

DVTel's Latitude VoIP Interface Voice over IP Intercom Interface Box

DVTel's Latitude Network Video Management System (NVMS) is a multimedia management software and is not limited to video recording and monitoring only. The audio support of the Latitude NVMS provides the ability to monitor, record and communicate with audio call boxes attached to Video Encoders or Decoders. The Latitude NVMS combined with the NetTalk Advanced Intercom System (RII) becomes an Intercom Master Station. A variety of commercially available call stations can be interfaces with NetTalk for maximum system flexibility. The Latitude ControlCenter client application provides full control of the audio system including push to talk and listen functions and can provide a full Latitude NVMS system response to a remote call button action. In addition to the Latitude ControlCenter application full audio controls, push-to-talk and listen can be accessed from the Latitude CCTV keyboard.

The RII allows a variety of intercom speaker stations to communicate with DVTel's line of Audio Enabled Encoders and Decoders with The Latitude NVMS audio option. All Audio Enabled 7401, 7600 series of Encoders and Decoders including the 9460, 9540 and 9840 series of IP cameras.

The NetTalk RII with its unique Automatic Level Control (ALC) circuitry, balances inbound and outbound audio levels for a full compatibility with the DVTel Audio Encoders, Decoders and the Latitude Software. When receiving the audio signal, it converts to 0dB level from the station. When transmitting the audio signal, it converts the low microphone level (-40dB typical) from the speaker/mic to a 0dB level at 600 ohms for transmission of the network.

DVTel's NetTalk RII is designed to be installed at the remote speaker station and requires 24 VAC power source to operate. A 12 VDC output is available to power a single channel Encoder/Decoder. Rack mount options is also available.



- Variety of Intercom solutions to work with DVTel's Encoder series
- Allows Intercoms to work over the network
- Automatic operation
- Automatic Level Control (ALC) for maximum voice clarity
- Robust 5W Audio amplification handles multiple speakers and low impedance loads
- Supports 4 to 50 ohm and 25V systems
- Audio talk listen control with Latitude GUI and maps
- ADA LED support on a Latitude NVMS
- Remote door release or speaker selection
- Short circuit and thermal overload protected
- Multi-speaker drive capability
- Factory calibrated—no field adjustments required under normal circumstances
- 2-wire to 4-wire conversion
- 24 VAC operation
- 12 VDC output to operate a single port DVTel Encoder

DVTEL's Latitude VoIP

NetTalk Intercom Speaker Station - Rugged cast aluminum baffle that has an extremely high resistance to corrosion and heavy impact. It offers superb sound quality and a very stylish appearance. By changing the speaker configuration, two different versions are available. The Intercom Speaker Station Indoor uses a standard cone speaker with a stainless steel perforated speaker grill. The Intercom Speaker Station Outdoor uses a waterproof cone speaker that can withstand extremes in heat, dust and weather. A stainless steel fine mesh screen is attached to the front of the perforated speaker grill to reduce water and dirt build-up inside the speaker station. The rugged cast aluminum push button has been designed for high visibility and easy, trouble free operation. It has been engineered to activate a call when just 2 lbs (.9 Kg) of pressure is applied anywhere on its front surface. Tamper proof screws are supplied for securely mounting the speaker station, and several options are available. These options include: 25 Volt Line Transformers, LED display indicators, and a variety of speaker impedances

Features: Rugged Cast Aluminum, Stylish appearance, high quality speaker/microphone, Standard 3 Gang Size, Superb sound quality, LED display Option is also available.



NetTalk Vandal Proof Speaker Stations are constructed entirely of stainless steel and were designed specifically for security applications. These rugged speaker stations have a smooth, clean appearance, but can handle abusive environments. The 2 1/2" speaker used in this series, has a special Sealed Linear Design protecting the speaker from ferrous and non-ferrous particles. With a wide operating temperature range and resistance to water, this station still provides outstanding audio performance. An offset, perforated 14 gauge stainless steel grill plate further protects the speaker from liquids, open flame and physical abuse.

The call button is made entirely out of stainless steel. A stop between the button cap and the flanged switch body protects the replaceable switch from being damaged. This design permits the switch assembly to be taken apart for service and cleaning as needed.

Features: All Stainless Steel Construction, 11 Gauge Faceplate, Waterproof Speaker/Microphone Resists Damage by Abuse, Flame and Liquid, Rugged All Stainless Steel Button, Superb Audio Clarity, 45 ohm or 25 Volt Operation, Other Configurations Available 2 or 3 Gang models



2 Gang Box Shown

NetTalk Re-Entrant Horn Speaker is used where noise penetration and clear speech intelligibility is required in one or two way communication systems. A special diffuser suppresses on-axis hot spots and improves dispersion.

