

C2N-IIF

Intercom Door Panel Interface

As part of a complete Crestron Home® AV distribution system, the C2N-IIF provides an extremely flexible intercom interface solution for door station and entry gate applications. Its powerful amplifier and microphone preamp deliver high-quality 2-way (half-duplex) voice communication employing an electret condenser microphone and weather-resistant speaker (part of **C2N-IIF-SPMK** kit, sold separately). A door camera can also be connected to support full video intercom functionality. Extensive logic inputs and outputs are provided to accommodate a range of access control devices including push-to-call (doorbell) buttons, floor sensors, driveway sensors, keyless entry keypads, door strikes, motorized doors, gates, and more.

For a simple yet elegant door station solution, the C2N-IIF is designed to mate directly with Holovision® brass plates including camera and keyless entry versions using the C2N-IIF-SPMK kit. It is equally well suited to accommodate completely custom or retrofit applications. The C2N-IIF is designed to be installed in a weatherproof housing or back box at the door station or gate location, and will tolerate temperatures from -22 to 140 degrees F (-30 to 60° C). The C2N-IIF works with Crestron's Intercom Distribution Switchers and other CAT5 AV distribution products. Audio, video, and control signals are carried to the head end by a single Cresnet cable and two CAT5E cables (available as **CresCAT7D**, sold separately).**

Additional features include built-in WAV sound file capability to enable customized door chime and voice prompts at the door station speaker. Volume, bass, and treble are individually adjustable for the intercom and WAV file signals.



SPECIFICATIONS

Input/Output Modes

Essex Panel Mode: (5) pulse inputs from Essex keypad plus (1) contact closure input and (8) electronic closure/24VDC outputs

Button Matrix Mode: 4 X 4 switch matrix plus (2) contact closure inputs and (4) electronic closure/24VDC outputs

Discrete I/O Mode: (6) contact closure inputs and (8) electronic closure/24VDC outputs

Audio – Speaker

Amplifier Output Power: 13 watts at 8 ohms

Volume Gain Range: -80dB to +20dB, 1.0dB steps

Mute: Electronic

Bass Gain Range: ±14dB, 2.0dB steps

Treble Gain Range: ±14dB, 2.0dB steps

Frequency Response: 100Hz to 20kHz, ±1dB

THD+N: <0.5% @ 100Hz to 20kHz, full output

S/N Ratio: 80dB @ 1kHz, full output

Audio – Microphone

Frequency Response: 20Hz to 20kHz, ±0.5dB

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Audio – WAV File

Storage Capacity: 30 WAV files maximum, 30 seconds total time

WAV File: 8-bit PCM, mono, 8 kHz sampling rate

Volume Gain Range: -80dB to +20dB, 1.0dB steps

Bass Gain Range: ± 14 dB, 2.0dB steps

Treble Gain Range: ± 14 dB, 2.0dB steps

Wav file audio feeds local speaker output only

Connectors

AUDIO: (1) 8-pin RJ45 female, shielded;

Bidirectional CAT5 balanced audio port;

Maximum Input Level: 4 Vrms;

Output Level: 1 Vrms nominal;

Connects to [C2N-IADS30X24](#), [CNX-BIPAD8](#), [CNX-PBAR4](#)

VIDEO: (1) 8-pin RJ45 female, shielded;

CAT5 balanced video output port (composite only);

Output Impedance: 100 ohms;

Output Level: 1 Vp-p nominal;

Connects to [C2N-IVDS24X24](#), [CNX-PBVR4](#)

AV IO: (1) 9-pin 3.5mm detachable terminal block comprising:

MIC/GND: Electret microphone input;

Input Level: 34 mV nominal;

Bias Voltage: 5 Volts DC, current limited;

Use Panasonic WM-61B or equivalent electret microphone;

VID IN/GND: Composite video input;

Input Level: 1 Vp-p nominal;

12V/GND: Camera power output;

