

Số: 924 /VEAM-VP

Hà Nội, ngày 22 tháng 12 năm 2022

V/v mời chào giá hệ thống âm thanh phòng họp

Kính gửi: Các nhà cung cấp

Tổng công ty Máy động lực và Máy nông nghiệp Việt Nam - CTCP (VEAM) đang triển khai trang bị hệ thống âm thanh phục vụ phòng họp tại địa chỉ Tòa nhà VEAM, Ngõ 689 Lạc Long Quân. Để có cơ sở xây dựng dự toán chi phí, lựa chọn nhà cung cấp theo quy định, VEAM thông báo và kính mời các nhà cung cấp chào giá theo các nội dung như sau:

1. Nội dung sản phẩm

TT	Thiết bị	Thương hiệu /Xuất xứ	ĐVT	Số lượng
1	Loa Column di động Mã hàng: EVOLVE50-TB + EVOLVE50-SB-AP	Electrovoice USA/China	Bộ	2
2	Bộ micro không dây cầm tay Mã hàng: RE3 ND86	Electrovoice/ Taiwan	Bộ	2
3	Micro không dây Vilsound 4 sóng, 2 micro cầm tay Mã hàng: VR3D	VILSOUND/ China	Bộ	1
4	Micro cổ ngỗng để bục phát biểu Mã hàng: PC Destop 18	Electrovoice /USA	Bộ	1
5	Digital Mixer Mã hàng: ui24R	Soundcraft/ China	Bộ	1
6	Dây tín hiệu Lappkabel 1x2x18 AWG	Lappkabel/ Malaysia	mét	70
7	Vật tư phụ, dây giắc kết nối, gen nẹp....		Gói	1
8	Vận chuyển, nhân công lắp đặt, bàn giao hướng dẫn sử dụng		Gói	1

(Thông tin chi tiết về thiết bị được đính kèm)

2. Yêu cầu về năng lực, kinh nghiệm nhà cung cấp

- Hoạt động hợp pháp tại Việt Nam, có kinh nghiệm trong việc cung cấp lắp đặt hệ thống âm thanh tại Việt Nam.

- Có năng lực, kinh nghiệm cung cấp, lắp đặt hệ thống âm thanh phòng họp.

3. Hồ sơ chào giá

3.1. Các đơn vị quan tâm xin gửi 01 bộ hồ sơ chào cho Tổng công ty Máy động lực và Máy nông nghiệp Việt Nam – CTCP. Hồ sơ chào giá gồm:

- 01 báo giá (ký, đóng dấu) bao gồm tối thiểu (nhưng không giới hạn) các nội dung: Giá sản phẩm; quy cách sản phẩm; thời gian giao hàng.

- 01 bộ hồ sơ năng lực.

3.2. Quy cách hồ sơ: Hồ sơ chào giá được đựng trong túi đựng hồ sơ niêm phong. Trường hợp hồ sơ không được niêm phong theo quy định, VEAM sẽ từ chối nhận hồ sơ chào giá.

3.3. Thời hạn nộp hồ sơ: Trước 10h00 ngày 28 tháng 12 năm 2022.

3.4. Địa chỉ nhận hồ sơ: Văn phòng (Phòng 105) - Tổng công ty Máy động lực và Máy nông nghiệp Việt Nam - CTCP; Địa chỉ: Lô D, Khu D1, Phú Thượng, Tây Hồ, Hà Nội (Người nhận: Ông Lê Bá Thuyên, Chuyên viên Văn phòng).

Trân trọng thông báo./. 

Nơi nhận:

- Như trên;
- Đăng website: <http://veamcorp.com/>;
- Tổng Giám đốc (để b/c);
- Lưu: VT.

**KT. TỔNG GIÁM ĐỐC
PHÓ TỔNG GIÁM ĐỐC**



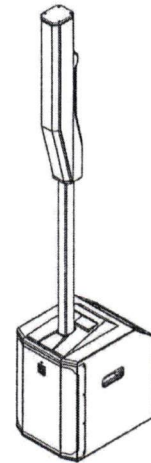
Lê Minh Quy

EVOLVE 50 Portable Column System



Electro-Voice

- EV Quick**Smart** Mobile application: quickly and wirelessly configure, control, and monitor up to six EVOLVE 50 systems simultaneously, and receive immediate notification during critical performance conditions. *Bluetooth® connectivity is available in select countries.*
- High-quality Bluetooth® audio streaming for background music or musical accompaniment. *Bluetooth® connectivity is available in select countries.*
- Ultra-wide 120° horizontal coverage via custom-designed waveguides and array-formed 40° asymmetrical vertical coverage means all acoustical energy is directed towards both sitting and standing audiences.
- Quick**Smart**DSP provides best-in-class processing via EV's signature single-knob user interface with LCD.
- Ideal for portable applications. Light weight and intuitive assembly via the magnet assisted sub pole make a quality performance easier than ever.



