INFUSION CONTROLLER II

IC-36-II / IC-24-II

Single software tool for project design, ordering, and programming

Auto backup: Full project file and 52 week updates on included Micro SD card

Supports wired, wireless, and hybrid systems

E-mail notification support for Yahoo, Gmail, Hotmail, and more

Integral real and astronomical time clock

Ethernet connected for mobile applications, remote programming, and integration

LCD display provides essential system information at a glance

Plug-and-play design enables upgrade or replacement without re-wiring from Gen-1 to Gen-2 within the InFusion system

DESCRIPTION

The controller is the "main brain" of the system and is capable of supporting all Vantage user interfaces, including Equinox touchscreens. The InFusion Controller II (IC-24-II and IC-36-II) possesses the required processor speed, RAM, and flash memory to meet the demands for delay-free control of large, complex systems. These requirements include control precision (where commands are completed instantaneously), real time feedback, a highly scalable system architecture, and programming for individual system personalization. Most buildings incorporate a number of controlled subsystems, including lighting, shades, HVAC, and more. The InFusion Controller provides seamless integration of these subsystems, enhancing the entire control experience.

OPERATION

The InFusion Controller II is powered by an independent power supply, which also powers two station bus runs. The IC-24-II uses a 24V power supply delivering 35W shared power to both station buses; the IC-36-II uses a 36 volt power supply delivering 60W to each of two Station Bus runs. Typically, the higher wattage controller is used on new systems to support more stations on the Bus, and the lower wattage controller is used on legacy Vantage system upgrades that are only 24V compatible. One InFusion Controller can support up to 120 WireLink stations or 38 Equinox 40 stations and up to 120 RadioLink stations. Controllers can easily network to expand the system to up to 31 controllers. Five RS232 and two RS485 ports per controller provide easy device connectivity while an Ethernet connection supports IP connected products.

HIGHLIGHTS

Remote programming and firmware updates via Design Center Software allows the system being run by the InFusion Controller to be updated off site. This way, system errors can be resolved without the programmer going to the physical location and plugging into the controller, reducing the expense of an on site visit. Updates to the software can thereby be made immediately without appointment. Programming of the system is more convenient and more accurate with this feature.

APPLICATIONS

The InFusion Controller II is ideal for larger applications where networking and expansion are possibilities. The InFusion system is Title 24 compliant and is useful for any project that employs energy efficiency. Additionally, it is UKCA, UL, cUL, and CE listed. Commercial projects as well as whole-home projects generally require one or more InFusion Controller(s) to power all sub-systems.