Maximum Load: 200 mA @ 12 Volts DC;

BELL/GND: Doorbell button input;

Contact closure/logic level input;

Input Voltage: -0.5 to 5.5 Volts DC minimum/maximum;

Logic "1" Threshold: ≈ 3.2 Volts DC;

Logic "0" Threshold: ≈ 0.9 Volts DC;

SPK-/+: Speaker-level output;

Output Power: 13 watts @ 8 ohms

INPUT: (1) 12-pin connector comprising (6) contact closure/logic level inputs referenced to GND; (see "Input/Output Modes" above);

Input Voltage: -0.5 to 5.5 Volts DC minimum/maximum;

Logic "0" Threshold: 3.2 Volts DC maximum;

Logic "1" Threshold: 0.9 Volts DC minimum;

Internal Supply Voltage: +5 Volts DC;

Essex Lamp Control: Switched voltage output for keypad backlight;

OUTPUT: (1) 14-pin connector comprising (8) electronic closures or switched 24 Volt DC output drivers referenced to GND;

(see "Input/Output Modes" above);

Maximum Load: 50 mA per output;

Maximum External Voltage: 24 Volts DC;

Internal Supply: 500 mA @ 24 Volts DC;

NET: (1) 4-pin 3.5mm detachable terminal block;

Controls & LED Indicators

PWR: (1) green LED, indicates 24 Volts DC power supplied from Cresnet control network

NET: (1) yellow LED, indicates communication with Cresnet system

SETUP (rear): (1) recessed miniature pushbutton and (1) red LED, used for touch-settable ID (TSID)

MIC VOL: (1) screwdriver-adjustable pot for microphone level adjustment

Power Requirements

Cresnet Power Usage: 20 Watts (1.25 Amps @ 24 Volts DC) plus up to 12 Watts (0.5 Amps) additional if using switched 24 Volt DC outputs

Environmental

Temperature: -22° to 140°F (-30° to 60°C)

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Humidity: 10% to 90% RH (non-condensing)

Enclosure

Black metal, surface mount box with (2) integral mounting flanges

Dimensions

Height: 5.14 in (13.06 cm)

Width: 2.74 in (6.96 cm)

Depth: 1.48 in (3.76 cm)