The EVOLVE 50 Portable Column System is a three component loudspeaker system powered by a 1000 W Class-D amplifier and driven by Electro-Voice's QuickSmartDSP.

The system consists of a 15 mm wooden, ported, powered subwoofer enclosure that houses a 12" subwoofer capable of a functional frequency output down to 37 Hz.

The bi-directional aluminum pole's connection to the subwoofer is secured using a magnet, and the column array is gravity-held to the sub pole. The signal is internally routed to the components.

Eight 3.5" neodymium drivers in the column array coupled with the 12" subwoofer delivers up to 127 dB SPL. The eight composite waveguides control high-frequencies with 120° of horizontal coverage, and 40° of asymmetrical (down-facing) vertical coverage to

ensure suitable output for sitting and standing audiences. The sub pole and column array come pre-packaged in a carrying bag.

The processing engine allows for easy setup via four presets (Music, Live, Speech, and Club), three-band EQ, five user-programmable presets (Store and Recall settings), output delay, phantom power (+15V), visual monitoring of limiter status, input level control and meters, and master volume control to ensure optimal gain structure.

The new Electro-Voice QuickSmart Mobile application utilizes Bluetooth® Low Energy (BTLE) technology for the wireless configuration, control, and monitoring of up to six EVOLVE 50 systems simultaneously. High-resolution Bluetooth® audio streaming adds convenience for wireless music playback in breakout rooms, intermission, and musical accompaniment.

Bluetooth® is available in select countries.

Parts included

Technical specifications

Frequency response (-3 dB)¹: 43 Hz-20 KHz

Frequency range (-10 dB)¹: 37 Hz-20 KHz

Maximum SPL²: 127 dB

Coverage (H x V): 120° x 40°

Amplifier rating: 1000 W

LF channel rating: 500 W

HF channel rating: 500 W

Crossover frequency: 200 Hz

Connectors: 2x XLR/TRS Combo Jack Input
1x 3.5 mm Input
1x Stereo RCA Input
1x Wireless Bluetooth® Audio Input
1x XLR THRU Output
1x XLR MIX OUT Output

Enclosure: Sub: 15 mm plywood
Column: Composite
Pole: Aluminum

Grille: Steel with black or white powder coat

Color: Black or white

Dimensions (HxWxD): Sub: 530 x 345 x 471 (20.9 x 13.6 x 18.5)
Column: 825 x 102 x 172 (32.5 x 4.0 x 6.9)
Pole: 929 x 48.5 x 55 (36.6 x 1.9 x 2.2)

Net weight: Sub: 44.66 lb (20.3 kg)
Column: 10.34 lb (4.7 kg)
Pole: 2.75 lb (1.25 kg)
Sub cover: 0.9 lb (0.4 kg)
Bag for column and pole: 1.87 (0.85 kg)

Shipping weight: Sub box: 50.71 lb (23 kg)
Column box: 18.30 lb (8.3 kg)

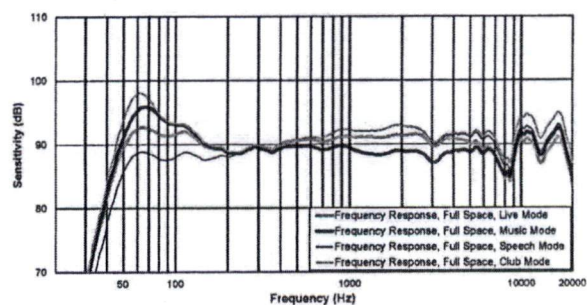
Power consumption³: 100-240 V AC, 50-60 Hz, 1.5-0.6 A

¹Full-space measurement using music DSP preset.

²Maximum SPL is measured at 1 m using broadband pink noise at maximum output.

³Current rating is 1/8 power.

Frequency response:



Dimensions:

