✓ EN 54 visual and audio indicators and system status

✓ 0, 10, 20, 30, 40, or 50 selection button options

✓ Live, store + forward & pre-recorded message triggers

✓ Flexible connectivity supporting both IP or analogue / serial

✓ Background music input and control

✓ Wall mount and fist microphone options

✓ Built-in loudspeaker with listen-in function

✓ EN 54-16 certified part of Zenitel PAVA system

MPS Range

DESK PAGING & EMERGENCY **MICROPHONE**

The MPS01, MPS10, MPS20, MPS30, MPS40, and MPS50 are from the Microphone Paging Station (MPS) range of flexible paging and emergency microphones designed to work seamlessly with Zenitel PAVA audio routers. These microphones can be configured for live or store-and-forward broadcasts and to trigger zonal functions such as pre-recorded messages and background music (BGM) or control volume levels. Zone selection is facilitated through the physical select buttons or a rotary selector using the LCD display. Each variant in the MPS range includes the MPS01 sloping console with a flexible gooseneck microphone, a graphic LCD display, and a silent operation 'Touch to Talk' touch pad PTT button. The number of MPX10 10-button extension panels varies, with the MPS10 featuring one panel with ten extra Select buttons, and the MPS50 featuring five panels with fifty Select buttons. Additionally, a VU bar-graph displays the microphone signal level and this along with the built in AGC ensures optimum live broadcast levels are maintained. The MPS microphone range offers versatile mounting options, allowing use as a freestanding unit on a desk or permanent installation with an optional bracket.

EN 54-16 Certified

The MPS series is EN 54-16 certified as part of the Zenitel PAVA system, ensuring full compliance with industry standards. It features comprehensive monitoring capabilities that cover connectivity, the dual power supplies, and the mic capsule. Any detected faults are reported back to the host Audio Router and categorized according to EN 54-16 requirements. Additionally, the built-in loudspeaker and front-panel LEDs enable the microphone to display system status. To meet the specific 'access level' requirements of EN 54-16, a key switch is provided, which can be configured to change the microphone's priority or inhibit button functions.

Listen IP functionality

The MPS range has a built in speaker, allowing the user to select a zone or mix of multiple zones and listen in to the live announcement. This innovative feature is typically mandated of or Transportation applications, such as control room.

Options and Accessories

The MPS range can be purchased with an alternative fist capsule with a built-in PTT, ideal for console or wall mounting. These models are distinguished with an 'FI' in the product code. Additional mounting accessories are available for various installation needs. Maintenance is also greatly simplified with gooseneck microphone which can be replaced onsite as a line replaceable part.

Hardware Bypass

The MPS microphones support 'hardware bypass' operation as defined under BS5839-pt8. When supported by the Zenitel audio router, the microphone continues in an all-call-only mode during an audio router processor failure or DBB connection fault. Hardware bypass operation is local to the host audio router and does not work across the IP network.

TYPICAL ARCHITECTURE

The MPS range offers flexible connectivity options. They can be directly connected to one or two Zenitel audio routers using analogue line audio, a serial link, and 24VDC power, with full monitoring. Distances up to 500 meters are achievable with CAT5 cable, which far exceeds the typical 90M achievable over IP. There is also an option for an Ethernet IP connection with Power over Ethernet (PoE) support for IP-based VIPA devices and audio routers. For auxiliary audio inputs, such as BGM, and a microphone headsets, a local 3.5mm jack plug connection is provided at the rear. The system also includes a general-purpose local contact input and output for use with PTT foot switches and external speak-now indicators.
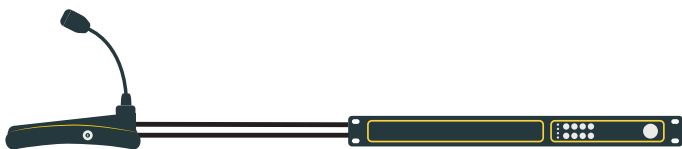
Single Serial / Analogue Audio / DC Connection

