

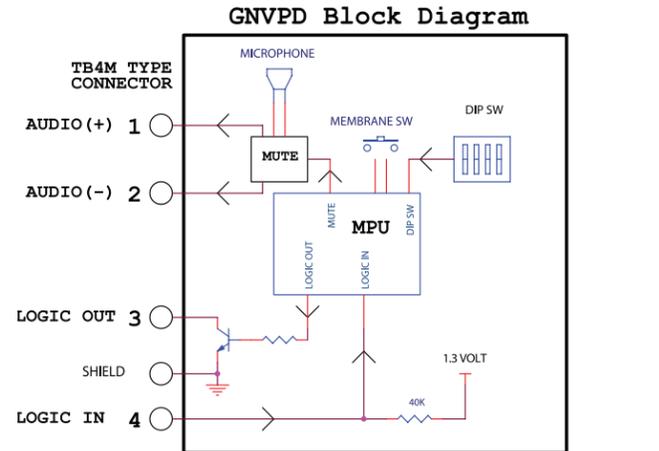
GN15VPD/GN20VPD

Continuously-variable Pattern, Condenser, Mini-gooseneck Microphone with Integrated Desk Stand, Programmable Switch, LED and Logic Interface

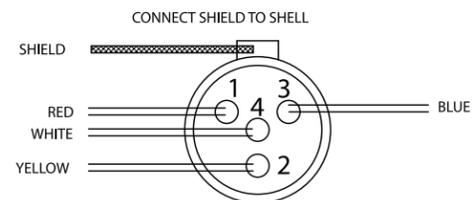
Logic Interface Details

The logic input, in effect, consists of a 40K ohm pull-up resistor to the internal microprocessor power supply (1.3V). Pulling the logic input to ground will activate the logic input.

The logic output, in effect, consists of the open collector of an NPN transistor. The emitter of this transistor is connected to ground. When the logic output is activated, current will flow from the logic output through the transistor to ground. It is recommended that the pull-up resistance value at the receiving circuit be kept as high as possible to minimize the current flow into the logic output. High currents can induce switching noise into the audio. Absolute maximum current into the logic output is 50mA.



Connector Wiring



TA4F TYPE CONNECTOR, SOLDER SIDE
TB4M TYPE CONNECTOR, PIN SIDE

1. AUDIO (+)
2. AUDIO (-)
3. LOGIC OUT
4. LOGIC IN

Two-Year Limited Warranty

Astatic Commercial Audio Products hereby warrants that this product will be free of defects in material and workmanship for a period of two years from the date of purchase. In the unlikely event that a defect occurs Astatic will, at its option, either repair or replace with a new unit of equal or greater value. Retain proof of purchase to validate the purchase date and return it with any warranty claim.

This warranty excludes exterior finish or appearance, damage from abuse, misuse of the product, use contrary to Astatic's instructions or unauthorized repair. All implied warranties, merchantability, or fitness for a particular purpose is hereby disclaimed and Astatic hereby disclaims liability for incidental, special or consequential damages resulting from the use or unavailability of this product.

This warranty gives you specific legal rights and you may have other rights that vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

Note: No other warranty, written or oral is authorized by Astatic Commercial Audio Products.

Shipping Instructions

Please call our customer service department at 440-349-4900 for a pre-approved return authorization number.

Carefully repack the unit and return the insured package to: Astatic Commercial Audio Products, 6573 Cochran Road, Building I, Solon, Ohio 44139. **RETURNS WITHOUT A PRE-APPROVED RETURN AUTHORIZATION NUMBER WILL BE REFUSED.**

If outside the United States, contact your local dealer or distributor for warranty details.



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Description

The GNVPD is a series of dual-flex, continuously-variable polar pattern, miniature-gooseneck condenser microphones with integrated desk stand, programmable membrane switch, LED, and logic interface. Special attention has been taken to design the GNVPD series to resist interference from devices such as cell phones and two-way communication devices. The integral 80Hz, 12dB/octave high-pass filter removes unwanted low-frequency energy to improve intelligibility. The cable can easily be made to exit the bottom or the rear of the stand.

The GNVPD series features logic I/O functions that can be utilized with automatic mixers, teleconferencing systems and control systems. The logic input can remotely control the LED as well as membrane switch activation. The membrane switch working with or bypassing the microphone's mute activates the logic output. Bypassing mute is particularly useful with teleconferencing systems that mute the microphones after the echo cancellation block. The exact mode of operation can be set with the DIP switch on the underside of the desk stand.

The GNVPD has a continuously-variable polar pattern so it can shorten the list of products an audio system designer needs to consider when gooseneck condenser mics are specified. The installer can precisely tailor the polar pattern for the best performance depending upon the application or environment. The GNVPD is primarily designed for speech and vocal pickup in governmental, institutional, and business applications.