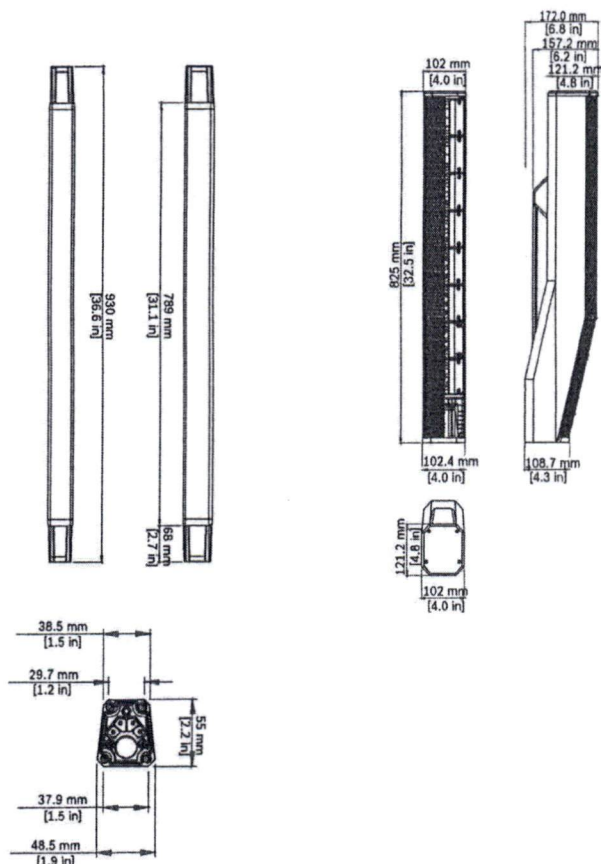
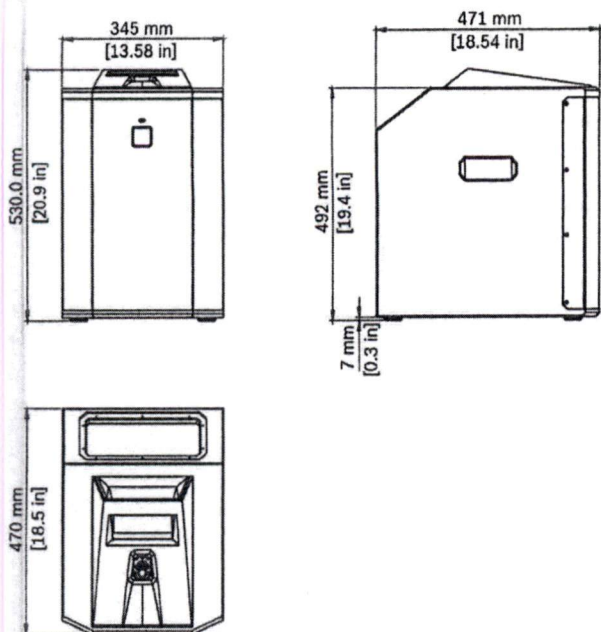


Fig. 1:



Ordering information

EVOLVE50-TB Column speaker array, pole, black
EVOLVE 50 column array, sub pole, and carrying bag, black
Order number **EVOLVE50-TB | F.01U.335.090**

EVOLVE50-SB-US Column speaker sub US, black
EVOLVE 50 column subwoofer, US, black
Order number **EVOLVE50-SB-US | F.01U.335.091**

EVOLVE50-SB-EU Column speaker sub EU, black
EVOLVE 50 column subwoofer, EU, black
Order number **EVOLVE50-SB-EU | F.01U.335.094**

EVOLVE50-SB-AP Column speaker sub AP, black
EVOLVE 50 column subwoofer, AP, black
Order number **EVOLVE50-SB-AP | F.01U.335.097**

EVOLVE50-SB-GL Column speaker sub, black, global, no BT
EVOLVE 50 column subwoofer, global, no BT, black
Order number **EVOLVE50-SB-GL | F.01U.335.092**

EVOLVE50-TW Column speaker array, pole, white
EVOLVE 50 column array, sub pole, and carrying bag, white
Order number **EVOLVE50-TW | F.01U.335.099**

EVOLVE50-SW Column speaker sub, white, global w BT
EVOLVE 50 column subwoofer, global, white
Order number **EVOLVE50-SW | F.01U.335.100**

EVOLVE50-SW-GL Column speaker sub, white, global, no BT
EVOLVE 50 column subwoofer, global, no BT, white
Order number **EVOLVE50-SW-GL | F.01U.335.101**

Represented by:

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.electrovoice.com

Bosch Security Systems, LLC
12000 Portland Avenue South
Burnsville MN 55337
USA

Accessories

EVOLVE50-SUBCVR Subwoofer cover
Cover for the EVOLVE 50 subwoofer, black
Order number **EVOLVE50-SUBCVR | F.01U.336.241**

EVOLVE50-CASE Column speaker carrying case, wheels
Column speaker carrying case with wheels, black
Order number **EVOLVE50-CASE | F.01U.335.110**

EVOLVE50-PL-SB Column speaker pole, short, black
Column speaker short pole, black
Order number **EVOLVE50-PL-SB | F.01U.335.108**

EVOLVE50-PL-SW Column speaker pole, short, white
Column speaker short pole, white
Order number **EVOLVE50-PL-SW | F.01U.335.109**

PolarChoice Desktop
PC Desktop-5/PC Desktop-12/
PC Desktop-18
Mult-Pattern Desk Microphone
with Automatic Mixer Logic



Key Features:

- RF Shield provides superior RFI/GSM shielding.
- Multi-pattern versatility. Choose between omni, cardioid, supercardioid or hypercardioid to easily adapt to any situation.
- Consistent microphone voicing across all four patterns.
- Switch can be programmed to operate as either latching on/off or momentary push-to-mute/push-to-talk.
- Disassembly of the mic isn't required to change switch functions.
- Compatible with echo cancellation for conference applications.
- High visibility blue LED clearly displays mic status to the user.
- Exceptional sound quality with EV's proven PolarChoice design.
- Available in three gooseneck lengths: 18", 12" or 5".



