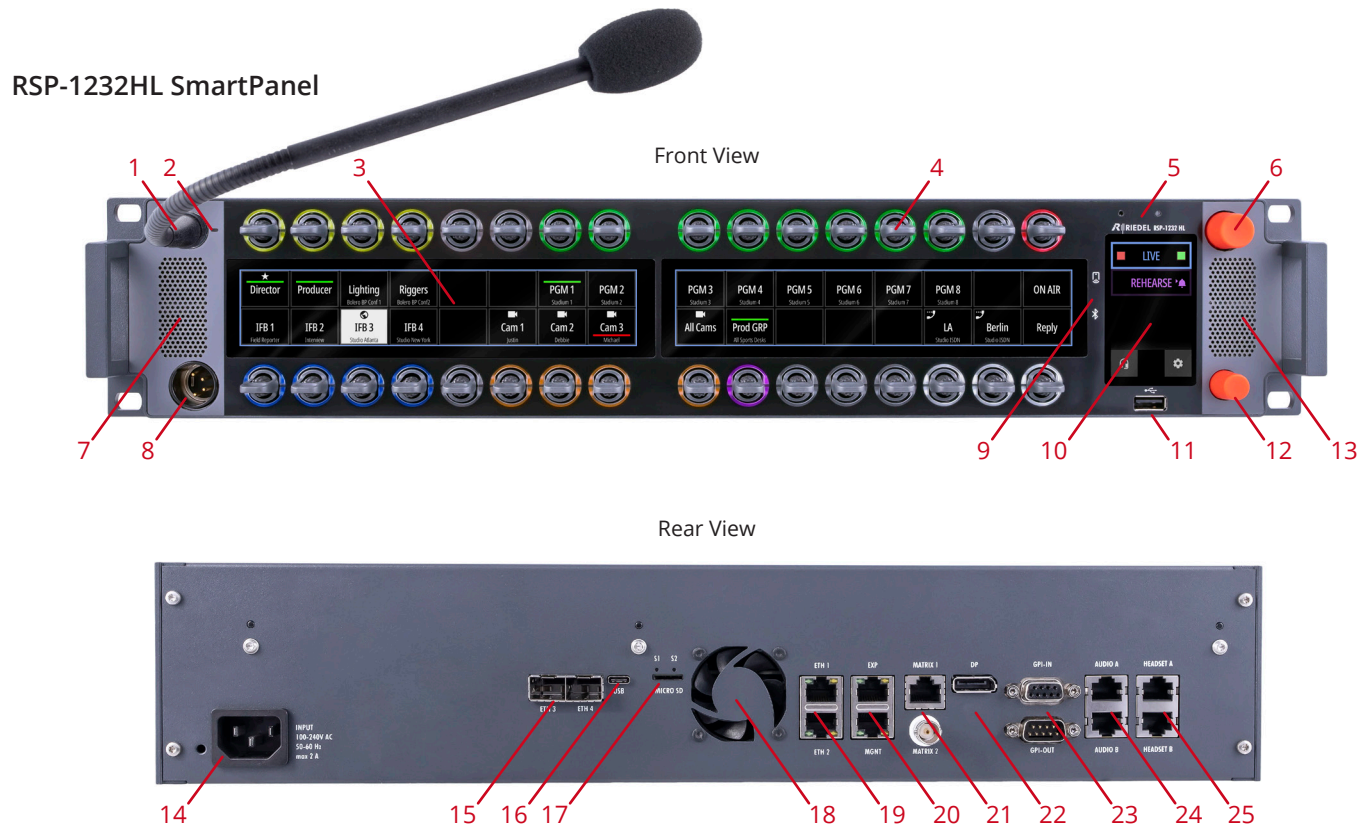


# Riedel SmartPanel RSP-1232HL

**Building upon the technology that powers Riedel's SmartPanel app-driven user interfaces, the new 1200 series RSP-1232HL multifunctional interface features multiple full-color multi-touchscreen displays, 32 innovative hybrid lever keys, the ability to leverage apps for multi-functionality, and the ability to easily adapt to the various workflows in use today. This new panel is poised to allow you to work the way you always have while opening up entirely new possibilities.**

In addition to full-color touchscreens and support for multiple workflows, each of the 32 hybrid lever keys features an innovative integrated rotary encoder that provides control over variable parameters in the same location as the key itself. Each key also has an LED ring which allows for easy grouping of keys based on colors. Key Banks, a new take on shift pages, are user-definable (name and color) layers of keys that are accessed by simply pressing a button on the screen.

The RSP-1232HL is app-defined and can support multiple workflows. Some comms users prefer a "Talk/Listen" workflow where the user chooses what to listen to from an initially silent panel. Other users prefer a "Talk/Mute" workflow that starts with a panel that broadcasts everything and the users select which signals to turn off. Users decide which mode they prefer on a per-panel basis.



