt, zoom, focus, iris, autoiris, and auxiliary operation.

The receiver shall be compatible with various control transmitters and CPUs. The receiver shall be available in several versions to offer compatibility with RS-422 and superimposed data on

composite video signal. The RS-422 version shall offer a choice of simplex or duplex communication with the CPU.

The receiver shall be available in two operating voltages: 120 VAC and 230 VAC. The output voltage to the pan-and-tilt shall be 24 VDC and maximum power consumption for the receiver shall not exceed 50 W. The receiver shall be available in a weatherproof metal housing. The receiver shall comply with the requirements for an FCC Class A classification.

The receiver shall be a compact unit. Maximum dimensions shall not exceed: height (H), 4.25 in. (10.5 cm); width (W) 9.5 in. (24 cm); length (L) 12.5 in. (32 cm). The weight of the unit shall not exceed 8.5 lb (4.0 kg).

The receiver shall be Vicon model V1305R-DC series of receivers.

Technical Information

ELECTRICAL

Input Voltage: V1305R-DC1, V1305R-DC2:
120 VAC, 60 Hz.
V1305R-DC1-230, V1305R-DC2-230:
230 VAC, 50 Hz.

Power Consumption: 50 W. (Associated equipment, such as pan-and-tilt and auxiliary devices, are not included in power ratings.)

Heat Equivalent: 2.8 btu/min. (0.7 kg-cal/min).
NOTE: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

Fuse: 120 VAC: 1 A slo blo.
230 VAC: 0.5 A slo blo.
Fuses must be HRC (ceramic).

Video Input/Output: BNC connectors.

Receiver Control Input: V1305R-DC1, V1305R-DC1-230 (NOVA): RS-422 communications. Terminal block on main PCB accessible through cable entry fitting on receiver enclosure for communication to and from CPU and next receiver in line. Two leads differential RS-422 command. Two leads differential RS-422 response. Two leads shield ground. Up to five miles distance between receivers when using Belden No. 9182 shielded twisted-pair wires or equivalent. Baud rate selectable from DIP switch on main PCB. V1305R-DC2, V1305R-DC2-230 (Vicoax II): Superimposed data on composite video signal. Two BNC connectors route control signals from the Vicoax control to receiver and

connect the video from the camera to the receiver.

Auxiliary Functions: Terminal block on main PCB accessible through cable entry fittings on the receiver enclosure. Settings are normally (NO). Selectable momentary or latching. Two relays installed; two additional driver outputs on optional relay board.

Pan-and-Tilt Output: Terminal block on main PCB accessible through cable entry fittings on receiver enclosure.

Lens Drive Output: Terminal block on main PCB accessible through cable entry fittings on receiver enclosure.

Autoiris: Receiver-based autoiris control. Autoiris level potentiometer on main PCB.

Radio Frequency Emission Rating: FCC Class A.

European Community (CE) Standards: EN 50081-1 generic emissions.
EN 50082-1 generic immunity.

OPERATION

Basic Functions: Pan left and right, variable speed.
Tilt up and down, variable speed.
Zoom in/out, two speed.
Focus near/far, two speed.
Iris open/close, two speed.
Autoiris control for motorized zoom lenses.
Two auxiliary relays, selectable momentary or latching, installed; two additional auxiliary drivers available as an option.
79 presets.
4800/9600 baud rates, selectable.

Technical Information (cont'd)

Test Mode: Pan right and left.
Tilt up and down.
Zoom in and out.
Focus near and far.
Iris open and close.
Auxiliary functions.
Erase presets.

MECHANICAL

Dimensions: Height (H) 4.25 in. (105 mm).
Width (W): 9.5 in. (240 mm), including
cable entry ports.
Length (L): 12.5 in. (320 mm).

Weight: 8.5 lb (4.0 kg).

ENVIRONMENTAL

Operating Temperature Range: -4 to 140° F (-20 to 60°C).
-40 to 140°F (-40 to 60°C) with
heater.

Operating Humidity: Up to 95% relative, noncondensing.

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

Storage Humidity: Up to 85% relative, noncondensing.