Features

- Continuously-variable polar pattern control
- Blue LED status indicator
- Soft-touch programmable membrane switch
- Securable controls on the underside of desk stand
- Keyhole mounting slots
- Logic I/O for external muting and/or remote control
- Available in two lengths (15" and 20")
- RF (radio frequency) Resistant Architecture
- Integrated high-pass filter for elimination of unwanted low frequencies
- Rear/bottom exit cable design



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GN15VPD/GN20VPD

Continuously-variable Pattern Condenser Mini-gooseneck Microphone with Integrated Desk Stand, Programmable Switch, LED and Logic Interface

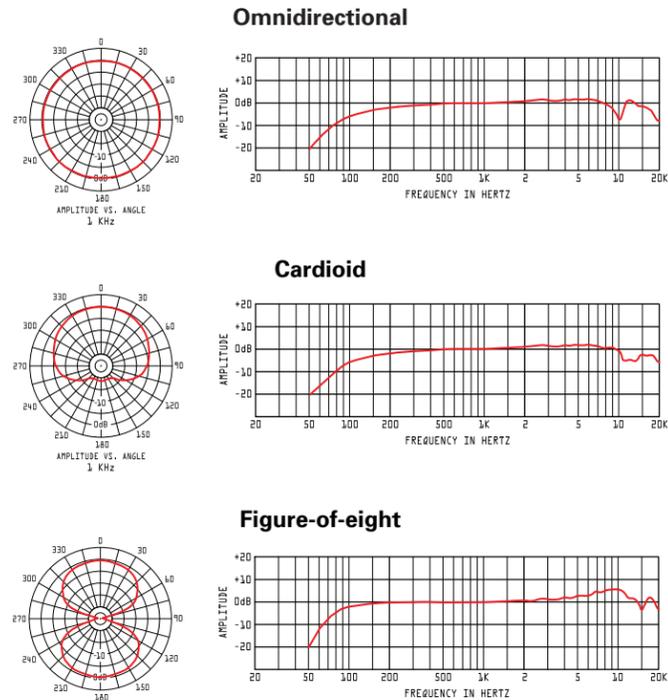
Specifications*

| | |
|----------------------------------|---|
| Operating Principle | Condenser |
| Polar Pattern | Continuously-variable |
| Frequency Response | 80Hz - 18KHz |
| Sensitivity | -36dBV (16mV) @ 1Pa |
| Impedance | 120 ohms |
| Self Noise | 29dBA |
| Maximum SPL | 120dB, 1% THD, 1KHz |
| Power Requirements | P12, P24, P48, 4mA |
| Connector | TB4M-type (TA4F-type to 3-pin male XLR-type cable included). |
| Polarity | Positive pressure on diaphragm corresponds to positive voltage on pin 1 relative to pin 2 at TB4M-type connector. |
| Logic Output | NPN open collector, 30V, 50mA, max |
| Logic Input | 40K ohm pull-up resistor to 1.3V |
| Finish | Durable matte-black urethane |
| Dimensions | (See drawing) |
| Net Weight [Mass] | |
| GN15VPD | 1lb 8oz [0.70Kg] |
| GN20VPD | 1lb 10oz [0.73kg] |
| Packaged Weight [Mass] | |
| GN15VPD | 1lb 15oz [0.87Kg] |
| GN20VPD | 2lbs 0oz [0.90Kg] |
| RF Immunity | Meets or exceeds EN55103-2, E1, E2, E3 and E4 |

RoHS Compliant

*Specifications subject to change without notice.

Included Accessories30' [9m] cable,
foam windscreen,
adhesive "Astatic" security cover.



Architects' and Engineers' Specification

This microphone will be a mini-gooseneck condenser type with a permanently-attached desk stand a programmable membrane switch. The frequency response will be 80-18KHz. The microphone will have a continuously-variable polar pattern. The membrane switch will be programmable to work as push-to-talk, push-to-mute, on/off, and activate a logic output for remote functions. The microphone will have a logic input that can be configured to remotely control the LED or the membrane switch.

The sensitivity of the microphone will be -36dBV (16mv) @ 1Pa. The microphone will have a miniature 4-pin TB4M-type connector on the underside of the desk stand allowing for rear or bottom exit. A 30' [9m] miniature 4-pin female to 3-pin male XLR cable will be provided. The cable will have 4 conductors within a shield. The logic input and the logic output wires will not be connected to the 3-pin male XLR when shipped from Astatic.

The desk stand will contain the microphone's electronics, variable-pattern control, membrane switch and a DIP switch for programmable functions. The microphone will operate on P12, P24 or P48 standard phantom power consuming 4mA.

The microphone element and electronics will be enclosed in a radio frequency resistant housing meeting or exceeding EN55103-2. The GN15VPD will be 15" [381mm] in overall length and 4-1/2" [115mm] in diameter at the base. The GN20VPD will be 20" [508mm] in overall length and 4-1/2" [115mm] in diameter at the base. The GN15VPD and GN20VPD will have a durable matte-black urethane finish. A foam windscreen, control cover and mounting screws will be supplied.

The Astatic model GN15VPD or GN20VPD is specified.