PROJECT		LOCATION/ TYPE	

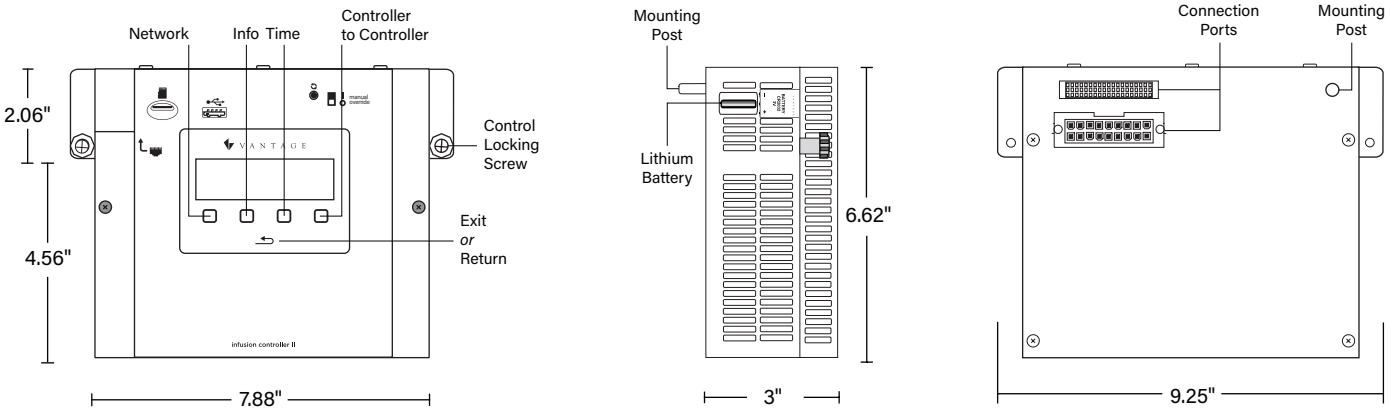
FEATURES

- Ample processor speed, RAM, and flash memory
- Remote programming and firmware updates through Design Center software
- Automatic backups of complete configuration each week to Micro SD card
- Password protection for security
- E-mail notification support for Yahoo, Gmail, Hotmail, and more
- Ethernet enabled for connectivity, expansion, and integration
- Automatic network addressing via zeroconf
- 5 RS232 ports; 2 RS485 ports
- 120 low-voltage or 96 Equinox 40 stations; 120 wireless stations
- Tracks real and astronomical time
- Scalable up to seven enclosures per controller
- 24VDC and 36VDC versions
- Plug-and-play design for tool-free replacement of older InFusion systems

SPECIFICATIONS

Dimensions (HWD):	6.62" x 7.88" x 3.0" (168mm x 200mm x 76mm)
Model:	IC-36-II and IC-24-II
Ambient Operating Humidity:	5-95% non-condensing
Ambient Operating Temperature:	32-104°F / 0-40°C
Controller-to-Controller, IC Network Wiring Topology:	Daisy chain
Cooling:	Convection
Lightning/Surge Protection:	Static shock IO; all ports and case; IEC 61000-4-2, low-voltage; ITU-T K.20
Lithium Battery Backup:	Disk Battery CR2032, 3Volt 2.5 Yrs. unpowered or 20 yrs. powered (field replaceable - see caution at end)
Max. # WireLink Stations IC-24-II:	Up to 50 stations each Bus or until the shared 35W supply is used
Max. # WireLink Stations IC-36-II:	Up to 60 stations each Bus or until the independent 60W supply is used on each Bus
Max Wire From IC to SC:	200 feet / 61 meters
Max. Wire Length Station Bus:	2,000 feet of cabling max. on each Station Bus. No station more than 1,000 feet from controller
Maximum Power Draw:	200W
Minimum Power Draw:	6W
Station Bus Power Supply, IC-24-II:	One 35W shared power supply to both Station Buses
Station Bus Power Supply, IC-36-II:	One 60W independent power supply to each Station Bus
Station Bus Specification:	2C 16AWG, non-shield, <30pF per foot, Station Bus should be separated a minimum of 18" from other parallel communication and/or high-voltage runs
Station Bus Wiring Topology:	Daisy chain, branch, star
System Compatibility:	The IC-36-II and IC-24-II controllers are compatible with other IC-II class controllers
Voltage:	120-240V, 50/60Hz
Weight:	3.3 lbs -or- 1.5kg
Warranty:	Five year warranty
Certifications:	UKCA, CE, UL, cUL, EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3