Standard connectivity to the audio router is achieved with a single cable connected to Router Port 1 on the microphone's rear panel. This setup provides audio, serial, and DC power, all of which are individually monitored by the audio router.
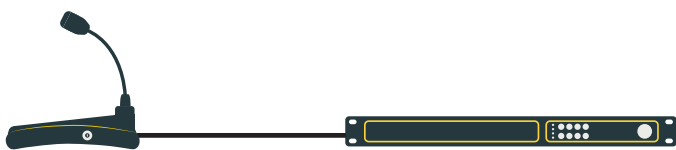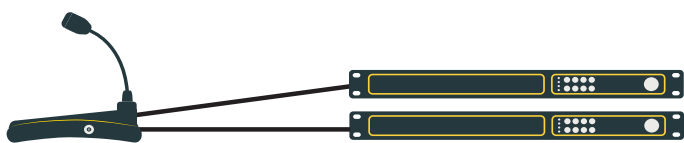
Single Serial / Analogue Audio / Dual DC Connection

For enhanced EN 54-16 compliant connectivity, two cables can be connected to Router Ports 1 and 2 on the microphone's rear panel. This configuration mirrors the standard connection but adds redundancy for the power supply.

Redundant Single Serial / Analogue Audio / DC Connection

To ensure added interconnection redundancy, the standard connection can be duplicated across two separate audio routers. These routers can either be in a DBB stack or devices within the Secure Loop network. All connections are monitored, and the system automatically selects which interface to use, with this information displayed on the MPS graphical display.

Single Serial / Analogue Audio / DC Connection with Background Music Input

When the MPS is used with a local music source connected to its rear-mounted 3.5mm audio input socket, both Router 1 and Router 2 Microphone Ports can be utilized—one

for the music feed and one for the microphone. This allows simultaneous operation of the microphone for broadcasting to selected zones while the music feed continues to play in others..

IP Interface (Local PoE Power)

Standard connectivity to the audio router can also be achieved via a single Ethernet IP connection to the Ethernet port on the microphone's rear panel. This connection is fully monitored and relies on a local PoE supply. The functionality mirrors that of the analogue connectivity, but the cable length is limited to less than 90 meters.
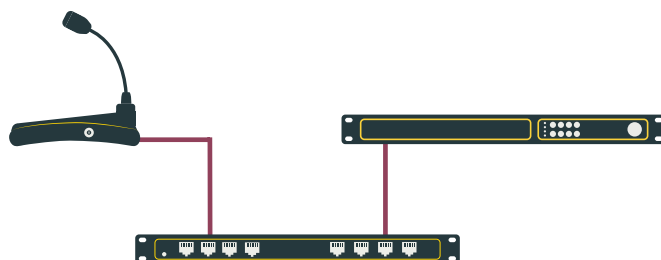
IP Interface to iVENCS or VIPA-Device (Local PoE Power)

An IP-connected MPS microphone can function as a workstation microphone with a VIPA-equipped Zenitel or third-party IP PA Control System. Broadcasts from the MPS are typically controlled via the workstation GUI, although the MPS microphone can also operate independently.
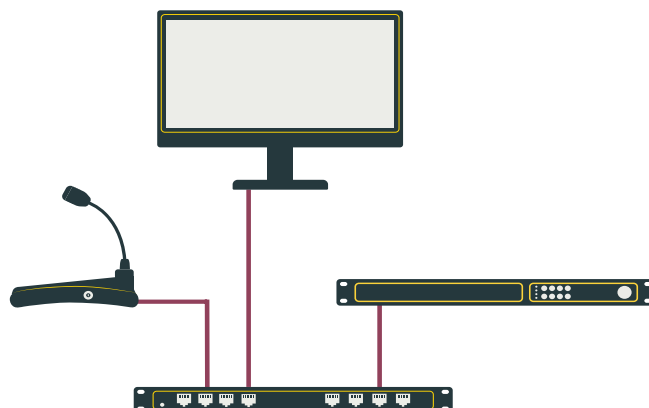
IP Fallback Mode

The analogue and IP interfaces described on the other page, rely on a host device (usually a VIPEDIA-12 or VIPA software module) for operation. If the host device becomes unavailable, it is possible to configure the MPS microphone to continue in limited operation 'Fall-back Mode', whereby it can address zones on multiple devices directly over an Ethernet network without the need for a host device.