Settings

The GNVPD microphone has an integrated membrane switch on the desk stand. This membrane switch can be programmed using the DIP switch on the underside of the microphone (see diagram). The microphone will come from the factory in the "Power Up On" mode.

Push to Talk (momentary mode):

A momentary press on the membrane switch (or a closure to ground on the logic input) will activate the microphone, close the logic output and turn the LED on.

Push to Mute (momentary mode):

A momentary press on the membrane switch (or a closure to ground on the logic input) will mute the microphone, open the logic output and turn the LED off.

Power Up On (latching mode):

The microphone is active, the logic output is closed and the LED is on when phantom power is first applied. A momentary press on the membrane switch will toggle the microphone mute, the logic output and the LED.

Power Up Off (latching mode):

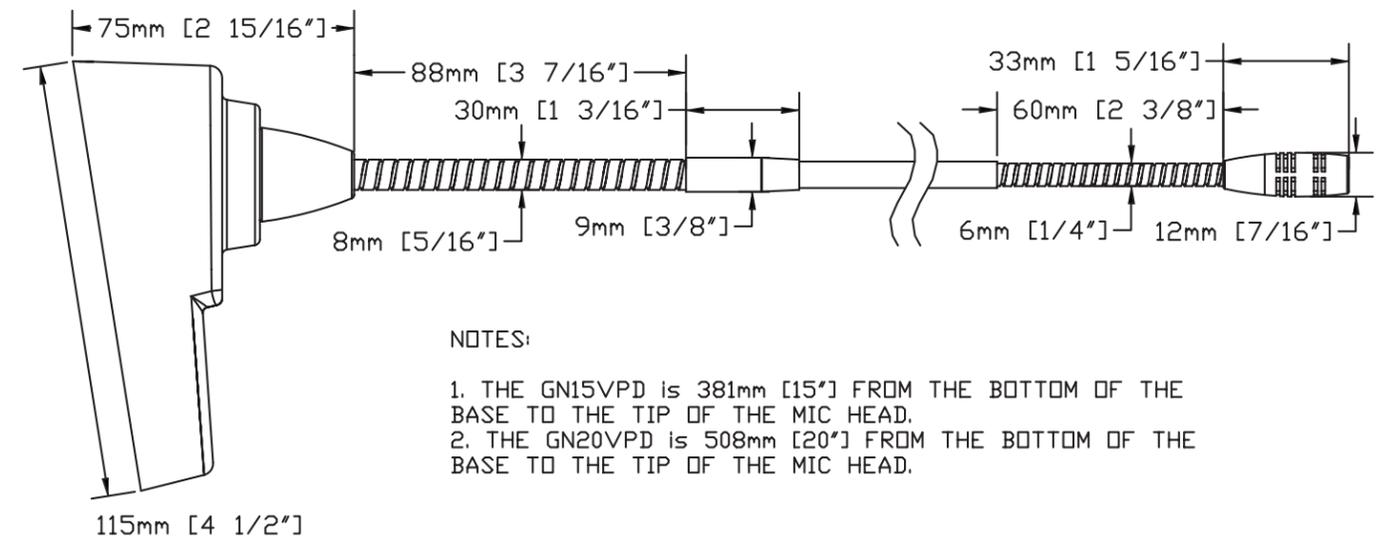
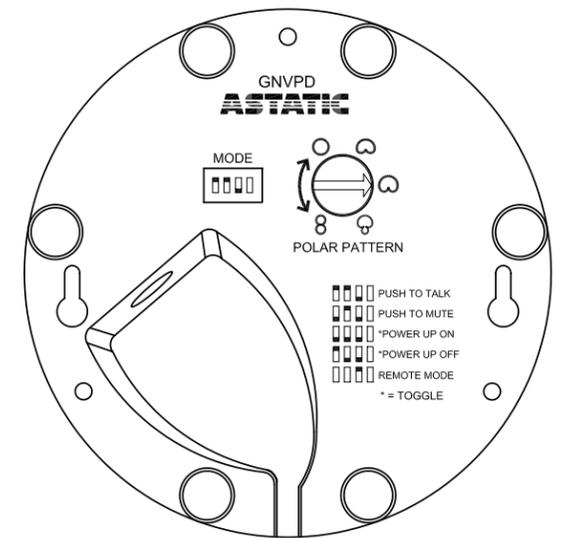
The microphone is muted, the logic output is open and the LED is off when phantom power is first applied. A momentary press on the membrane switch will toggle the microphone mute, the logic output and the LED.

Remote Mode:

1. The LED will illuminate when the logic input is grounded.
2. The logic output will close when the membrane switch is pressed.
3. The audio will remain un-muted.

Polar pattern Adjustment

1. Set the desired polar pattern by turning the dial on the underside of the microphone.
2. Cover controls with the provided adhesive security label if desired.



NOTES:

1. THE GN15VPD is 381mm [15"] FROM THE BOTTOM OF THE BASE TO THE TIP OF THE MIC HEAD.
2. THE GN20VPD is 508mm [20"] FROM THE BOTTOM OF THE BASE TO THE TIP OF THE MIC HEAD.