The Re-entrant horn speaker is conservatively rated at 16 watts continuous duty. It's powerful compression drivers steel parts are plated to meet a 96 hour salt spray test. The construction is weather and corrosion resistant using stainless steel fasteners and engineering grade UV resistant thermoplastics.

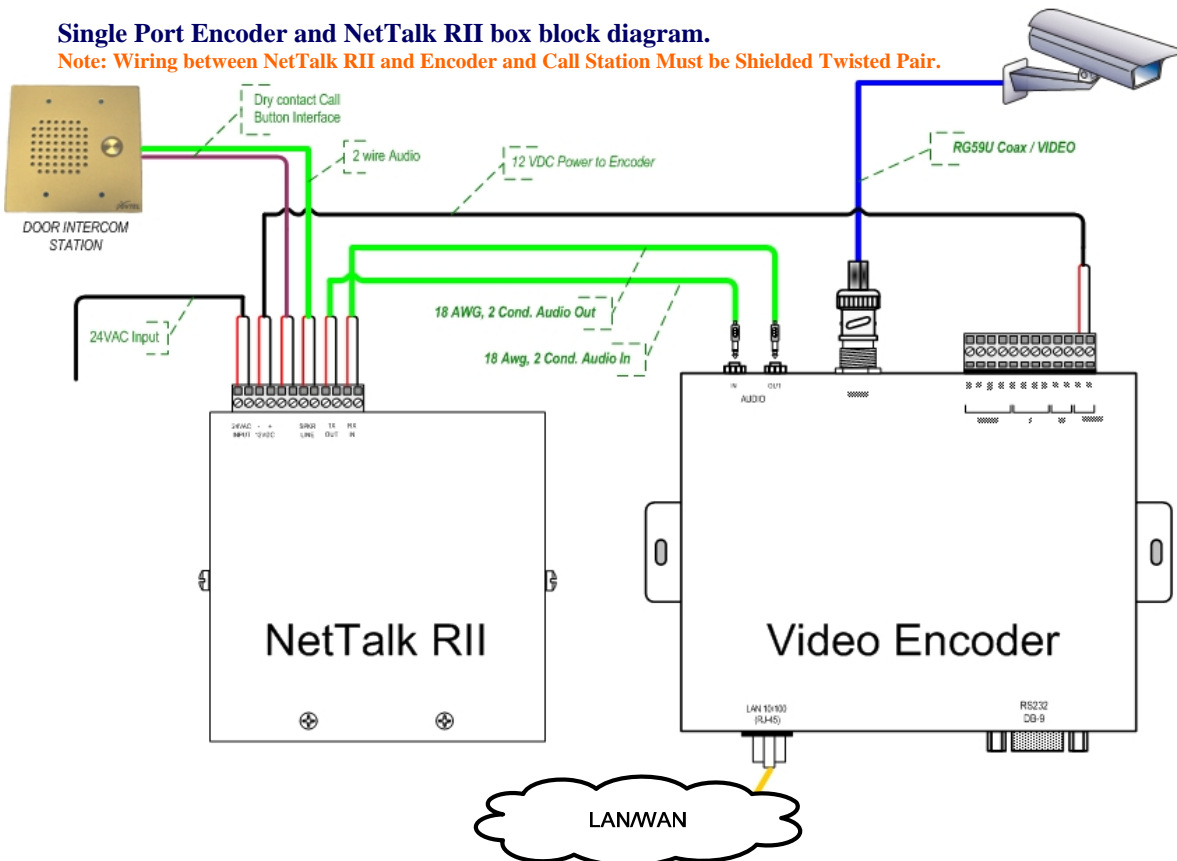
The mounting system is designed for easy assembly and adjustment. Power adjustments are done with a color coded 5 conductor cable.

Features: Designed for noise penetration and speech clarity; Excellent sensitivity as a microphone in two-way systems; Weather and corrosion resistant construction using stainless steel fasteners and UV resistant thermoplastics; Conservatively rated at 16 Watts continuous duty; Diffuser suppresses on-axis hot spots.



Single Port Encoder and NetTalk RII box block diagram.

Note: Wiring between NetTalk RII and Encoder and Call Station Must be Shielded Twisted Pair.



Please note that other Encoders and call boxes may require additional wiring, components and/or software.