IP Fallback Mode

The feature set available differs according to type of device which is hosting the microphone. See below:

VIPEDIA-12 Features

- Live Paging
- Store and Forward Paging
- Listen In
- Volume Control Buttons
- Fixed Route Button
- Zone Selectable Route Button
- Key Switch Priority
- Key Switch ANS Enabled
- Key Switch Emergency Type
- Key Switch Chime Type
- Key Switch Protected Routes
- EN 54 Mandatory Indications
- Fault Clear

VIPA Features[1]

- Live Paging
- Store and Forward Paging
- Listen In
- Control BGM in a VIPA System

Fall-back IP Features[1]

- Live Paging

[1] Non EN 54-16 certified

MECHANICAL
Controls Panel & Buttons

Voice Alarm LED (red)
System Fault LED (yellow)
Power On LED (green)
Fault LED (yellow)
Speech level indicator LED (blue)
LCD display
Menu selection button
Gooseneck (or fist) microphone
MPX10 10-button Expansion Module
Function button and indicators
Menu selection button
PTT button and indicator
Navigation wheel
Emergency mode keyswitch
Built-in loudspeaker/alarm sounder (under the unit)
Main user interface

SPECIFICATIONS

Power Supply

Input Voltage	18-40 V DC or PoE 42-57V DC
Current Consumption @ 24V (nom.- sounder & LEDs off)	
MPS01	90mA
Each additional MPX10	5mA
Current Consumption @ 24V (max. - sounder & LEDs on)	
MPS01	165mA
Each additional MPX10	55mA

Analogue and Serial Connectivity

Audio	Dual Analogue Balanced Audio/0dBu nominal/220Ω
Control Data	EIA RS485 / 19200 baud
Hardware Bypass Interface	2 x Push-To-Talk switch, 2 x Speak Now LED
Listen In Input	1 x Analogue Balanced Audio

IP Connectivity

Audio and Control Data	1 x 100BASE-T Ethernet (RJ45)
Audio Format (VoIP)	Zenitel's Proprietary PMC
Listen In Input and Format	1 x Zenitel's Proprietary PMC

General

Key Switch	Emergency mode selection and locked button functions
LCD Display	128 x 64 pixels / 58 mm x 29 mm view area

Additional Connectivity

Music Input	1 x 3.5mm jack balanced / unbalanced stereo
Output (Speakers, Headset)	1 x 3.5 mm jack unbalanced
Contact Input (Ext. PTT)	1 x 3.5 mm jack
Contact Output (Speak Now)	1 x 3.5 mm jack (open-collector)

Mechanical

Dimensions (H x W x D mm)	
MPS01-GO	58 x 175 x 200 (excluding gooseneck)
Each additional MPX10	+110mm W
Weight	
MPS01-GO	1.0kg
Each additional MPX10	+0.2kg

Environmental

Temperature (Storage)	-20 °C to +55 °C
Temperature (Operation)	-10 °C to +55 °C
Humidity Range	0% to 95% non-condensing
IP Rating	IP30

Compatibility

Zenitel Audio Routers	VAIA Range, VIPEDIA Range, IPAM Range, VAR Range &VIPA Device
Zenitel Control Systems	iVENCS Range & VIPA-WS Range

Approval and Standard Compliance

Railway	EN 50121-4
Fire Detection and Fire Alarm Systems	EN 54-16
Environmental Directive (Safety)	EN / IEC / UL 62368-1
Environmental Directive (Immunity)	EN 55103-1 / EN50130-4
Environmental Directive (Emissions)	EN 55032 / EN 6100-6-2 / EN 6100-6-3 / EN 6100-6-4 / FCC-47 part 15B Class A
Environmental	RoHS / REACH
Conformity Europe	CE / CPR / UKCA

Compatible Hardware

MPS01-MB	Wall Mount Bracket for the MPS01
MPX10-MB	Wall Mount Bracket for the MPS10-50
MPX10	10 Button Expansion Panel for the MPS01

Product Part Codes

MPS01-G	Desk Paging and Emergency Microphone / 0 Button / Gooseneck
MPS01-F	Desk Paging and Emergency Microphone / 0 Button / Fist
MPS10-G	Desk Paging and Emergency Microphone / 10 Button / Gooseneck
MPS10-F	Desk Paging and Emergency Microphone / 10 Button / Fist
MPS20-G	Desk Paging and Emergency Microphone / 20 Button / Gooseneck
MPS20-F	Desk Paging and Emergency Microphone / 20 Button / Fist
MPS30-G	Desk Paging and Emergency Microphone / 30 Button / Gooseneck
MPS30-F	Desk Paging and Emergency Microphone / 30 Button / Fist
MPS40-G	Desk Paging and Emergency Microphone / 40 Button / Gooseneck
MPS40-F	Desk Paging and Emergency Microphone / 40 Button / Fist
MPS50-G	Desk Paging and Emergency Microphone / 50 Button / Gooseneck
MPS50-F	Desk Paging and Emergency Microphone / 50 Button / Fist