

1600VP/1700VP/1800VP

Continuously-variable Pattern Condenser Microphone System with Remote Polar Control



Description
 The 1600VP / 1700VP / 1800VP is a continuously-variable pattern condenser microphone system with remote polar control (patent pending). The variable polar pattern with remote control allows the user to precisely adjust the shape of the pick-up pattern for best performance from a remote location. Utilizing a two-conductor shielded cable (maximum length 2,000 feet) between the microphone head and the pattern-control box (VPC-1), the user can adjust the polar pattern in real time without changing capsules, microphone positions, or inducing noise in the audio chain.

Special attention has been given to the frequency response and sensitivity of the microphone system while utilizing the variable-pattern control to precisely alter the shape of the pick-up pattern. The large-diameter, low-noise elements produce a frequency response of 40Hz to 20KHz with a selectable, recessed 80Hz, 12dB/octave high-pass filter that removes unwanted low-frequency energy when engaged. The filter control is conveniently located on the control box.

The microphone head is made of commercial grade aluminum, the control box is made of hardened steel, both manufactured in the USA. The microphone head and box are powder coated matte black for an unobtrusive yet stylish appearance. Up to six control boxes can be mounted in one rack unit shelf - Astatic RUI. The polar-pattern dial is positioned for easy adjustment "on the fly" and can be secured with a single "Flat Style" blank panel when rack mounted.

The 1600VP / 1700VP / 1800VP is designed to resist interference from devices such as cell phones, two-way communication devices and lighting apparatus. Utilizing our RF Resistant Architecture, the 1600VP / 1700VP / 1800VP meets the stringent RF standards set by the European Union (see the specification section for more information).

The system comes complete with microphone head, VPC-1 control box, 30' (9.1m) of two-conductor shielded cable terminated with a TA3F-type connector and 3-pin XLRM-type connector. Also included with the microphone system is a 3-pin XLRF-type connector on a stainless steel duplex wall plate. Choose the appropriate model number for your specific application:

Choose the 1600VP when a suspended system is required. System includes a counter poise string, exclusive articulating steel hanger, anti-twist thread and rods, 30' of cable, and XLRF-type wall plate.

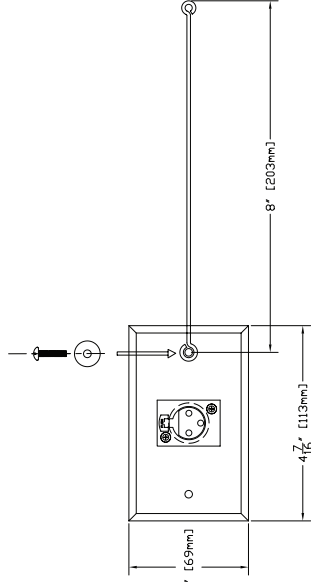
Choose the 1700VP when a floor stand version is needed. System includes the MB-1; a feather light 56" boom and exclusive Clutch Rotation System, this boom can be mounted on any standard microphone tripod or base stand.

Choose the 1800VP when a podium version is required. System includes the MB-18; an 18" miniature dual-flex gooseneck with TA3F-type and XLRM-type connectors.



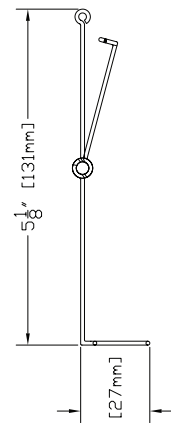
Using the Wall Plate

1. Attach the upper-support arm to the wall plate.
2. Run provided thread to counterbalance support (small loop on support).
3. The microphone head can be twisted in the hanger to help correct for rotation if the thread is not used.



Using the Articulating Steel Hanger

1. Insert the microphone head into the large hoop of the hanger.
2. Line up the microphone head screw hole and insert security screw.
3. Run the provided cable through the hanging hoop (small hoop).
4. Wrap the cable around the underside of the pivot joint.
5. Adjust microphone angle and tighten thumb screw.



Two-Year Limited Warranty

CAD Audio 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, CAD Audio will, at its option, either repair or replace with a new unit of equal or greater value. Return proof of purchase to validate the purchase date and return it with any warranty claim. This warranty excludes excessive use, misuse of the product, use contrary to CAD Audio's instructions or unauthorized repair. All implied warranties, merchantability, or fitness for a particular purpose is hereby disclaimed and CAD Audio 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 CAD Audio.

Shipping Instructions

Please call our customer service department at 440.349.4900 for a pre-approved return authorization number. Carefully re-pack the unit and return the insured package to: CAD Audio, 6573 Cochran Road, Building L, 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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 Part No. 46573-32-01, 04/2010



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Specifications'