Multi-port Encoders supports single Bi-Directional Audio in/out pair. If multiple audio in/out are required for multiple cameras additional audio enabled Encoders will have to be installed in the system

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Intercom Speakers Specifications

Net Talk Intercom Speaker Station	
Size/Shape:	3" Square
Magnet:	2.5 oz. Ceramic
Continuous Power:	5 watts
Peak Power:	10 Watts
Mounting Diameter:	3 3/8"
Depth:	1 7/32"
Impedance:	45 Ohms (25 Volt transformers are also available)
Frequency Response:	260Hz to 8 kHz (Standard) 400Hz to 4.5 kHz (waterproof)
Output sensitivity:	87dB (above .0002 Dynes/CM ²)
Construction:	Cast Aluminum
Finish:	Black Anodize with Silver Trim
Dimensions:	6 1/2" x 4 9/16" x 1 1/2" D Fits a Standard 3 gang electrical box

Net Talk Vandal Proof Speaker Stations	
Speaker Size	2 1/2 Square
Impedance	45 ohm or 8 ohm with 25 Volt 2 Watt Line Transformer
Power:	6 Watts RMS; 12 Watts Program
Frequency Response	350Hz to 4.5 kHz
Sensitivity	87dB (above .0002 Dynes/CM ²)
Environmental	-55C to +85; Total immersion in water for 96 hours without degradation
Call Button	All stainless steel housing; 1 Amp @ 25 VAC or 28 VDC; 250,000 cycles at full rating
Dimensions	2-Gang: 4 1/2" w 4 1/2"h 1 3/8"d (2 5/8" d w/Transformer). 3-Gang: 6 3/8" w 4 1/2"h 1 3/8"d (2 5/8" d w/Transformer).
Material	11 gauge SS front panel w/14 gauge SS baffle plate; matte finish
Weight	2 Gang box: 1 1/2 lb; 1 3/4lbs w/transformer 3 Gang box: 1 3/4 lb; 2 lbs w/ transformer

Net Talk Re-Entrant Horn Stations	
Power Handling:	16 Watts Continuous Duty
Frequency Range:	600 - 5600 Hz, (± 3 Db), 400 - 6800 hZ (± 6 dB)
Sound Pressure Level:	1 Watt 500—5000Hz, averaged; 109 dB; 1 Watt, 1 Octave at 2 kHz, averaged; 110.7dB; 16 Watts, 1 octave 2 kHz, average; 122 dB
Talk-Back Sensitivity:	Referenced 94 dB (1.0 Pa) SPL, 700—2000 Hz; 47.4 + 2mV or—13 dBm (0 dBm +mv)
Materials:	Impact and UV resistant ABS Horn and Cover. High Stability, UV resistant polycarbonate for driver and mounting components. Stainless steel fasteners.
Driver:	Compression type, integral with horn. Replaceable phenolic diaphragm driven by high head rated voice coil. Magnet is Strontium Ferrite.
Color:	Tan with brown diffuser/inner horn
Wiring:	5 conductor black jacketed 30" long cable
Power Taps:	16, 8, 4 & 2 Watts



RII Specifications

NetTalk Remote Intercom Interface	
Output to Encoder	-20 dBm to 0 dBm across 600 ohms
Input from Encoder	-30 dBm to +22 dBm for full output
ALC Circuitry	52dB change in input results in no more than a 2dB change in output. Compression starts at 30 dBm @ mixing point. Fast attack, slow release action
Frequency Response	Optimized for maximum voice clarity
Speaker Impedance	4-50 ohms and 25V systems—compatible with most Intercom call stations
Power Requirements	24 VAC input @ 50ma idle; 275ma continuous maximum
Controls	TX—TRANSMIT (TX level) -20 to 0dB RX—RECEIVE (RX level) 0 to maximum audio power
Connections	12 pin screw terminal connection
Cable Requirements	18 - 24 awg Shielded Twisted Pair
Distance Capabilities	Up to 1500 feet from speaker—door control with 18awg Shielded Twisted Pair
Audio Power Output	5W @ 4 ohms
Power	24VAC, .525mA max. (unit only) When powering encoder- .750mA max.
Dimensions	4 1/4" w x 6 1/4" h x 3" d

System Components

Remote Intercom Interface	
DVT-NTK-RII	Remote Intercom Interface (RII) for NetTalk product line
Intercom Speakers (Requires DVT-NTK-RII)	
DVT-NTK-ISS-10	Speaker Station—Outdoor
DVT-NTK-ISS-10-L	Speaker Station—LED—Outdoor
DVT-NT-VAN-1	Vandal Proof Speaker Station (2-Gang Box)
DVT-NT-VAN-2	Vandal Proof Speaker Station (3-Gang Box)
DVT-NT-VAN-3	Vandal Proof Speaker Station (2-Gang Box) no button
DVT-NT-VAN-CB	Vandal Proof Call Button Only
DVT-NTK-HRN-2	Re-Entrant Horn Speaker
NetTalk with AiPhone Interface	
DVT-NTK-RII-AI	Remote intercom interface (RII) with AiPhone Support for the following models: LE-D: Surface Mount Door Station Vandal Resistant Sub Stations: LE-SS: Stainless Steel 2-Gang Sub Station LE-SSR: Stainless Steel 2-Gang Substation with red mushroom push button LE-SS-GP: Gold Plated 2-Gang Sub Station
	Call DVTel application engineering for other models or applications