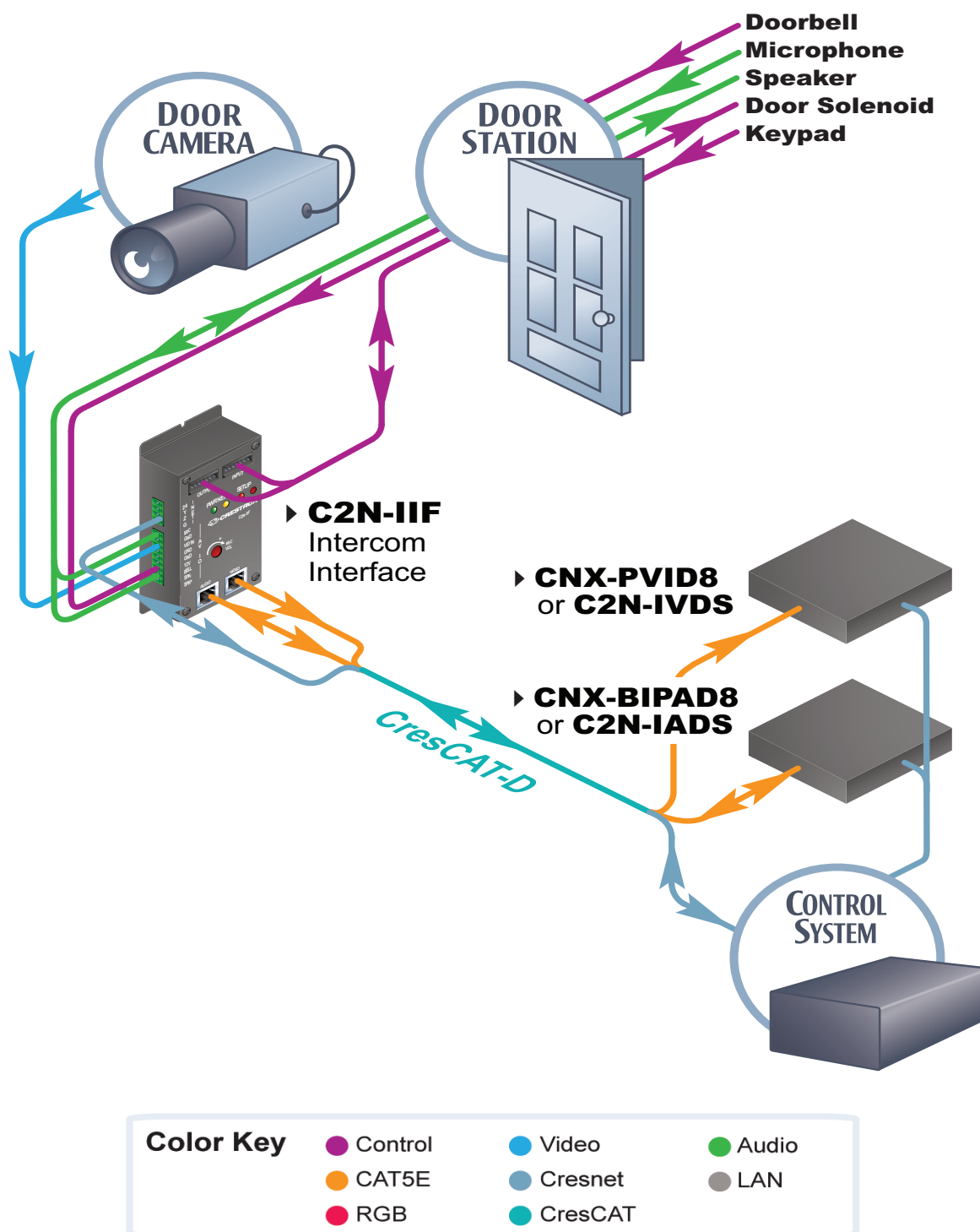
Weight

13.3 oz (0.38 kg)

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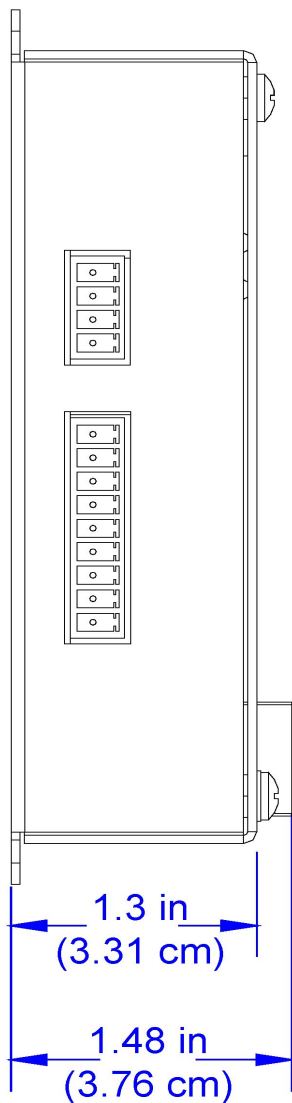
Typical C2N-IIF Connections