General Description:

The PolarChoice Desktop is a high quality tabletop microphone that can be used with both standard and automatic mixers, and is highly-shielded from RFI/GSM thanks to EV's exclusive RF Shield technology.

The PC Desktop features the exclusive EV PolarChoice miniature multi-pattern gooseneck microphone. The multi-pattern versatility of the PolarChoice microphone makes it a true "problem solver". With one non-directional and 3 directional polar patterns available, the PolarChoice microphone is ideal for virtually any installation. The PC Desktop also includes a switchable high pass filter that helps reduce any vibration induced noise pickup.

The PC Desktop features a large push button mute switch that has a much better "feel" than membrane switches. The mute button can be configured for push-on/push-off, push-to-talk, or push-to-mute function. Switch programming is easily accomplished without disassembling the microphone. A switch on the bottom quickly converts the PC Desktop to automatic mixer mode. In this mode, audio is always on.

Applications:

The PolarChoice Desktop is acoustically designed for high-quality sound reinforcement and broadcast applications. The frequency response is tailored for wide-range sound reproduction with very natural sound pickup for either distant or close-up use. The PC Desktop can be used on lecterns, podiums, desks, table-tops, or other applications. To maximize gain-before-feedback, the PolarChoice's three directional polar patterns allow the user to pick the directional polar pattern for optimum effect. For those applications where gain-before feedback is not a problem, an omnidirectional pattern is included. Applications requiring speaking close to the microphone at podiums, lecterns, or pulpits normally require a windscreen (included) to control breath noise and P-popping or, in some cases, wind noise from circulating air.

Technical Specifications:

Generation Element:	Dual condenser, back electret
Frequency Response:	50 Hz to 20,000 Hz (see chart)
Polar Patterns: (see chart)	Omnidirectional Cardioid Supercardioid Hypercardioid
Sensitivity:	Open Circuit Voltage, 1 kHz: 5.6mV/Pascal
Clipping Level (1% THD):	>127 dB SPL
Equivalent Noise:	<26 dB SPL "A" weighted (0 dB=20 micropascals)
Dynamic Range:	>101 dB
Output Impedance, 1 kHz:	200 ohms
Power Requirements:	Phantom, 12 – 52 VDC
Current Consumption:	< 5 mA with P48 supply
Polarity:	Pin 2 positive, referenced to pin 3, with positive pressure on the diaphragm
Cable:	10-foot, 5-conductor (2-conductor shielded) black cable, terminated with a professional 3-pin male XLR style connector with gold plated pins.
Logic Levels:	Standard TTL levels for switch out and LED Control 5 Volts = Logic High 0 Volts = Logic Low
Dimensions:	Base (all mics): Length: 175 mm (6.9 in.) Width: 117 mm (4.6 in.) Height: 56 mm (2.2 in.) Gooseneck Length: PC Desktop-5: 175 mm (6.9 in.) PC Desktop-12: 318 mm (12.5 in.) PC Desktop-18: 470 mm (18.5 in.) Maximum Head Diameter: 14.6 mm (0.58 in.) Gooseneck Diameter: 6.4 mm (0.25 in.) Lower section: 7.9 mm (0.31 in.)
Accessories Furnished:	Windscreen
Optional Accessories:	WS-PC1 large windscreen
Color:	Nonreflecting black
Net Weight:	PC Desktop-5: 703 grams (24.8 oz) PC Desktop-12: 712 grams (25.1 oz) PC Desktop-18: 730 grams (25.8 oz)
Shipping Weight:	PC Desktop-5: 1080 grams (38.1 oz) PC Desktop-12: 1102 grams (38.9 oz) PC Desktop-18: 1111 grams (39.2 oz)

Live For Sound
www.electrovoice.com



Microphone Setup:

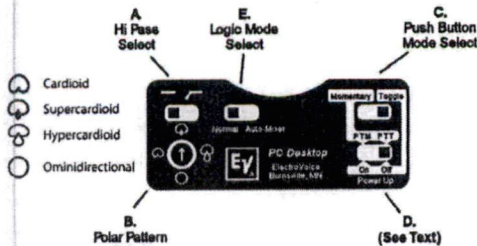


Figure 1:
PC Desktop Controls

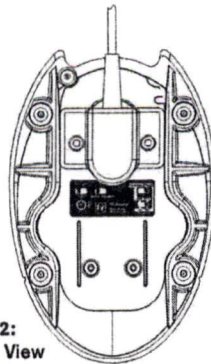


Figure 2:
Bottom View

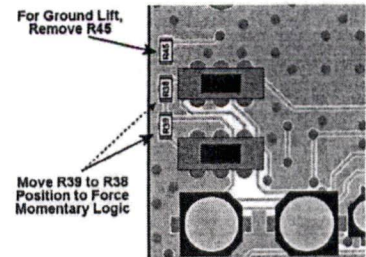


Figure 3:
PC Board Detail

Refer to Figure 1 for the following switch function descriptions-

Switch "A":

Select High-Pass switch position. Start with this switch set to the left (flat response). If the mic is in a location where low frequency rumble or wind noise is encountered, moving this switch to the right will help by reducing low frequency sensitivity.

