

DSPK4 User Station



The **DSPK4** (Digital Speaker Station) is an IP-based version of its wired analog speaker station predecessor, with several key enhancements, such as high quality digital audio and the use of standard Ethernet, making it compatible and versatile to fit into any environment.

Building on the versatility, DSPK4 comes in three different variants: a desktop version, a wall mount version, and a flush mount version. There is a model for every situation. The flush mount version comes with 4-pin female, 4-pin male, or 5-pin female front panel XLR connector. The wall mount and desktop versions have all three XLR connectors. Power the DSPK4 via an external AC/DC power adapter, a DC +24 V terminal block, or by PoE+ / PoE+ + (Power over Ethernet). In addition, you can have peace of mind when powering the DSPK4 local DC power because PoE+ / PoE++ is ready to take over as a redundant power supply with no interruptions if the unexpected happens.

The DSPK4 has a full-color TFT display and an iconbased menu interface, which allows for local configuration of essential customer preferences.

- Multiple DSPK4 variants: Desktop and Wall Mount devices with 4-pin and 5-pin headset connectors and a Flush Mount device with 4-pin male, 4-pin female or 5-pin female connector options.
- Supports connections to an OMNEO Main Station (Digital Party Line) or an OMNEO capable matrix (ADAM or ADAM M with OMI installed or ODIN).
- Features a high-resolution TFT display, allowing user setup and configuration using an iconbased GUI.
- Supports power redundancy from an external DC power supply or the Local +24V terminal block to PoE+ / PoE++
- Supports Bluetooth audio connectivity via Bluetooth enabled USB dongles and phone connectivity.

Technical specifications

Power

PoE+ / PoE++

Type of Power Supply	PoE
Connector Type	Neutrik etherCON
Number of PoE ports	1
PoE Input	POE+ IEEE 802.3at Type 2, Class 4 POE++ IEEE 802.3bt Type 3&4, Class 4
PoE voltage (VDC)	42.5 to 57 VDC
Power consumption PoE (W) max- imum, typical	25 W

External DC Power Supply Input

Type of power supply	VDC
Connector type	Locking Kycon 3-pin connector
Input voltage (VDC) (minimum - max- imum)	24 VDC
Current (A)	280 mA

DC Power Terminal Block Input

Type of power supply	VDC
Connector type	Phoenix Terminal Block (Push-in spring connection)
Input voltage (VDC) (minimum - max- imum)	19 VDC - 24 VDC
Current (A)	280 mA

External Power Supply

Type of power supply	External AC/DC power supply
Connector type	IEC C14
Input voltage (VAC) (minimum - max- imum)	100 - 240 VAC
Operating voltage (VAC) (minimum - maximum)	100 VAC to 240 VAC @ 50 Hz to 60 Hz
Power consumption (VA)	25 VA
Power consumption (W) (maximum)	13 W

Mechanical

	DSPK4-D IP 4 ch desktop user station DSPK4-W IP 4 ch wall
	mount user station
Dimensions (H x W x D) (in)	5.79 in x 9.13 in x 3.94 in
Dimensions (H x W x D) (mm)	147 mm x 232 mm x 100 mm
Weight (lb)	2.97 lb

	DSPK4-D IP 4 ch desktop user station
	DSPK4-W IP 4 ch wall mount user station
Weight (kg)	1.35 kg
	DSPK4-F IP 4 ch flush mount user station 4F, 4M, 5F
Dimensions (H x W x D) (in)	5.90 in x 9.13 in x 2.56 in
Dimensions (H x W x D) (mm)	150 mm x 232 mm x 65 mm
Weight (lb)	1.62 lb
Weight (kg)	0.74 kg

Environmental

	DSPK4-All models
Operating temperature (°F)	-4 °F – 122 °F
Operating temperature (°C)	-20 °C – 50 °C
Operating relative humidity, non- condensing (%)	5% - 90%
Storage temperature (°F)	-4°F – 158°F
Storage temperature (°C)	-20 °C – 70 °C
Storage relative humidity (%)	15% - 90%

TFT Display

	All Models
Display type	TFT
Backlight	White LED with adjustable brightness (active and idle)
Display color	Color
Display resolution (pixels)	320 x 240 px
Display size (cm)	6.1 cm
Display size (in)	2.4 in
Color depth	16-bit bpp
Active viewing area (W x H)	36.72 mm x 48.96 mm

	All Models
Display view angle	80° all direction
Display protective lens	Anti-glare

OMNEO Ports

Connector type	Neutrik etherCON
Number of Ethernet ports	2
Ethernet type	100/1000 Mbps
Audio streaming	Full duplex
Number of audio channels	2