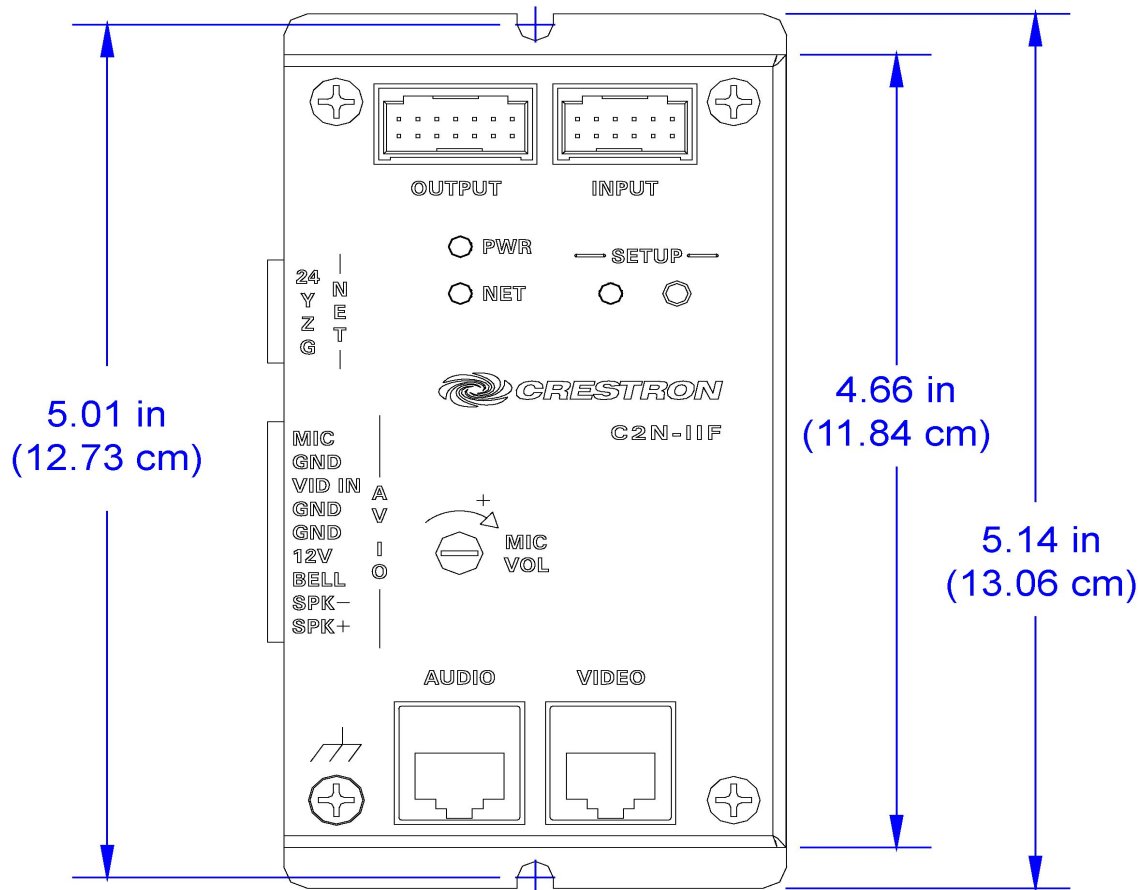
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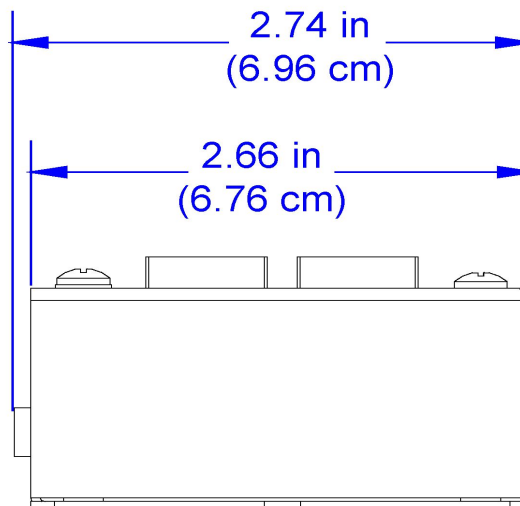
Side