Flat (—): Normal response.

High Pass (—): minimum 5 dB reduction in sensitivity at 100 Hz.

Switch "B":

Select preferred polar pattern. The cardioid polar pattern works well for most installations. If feedback from a sound system occurs, switching to the supercardioid or hypercardioid pattern will usually allow increased mic gain before feedback. The omnidirectional pattern is best suited for situations where there is no sound reinforcement system present, such as for recording.

Switch "C" and "D":

Controls action of push-button switch on the top of the PC Desktop microphone.

Momentary Modes:

When switch "C" is set to the left, the push-button (mute) switch action is momentary.

In addition, If switch "D" is in the left hand position, the mic will be in push-to-mute mode.

Alternately, If switch "D" is in the right hand position, the mic will be in push-to-talk mode.

Toggle Modes:

When switch "C" is in the right hand position, the push-button (mute) switch will be in toggle (push-on/push-off) mode.

With switch "C" in the right hand position, the setting of switch "D" determines if the mic audio should be muted when power is first applied.

If switch "D" is in the left hand position, the mic audio will be on when power is first applied.

If switch "D" is in the right hand position, mic audio will be muted when power is first applied.

Switch "E" (Logic Mode Select):

When switch "E" is set in the left hand position, the PC Desktop operates as a normal desk microphone. Mic muting and operation of the LED is controlled by the push-button on the top of the mic. With switch "E" in the right hand position, the mic will be in automatic mixer mode, and the following will apply:

- 1.) Mic audio is always on.
- 2.) The automatic mixer controls LED operation and mic muting.

Wiring:

For non-automatic mixer applications, the PC Desktop comes equipped with a standard XLR style 3-pin male connector. For automatic mixer applications, remove the XLR connector and service the cable as needed.

Cable Connections:

- Red - Balanced Audio High
- Black - Balanced Audio Low
- Shield - Audio Ground
- Green - Logic Ground (Common to shield unless R45 is removed. See Figure 3.)
- White - Switch Logic
- Orange - LED Control

Logic Signals:

If the PC desktop mic is in momentary mode (see above section on the mute switch), the logic level on the white wire will normally be "high", and go "low" when the push-button is pressed. If the mute switch is set for toggle mode, the logic will toggle from high to low, or from low to high, each time the button is pressed. (If desired, a pc board change can be done to force the logic to always be momentary, regardless of switch settings. See Figure 3).

LED Control:

When the mic is in automatic mixer mode, a low logic signal on the orange LED control wire will cause the LED to light.

Logic Ground Lift:

If necessary, the logic and audio grounds can be separated. This requires removing a resistor from the pc board. See Figure 3.

EV Multi-Port Windscreen:

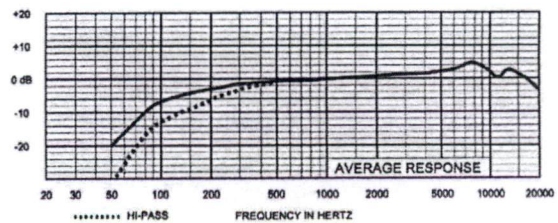
All PolarChoice microphones come with the exclusive EV Multi-Port Windscreen. This unique one-piece ported design offers greatly improved resistance to "P"-popping noise by creating a two-stage filter that has an air space between the stages. This makes the multi-port windscreen as effective as much larger traditional designs.



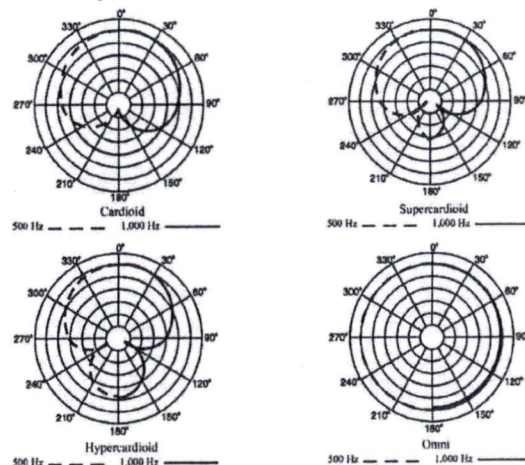
Architects' and Engineers' Specifications:

PolarChoice Desktop: PC Desktop-5, PC Desktop-12, PC Desktop-18. The microphone shall be a freestanding, tabletop microphone with a high degree of output signal quality despite possibly near-field presence of RF (radio frequency) devices such as cell phones. The base will have a 10-foot integral 5-conductor (2-conductor shielded) cable terminated in a 3-pin XLRM connector. The microphone shall have four selectable polar patterns: omnidirectional, cardioid, supercardioid, and hypercardioid. The mic will use a pair of back-electret condenser elements with a frequency response of 50 Hz to 20 kHz. The microphone shall have a nominal, balanced output impedance of 200 ohms. The microphone will have a switchable high-pass filter to roll off low frequencies. The microphone shall have an output level of 5.6 mV/Pascal and outputs shall not be appreciably affected by the following temperature and humidity extremes: -29° to 74° C (-20° to 165°F) when the relative humidity is 0-50%; -29° to 57°C (-20° to 135°F) when the relative humidity is 0-95%. Dimensions shall be 231 mm (9.1 in.) long (PC Desktop-5), 373 mm (14.7 in.) long (PC Desktop-12), and 526 mm (20.7 in.) long (PC Desktop-18) with a maximum head diameter of 14.6 mm (0.58 in.). The PC Desktop-5 microphone shall include a 175 mm (6.9 in.) gooseneck. The PC Desktop-12 microphone shall include a 318 mm (12.5 in.) gooseneck. The PC Desktop-18 microphone shall include a 470 mm (18.5 in.) gooseneck. The gooseneck will be attached to a base that has a top mounted push-button and a status LED that lights when audio is active. The push-button will be configurable to operate in either momentary or toggle mode. When the microphone is set in momentary mode, the push-button can be programmed to operate in either push-to-mute or push-to-talk mode. When the microphone is set in toggle mode and power is initially applied, the status of the microphone can be programmed to be either on or muted. The microphone will be capable of operation with automatic mixers by means of a configuration switch located on the bottom of the microphone. When the microphone is in automatic mixer mode, normal LED and top push button functions are disabled. In automatic mixer mode, audio will always be on, the top push button will only change the logic level on the microphone's white wire, and a logic low level on the microphone's orange wire will cause the LED to illuminate. All controls except for the push button shall be accessible from the bottom of the microphone base. The microphone base shall be of metal construction. The microphone will include an external windscreens. The microphone shall have a nonreflecting black finish. The Electro-Voice PolarChoice PC Desktop-5, PC Desktop-12, or PC Desktop-18 is specified.

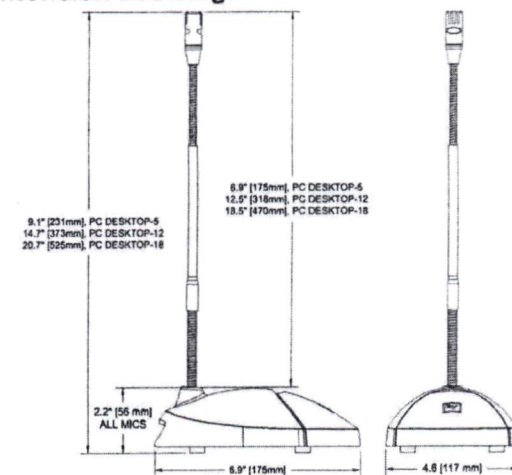
Frequency Response:



Polar Response:



Dimension Drawing:



Polar Choice Part Numbers:

PC Desktop-5 • 5" Gooseneck Length
PC Desktop-12 • 12" Gooseneck Length
PC Desktop-18 • 18" Gooseneck Length

Warranty:

Please refer to the Limited Warranty information found at:
www.electrovoice.com

Electro-Voice

12000 Portland Avenue South, Burnsville, MN 55337
Phone: 952/884-4051, Fax: 952/884-0043

www.electrovoice.com

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Part Number F.01U.177.760 Rev 05



U.S.A. and Canada only. For customer orders, contact Customer Service at:
800/392-3497 Fax: 800/955-6831

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:
+ 49 9421-706 0 Fax: + 49 9421-706 265

Other International locations. For customer orders, Contact Customer Service at:
+ 1 952 884-4051 Fax: + 1 952 887-9212

For warranty repair or service information, contact the Service Repair department at:
800/685-2606

For technical assistance, contact Technical Support at: 866/78AUDIO

Specifications subject to change without notice.

Compact analogue mixing - your Signature sound

Drawing on over 40 years experience in live sound mixing, the Signature Series combines a superb analogue control surface with the unrivalled British sound of Soundcraft in a powerful, compact, professionally spec'd mixer.

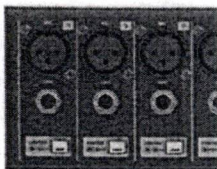
Built tough for trouble-free performance night-after-night, Signature Series mixers deliver great sounding results thanks to high-grade Ghost® preamps, the most musical EQ in the business, pristine Lexicon® effects and powerful dbx® dynamics - all designed to let you discover your Signature sound.