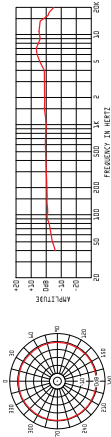
Operating PrincipleCondenser
Polar PatternContinuously-variable
Frequency Response	.....40Hz - 20KHz
Sensitivity	.....-29dBV (35mV) @ 1Pa
Impedance	.....135 ohms
Self Noise	.....22dBA
Maximum SPL	.....110dB, 1% THD, 1KHz
Power Requirements	.....P12, P24, P48, 4mA
Connector	.....3-pin XLRM-type
Polarity	.....Positive pressure on diaphragm corresponds to positive voltage on pin 2 relative to pin 3 at XLRM-type connector.
Finish	.....Matte-black
Dimensions	.....(See drawing)
Net Weight Mic Head [Mass]	.....1.1oz (0.03Kg)
Net Weight Control Box [Mass]	.....1.2oz (0.34Kg)
Packaged Weight 1600VP [Mass]	.....1lb 14oz (0.85Kg)
Packaged Weight 1700VP [2 boxes] [Mass]	.....1lb 14oz (0.85Kg) & 4lb (1.80Kg)
Packaged Weight 1800VP [2 boxes] [Mass]	.....1lb 14oz (0.85Kg) & 7.2oz (0.20Kg)
RF Immunity	.....Meets or exceeds EN55103-2, E1, E2, E3 and E4
RoHS Compliant	.....
*Specifications subject to change without notice.	
Included Accessories	.....40-347, 40-354, Articulating Steel Hanger
1600VP	.....MB-1, 40-347, 40-354, Articulating Steel Hanger
1700VP	.....MB-18, 40-347, 40-354, Articulating Steel Hanger
1800VP	.....RU-1

Architects' and Engineers' Specification

The microphone will be a condenser type designed to be suspended, mounted on a boom (Astatic MB-1) or podium gooseneck (Astatic MB-18). The microphone will have a continuously variable polar pattern controllable from the remote-control box connected by a two conductor shielded cable. The sensitivity of the microphone will be -29dBV (35mV) @ 1Pa. The frequency response will be 40Hz - 20KHz. The impedance of the microphone will be 135 ohms. The self noise will be 22dBA. The maximum SPL will be 110dB. The microphone will include a selectable 80Hz - 120B/octave high-pass filter controllable on the remote control box for increased intelligibility. The microphone will have a TB3M-type connector on the rear of the microphone element enclosure. The control box will have 3-pin XLR-F-type input and 3-pin XLRM-type signal output. The microphone will operate on P12, P24 or P48 standard phantom power consuming 4mA. The microphone element and electronics will be enclosed in radio frequency resistant housings meeting or exceeding EN55103-2.

The microphone element enclosure will be matte black and measure 1-11/16" (143mm) long, 3/4" (20mm) in diameter. The net weight (mass) will be 1.1oz (0.03Kg) not including the cable. The

Omnidirectional



Cardioid

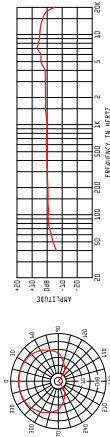
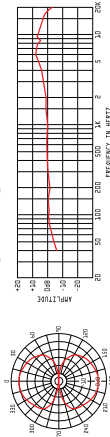
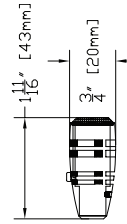


Figure-of-eight



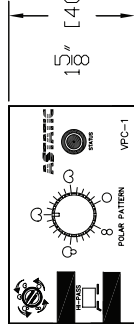
Microphone Head



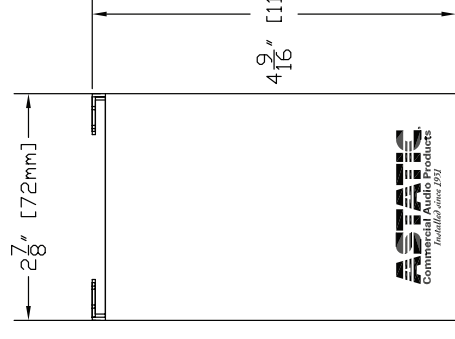
Final Connections

The connection cable between the microphone element enclosure and the control box is to be two conductors, with a braided shield-cable. (Existing microphone wiring, such as mic cable or an analog audio snake can be used).

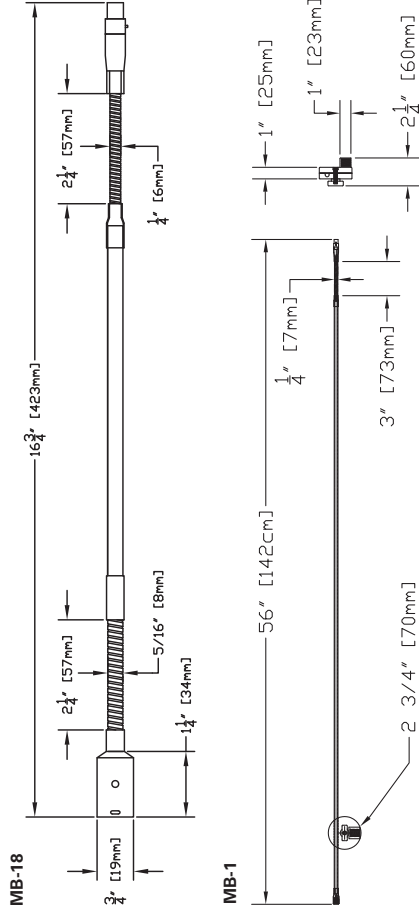
1. Connect the microphone head to the TA3F-type connector of the cable provided.
2. The female plug on the control box will accept the 3-pin XLRM-type cable from the microphone element enclosure.
3. Connect the 3-pin XLRM-type to an audio mixer or recording providing phantom power (P12, P24, P48).
4. When all connections are made and phantom power is applied the blue LED on the control box will illuminate to indicate proper connection to the mic head.
5. Adjust the polar pattern as desired.
6. Use the white spaces to label the control box.



Top View



VPC-1 Variable-pattern Control Box



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