Front



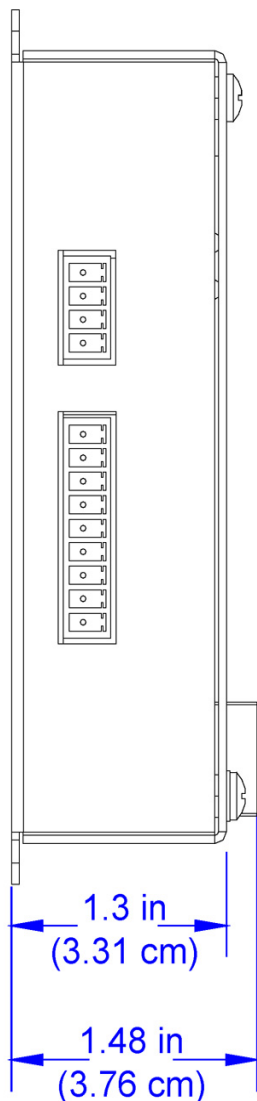
End



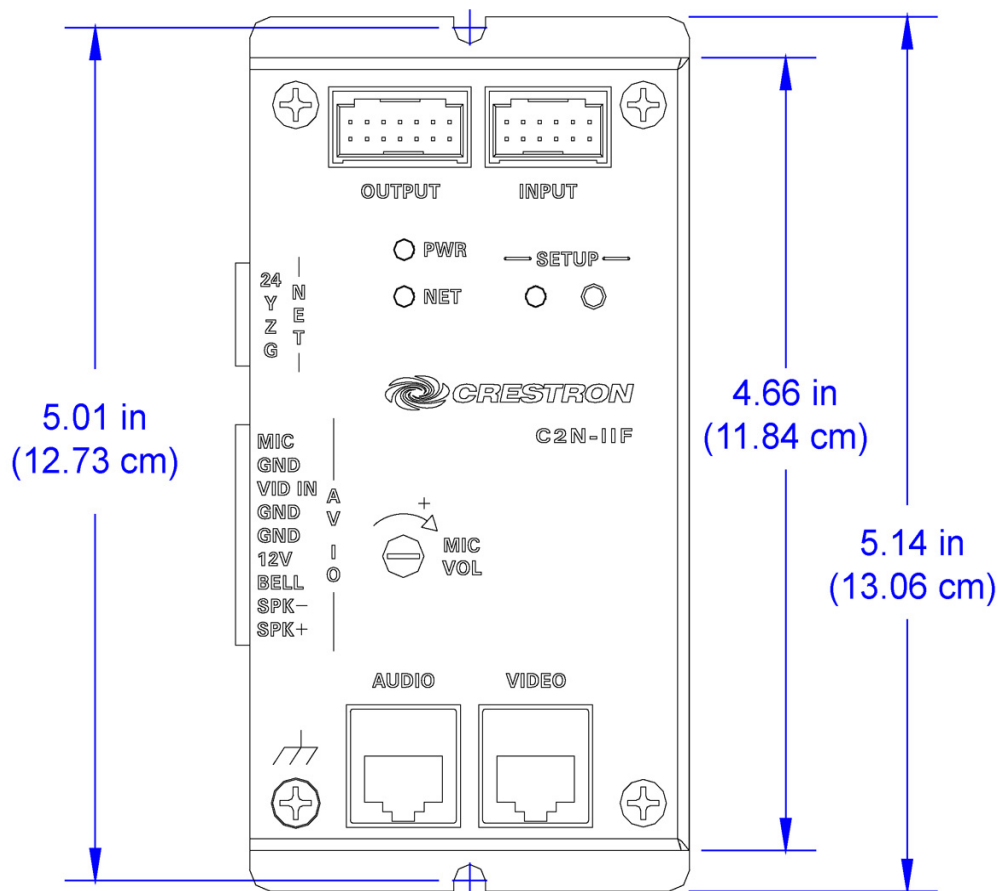
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Side



Front



End