The legendary British sound



From humble beginnings in London more than 40 years ago and still designed and engineered in the UK, Soundcraft defined the term 'British sound' in live sound mixing consoles. Acclaimed Ghost mic preamps and our Sapphyre® 'British' equaliser ensure the Signature range carries the Soundcraft signature sound today.

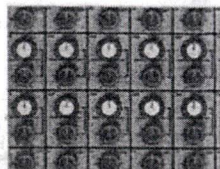
Iconic Soundcraft® Ghost Mic Preamps



It's no secret that great sound starts with a great microphone preamp.

Inheriting technology from our top-of-the-line professional consoles, our acclaimed Ghost mic preamp delivers stunning audio fidelity and class-leading performance, with high headroom, wide dynamic range and superb signal to noise ratio.

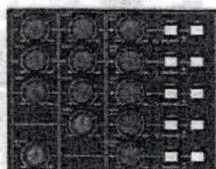
Soundcraft® Sapphyre British EQ



To get every element sounding great in your mix, from the kick drum to the lead vocal, you need a great EQ.

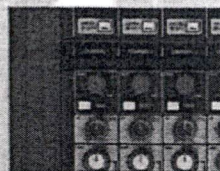
Famed for its musical sound and unmistakable 'British' quality, Signature Series mixers feature our highly regarded Sapphyre® EQ. Signature 10 & 12 feature a 3-band EQ with sweepable mid. Signature 16 & 22 feature a 4-band EQ with dual-sweepable mid bands.

Flexible Soundcraft® GB audio routing



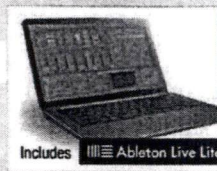
Giving you maximum flexibility, Signature Series mixers feature comprehensive Soundcraft® GB Series audio routing with flexible pre/post switching on each Aux and subgroups with powerful routing and switching options as well as dedicated outputs.

Built tough for the long haul



We understand the importance of reliability. Every night, Soundcraft consoles run the biggest shows in the world. With a robust metal construction and premium-quality components, Signature Series mixers are built to withstand the rigours of extensive use and deliver years of maintenance-free operation.

Easy playback and recording via USB



Includes Ableton Live Lite

Enabling simple playback and recording, Signature Series mixers are loaded with a 2-channel USB audio interface, ideal for playing music from a computer and capturing a stereo mix of a live performance or rehearsal. Signature Series mixers also include Ableton Live 9 Lite DAW software. MTK models feature multi-channel, ultra-low latency USB audio interface.

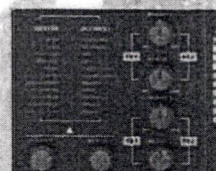
Switchable Hi-Z instrument inputs



Eliminate fuss by connecting instruments direct to your mixer.

Removing the need for DI boxes or additional hardware, Signature Series mixers make it simple to get a great instrument channel sound using the switchable Hi-Z inputs, optimised for acoustic guitars, electric guitars and basses.

Award-winning Lexicon® effects



Need effects? You've got Lexicon®.

With the Signature Series you don't just get generic, dull processing algorithms. The Lexicon® Effects Engine (Dual-Effects Engine) on Signature 22 and 22 MTK powers your mix with studio-grade Reverbs, Delays, Choruses and Modulations, designed to add a truly professional edge to your productions.