MULTI-VIEW LINE DRAWING



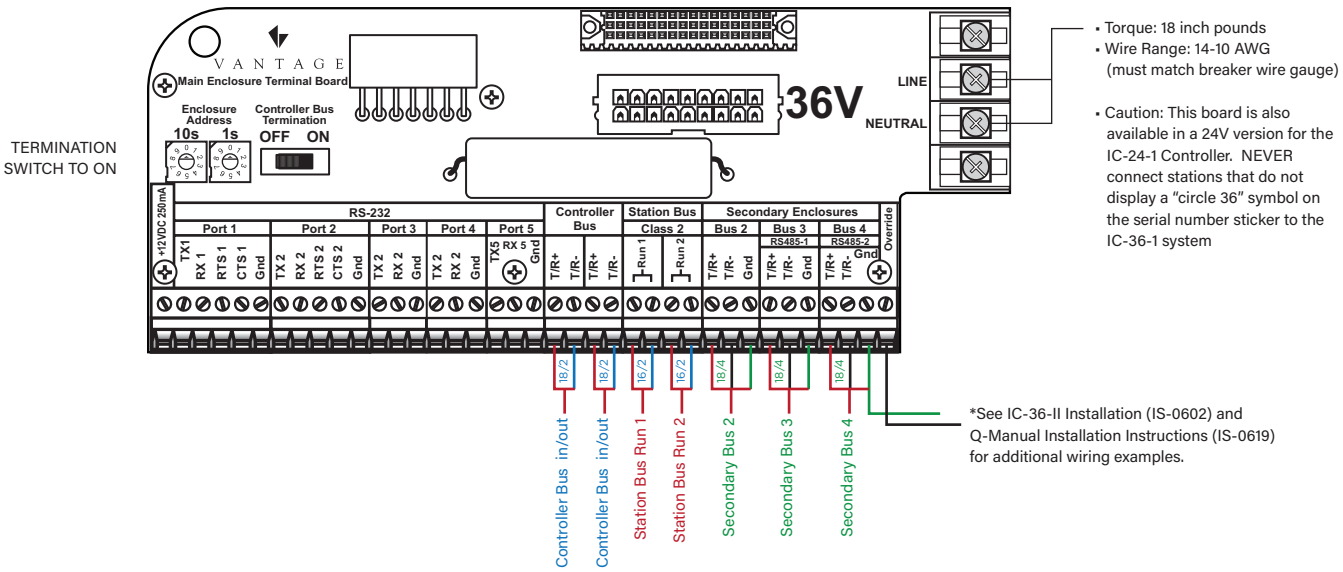
Front View | Side View | Back View

WIRING DIAGRAM

Electrical contractor to provide (1) 120V circuit input to the controller (not to be shared with lighting loads). Wire gauge and breaker rating to be determined by electrical contractor, considering 200W maximum power draw per controller.

NOTE: See Q-Manual Installation Instructions (IS-0619) and IC-36-II Installation (IS-0602) for additional wiring examples.

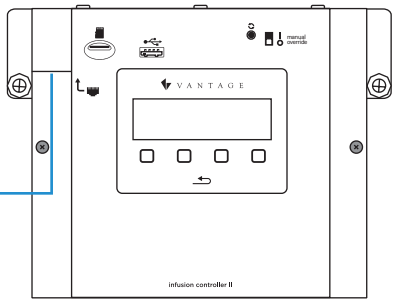
Diagram Label - Terminal Board Part #: VSUB215 (Pre-Installed In Main Enclosures)



WIRING DIAGRAM

The InFusion Controller plugs into the main enclosure terminal board after all connections have been made.

CATE5E: RJ-45 termination consistent with local area network pinout wiring



ORDERING INFORMATION

Catalog #		Description	Voltage	Misc
☐	IC-36-II	InFusion Controller II - 36V	120-240V, 50/60Hz	
☐	IC-24-II	InFusion Controller II - 24V	120-240V, 50/60Hz	

ADDITIONAL MOUNTING ACCESSORIES

Catalog #		Description	Catalog #	Desscription
☐	IRME-24	24 Volt InFusion Rack Mount Enclosure	IRME-24RF-KIT	24 Volt InFusion Rack Mount Enclosure Kit
☐	IRME-36	36 Volt InFusion Rack Mount Enclosure	120-240V, 50/IRME-36RF-KIT	36 Volt InFusion Rack Mount Enclosure Kit
☐	ISME-24	24 Volt InFusion Surface Mount Enclosure	ISME-24RF-KIT	24 Volt InFusion Surface Mount Enclosure with RadioLink Kit
☐	ISME-36	36 Volt InFusion Surface Mount Enclosure	ISME-36RF-KIT	36 Volt InFusion Surface Mount Enclosure with RadioLink Kit

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