Panel Mic

Microphone element type	Electret
Connector type	¼" TRS jack
Audio input	Microphone
Nominal input level (dBu)	-42.5 dBu
Maximum input level (dBu)	-22.5 dBu
Panel mic input frequency response (Hz)	70 Hz to 7.4 kHz

XLR Headset Front (DSPK4-D/DSPK4-W)

Connector type	6-pin (5-pin compatible) female XLR
Audio input	Microphone
Microphone element type	Electret
Nominal input level (dBu)	-42.5 dBu
Maximum input level (dBu)	-22.5 dBu
Microphone element type	Dynamic
Nominal input level (dBu)	-50 dBu
Maximum input level (dBu)	-30 dBu
Headset mic input frequency re- sponse (Hz/kHz)	70 Hz to 7.4 kHz

XLR Headset Front (DSPK4-F)

Connector type	4-pin female XLR [,] 4-pin male XLR, or 6-pin (5-pin compatible) female XLR
Audio input	Microphone
Microphone element type	Electret
Nominal input level (dBu)	-42.5 dBu
Maximum input level (dBu)	-22.5 dBu
Microphone element type	Dynamic
Nominal input level (dBu)	-50 dBu
Maximum input level (dBu)	-30 dBu
Headset mic input frequency re- sponse (Hz/kHz)	70 Hz to 7.4 kHz

XLR Headset Left (DSPK4-D/DSPK4-W)

Connector type	4-pin female XLR (Desktop) 4-pin male XLR (Wall Mount)
Audio input	Microphone
Microphone element	Electret
Nominal input level (dBu)	-42.5 dBu
Maximum input level (dBu)	-22.5 dBu
Audio input	Dynamic
Nominal input level (dBu)	-50 dBu
Maximum input level (dBu)	-30 dBu
Headset mic input frequency re- sponse (Hz/kHz)	70 Hz to 7.4 kHz

XLR Headset Right (DSPK4-D/DSPK4-W)

Connector type	4-pin male XLR (Desktop) 4-pin female XLR (Wall Mount)
Audio input	Microphone
Microphone element	Electret
Nominal input level (dBu)	-42.5 dBu
Maximum input level (dBu)	-22.5 dBu
Audio input	Dynamic

Nominal input level (dBu)	-50 dBu
Maximum input level (dBu)	-30 dBu
Headset mic input frequency re- sponse (Hz/kHz)	70 Hz to 7.4 kHz

Headphone Amplifiers (XLR 1/2/3)

Maximum output power (mW)	80mW for 150Ω
Frequency response (Hz)	200-20000 Hz

Loud Speaker Amplifier

Peak SPL at a distance of 1 m (dB-SPL)	90 dBSPL
Frequency response (Hz)	200-12000 Hz

General Purpose Input/Output Ports

Connector type	Phoenix Terminal Block (Push-in spring connection)
Control ports	1 GPI 1 GPO
Number of relay outputs	1
Maximum contact current (A)	1 A
Maximum contact voltage (VDC)	30 VDC
Number of optically-coupled inputs	1

Bluetooth

Mic input frequency response	70 Hz to 3.4 kHz
Headphone response	30 Hz to 19 kHz 30 Hz to 3.4 kHz
Version	4.0
Approved dongles	IO Gear GBU522 LM Technologies LM506

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Range (ft)	15 ft
Range (m)	5 m
Audio codec	SBC

Ordering information

DSPK4-D IP 4 ch desktop user station DSPK4 Desktop version Order number DSPK4-D F.01U.405.616
DSPK4-W IP 4 ch wall mount user station DSPK4 Wall mount version Order number DSPK4-W F.01U.405.617
DSPK4-F 4F IP 4 ch flush mount user station 4F DSPK4 Flush mount version, 4-pin XLR female Order number DSPK4-F 4F F.01U.405.619
DSPK4-F 4M IP 4 ch flush mount user station 4M DSPK4 Flush mount version, 4-pin XLR male Order number DSPK4-F 4M F.01U.405.618
DSPK4-F 5F IP 4 ch flush mount user station 5F DSPK4 Flush mount version, 5-pin XLR female Order number DSPK4-F 5F F.01U.405.620
Accessories RTS 4-GANG BOX Metal Electrical Wall Box 4-Gang metal electrical wall box for all models of the DSPK4 Flush mount version Order number RTS 4-GANG BOX F.01U.409.059
PSU-KP DSPK PSU KP-Series and DSPK panels KP-Series and DSPK4 external power supply Order number PSU-KP DSPK F.01U.410.185
EWE-DSPK4-IW 12 mths wrty ext extension DSKP4 12-month warranty extension Order number EWE-DSPK4-IW F.01U.411.436