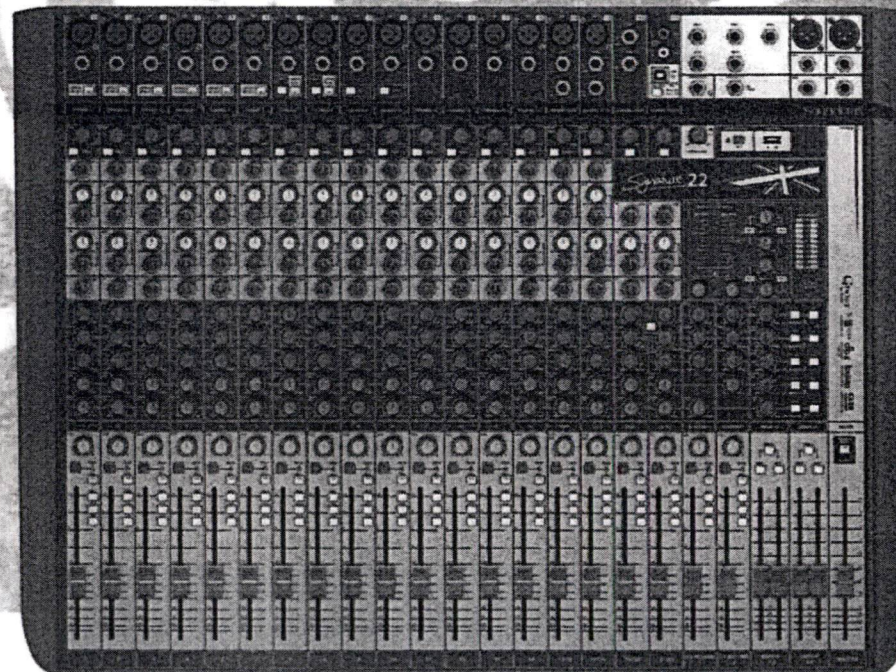
Soundcraft



Signature

Key features

- High-Performance 10-, 12-, 16- and 22-input small format analogue mixers with onboard effects
- Iconic Soundcraft® Ghost mic preamps with ultra-low noise performance
- Renowned Soundcraft® Sapphyre British EQ with sweepable mid-bands per channel
- Lexicon® Effects Engine featuring award-winning Reverbs, Delays, Choruses and Modulations
- dbx® Limiters (High-ratio Compressors) on input channels
- 2-in/2-out USB audio playback and recording
- Switchable Hi-Z inputs for guitars, basses and other instruments
- Hi-Pass Filters (low-cut) and 48V Phantom Power on all mic channels
- Comprehensive Soundcraft® GB Series audio routing
- Smooth premium-quality faders
- Robust metal construction for long-grade build quality and reliability
- Internal universal power supply



Powered by

Ghost
MIC PREAMP

Sapphyre
ASYMPTOTIC EQ

dbx
DUAL-BAND
LIMITER

lexicon
FX PROCESSOR

GB
AUDIO ROUTING

Soundcraft

Product Name : VR-3D wireless microphone**Model:**VR-3D**True diversity wireless microphone (2x200CH)****Distance: up to 200meters****TRANSMITTER**

- * Bandwidth: 60MHz
- * Channel space: 300KHz
- * Frequency stability: $\pm 0.005\%$
- * With FM Max frequency adjusting:
 $\pm 45\text{KHz}$
- * RF output: HIGH 10mW / LOW 5mW
- * Power supply: 2*AA batteries, Staing
time: about 8 hours

RECEIVER

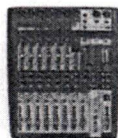
- * Operating frequency: 500-980MHz
- * With ACR/IR SYNC technology
- * With battery display on LCD
- * S/N ratio: $> 105\text{dB}$
- * T.H.D distortion: $< 0.5\%$
- * Frequency response: 40Hz-18KHz
- * Noise locked+pilot tone locked

ENPING Vilsound Audio Equipment factory

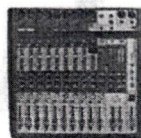
Enping VILSOUND audio equipment factory. was founded in 2001 in ENPING ,Guangdong, China. We own advanced producing equipments, checking machines and perfect producing lines. We produces professional wireless, wired, wireless conference microphones, power amplifiers, mixers, speaker, and etc.

We have professional technical team to research and develop various products that fit the market demands. As the high quality and good services introduced to the market, our products are sold well at home as well as abroad markets. Now our products are exported to Europe. America.the Middle East. Asia, Africa and many other countries. We promise our market to introduce high quality, super service", and continue to provide high quality products to our customers. We are sincerely looking forward to cooperating with you and will provide you with satisfied products and good services.

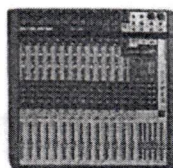
Signature



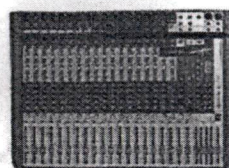
Signature 10



Signature 12



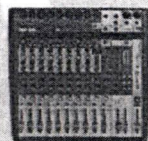
Signature 16



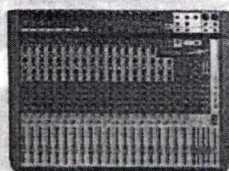
Signature 22

	Signature 10	Signature 12	Signature 16	Signature 22
Channels	10	12	16	22
Soundcraft® Ghost Preamps	6	8	12	16
Soundcraft® Sapphire EQ	3-band (1 band of swept mids)	3-band (1 band of swept mids)	4-band (2 bands of swept mids)	4-band (2 bands of swept mids)
dbx® Limiters on Inputs	2	2	4	8
Lexicon® Effects	Single Engine	Single Engine	Single Engine	Dual Engine
USB Interface	2-in/2-out	2-in/2-out (14-in/12-out on 12 MTK)	2-in/2-out	2-in/2-out (24-in/22-out on 22 MTK)
Auxes	3	3	4	5
Subgroups	0	2 mono/1 stereo	4 mono/2 stereo	4 mono/2 stereo
Faders	60mm	60mm	100mm	100mm

Also available: Signature Series Multi-track versions with multi-channel ultra-low latency USB audio interface -



Signature 12
MULTI-TRACK



Signature 22
MULTI-TRACK

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Signature

Soundcraft
by HARMAN

www.soundcraft.com

Part No: S055924 E & OE 01/2015

Analogue Mixers with legendary
Soundcraft®, Lexicon®
and dbx® signal processing

Soundcraft