## Legend

- |  |   |  |
|--|---|--|
| 1) Microphone Connector                                      | 9) NFC / Bluetooth Connection (future use)                    | 17) MicroSD-Card Slot                        |
| 2) Microphone Status LED                                     | 10) Multi-touch Color Info Display                            | 18) Fan (temperature controlled)             |
| 3) 2x Multi-touch Color Key Displays                         | 11) Front USB Connector                                       | 19) 2x Ethernet Connectors (AES67/Ethernet)  |
| 4) 32x Hybrid Lever Keys with Rotary Encoder & LED Key rings | 12) Small Rotary Encoder (Sidetone Control & Menu Navigation) | 20) Expansion / Management Port (future use) |
| 5) Light sensor / Panel Microphone (future use)              | 13) DSP-controlled Speaker (right)                            | 21) 2x Artist Matrix Connectors (AES3)       |
| 6) Big Rotary Encoder (Volume Control)                       | 14) Mains Power Connector                                     | 22) DisplayPort (future use)                 |
| 7) DSP-controlled Speaker (left)                             | 15) 2x SFP Slots (AES67/Ethernet)                             | 23) GPI Input/Output Connectors              |
| 8) Exchangeable Headset Connector                            | 16) Rear USB Connector  | 24) 2x Analog 4-Wire Input/Output Connectors |
|  |   | 25) 2x Headset Connectors                    |

# Riedel SmartPanel RSP-1232HL

## Hardware

Front Elements	
Keys & Rotaries	32× software-assignable lever keys with rotary encoder and push button 2× rotary encoders
Displays	3× high-resolution, bright color, sunlight readable TFT displays with multi-touch control (capacitive)
Mic	1× threaded 6.3 mm jack for microphone 1× internal panel microphone (future use)
Headset	User-exchangeable headset connector with preinstalled 4-pin male XLR connector
Speaker	2× full-range, DSP-controlled, Stereo
USB	1× USB 2.0 (standard Type-A, max. 500 mA)
NFC	Technology RFID, Frequency 13.56 MHz (future use)
Bluetooth	Frequency DTS Band 2400 ... 2483.5 MHz (future use)
Lightsensor	Adaptation of the display brightness to the environment (future use)

## Rear Elements

IEC	Power Input
SFP	2× Ethernet ETH 3 / ETH 4 (1000BASE-X, Ethernet, AES67)
USB	1× USB 2.0 (standard Type-C, max. 500 mA)
MicroSD-card	1× MicroSD / MicroSDHC card up to 32 GB (for service purpose only)
RJ45	2× Ethernet ETH 1 / ETH 2 (1000BASE-T Ethernet, AES67) 1× Expansion port for expansion panels 1× Management port for panel configuration (future use) 1× Artist Matrix connector (AES3) 2× Analog audio 4-wire inputs and outputs 2× Headset ("Headset A" is identical to front)
BNC	1× Artist Matrix connector (AES3)
DisplayPort	1× DisplayPort connector (future use)
Sub-D9 (male)	3× GPI output, $U_{max}$ 48 V / 300 mA, protected by self-healing fuse
Sub-D9 (female)	3× GPI input, $U_{in}$ = +5 V ... +48 V

## Audio Specs

Maximum Level	Audio A/B Output	+24 dBu +23 dBu	@ 0 dBFS, 2 kΩ load @ 0 dBFS, 600 Ω load
	Audio A/B Input	+24 dBu	± 0 dBFS
	Headset Phones	+20.5 dBu	@ 0 dBFS, 150 Ω load
	Headset Microphone	+6 dBu	± 6 dBFS
	Internal Speakers (stereo)	max. 110 dB SPL	@ 1 m
	Frequency Response	Panel/Internal Mic (electret)	70 Hz ... 20 kHz, -3 dB (70 Hz high-pass filter)
Headset Mic A/B		20 Hz ... 20 kHz, -0.1 dB	@ -20 dBFS (-20 dBu), -12 dB internal gain
Headset Phones		20 Hz ... 20 kHz, -0.4 dB	@ -20 dBFS, 150 Ω load
Audio A/B Input		20 Hz ... 20 kHz, -0.4 dB	@ -20 dBFS (+4 dBu), 150 Ω source
Audio A/B Output		20 Hz ... 20 kHz, -0.3 dB	@ -20 dBFS, 600 Ω load
Internal Speakers (stereo)		120 Hz ... 16.6 kHz, -10 dB	
Distortion THD+N	Panel Mic	<0.03 %, 70 Hz ... 20 kHz	@ 25 μA (± 110 dB SPL)
	Headset Mic A/B	<0.004 %, 20 Hz ... 20 kHz	@ -1 dBFS (-1 dBu), -12 dB internal gain
	Headset Phones	<0.10 %, 20 Hz ... 200 Hz	@ -1 dBFS, 150 Ω load
		<0.004 %, 200 Hz ... 20 kHz	
		<0.03 %, 20 Hz ... 200 Hz	@ -20 dBFS, 150 Ω load
	Audio A/B Input	<0.010 %, 20 Hz ... 20 kHz	@ -1 dBFS (+23 dBu), 150 Ω source
<0.004 %, 20 Hz ... 20 kHz		@ -20 dBFS (+4 dBu), 150 Ω source	
<0.004 %, 20 Hz ... 20 kHz		@ -1 dBFS, 600 Ω load	
Resolution	48 kHz / 24 Bit		

## Overall

Power	Supply voltage	100 – 240 VAC, 50 – 60 Hz	
	Power consumption	≤20 W, ≤70 BTU/hr	
Dimensions	Form factor	19", 2 RU	
	Width × height × depth	483 (445) × 88 × 138 (95) mm / 19 (17.5) × 3.5 × 5.4 (3.7) " outer dimensions (installing dimensions)	
Weight		3.4 kg / 7.4 lbs	
Cooling	Fan noise (temperature controlled fan)	<23 dB(A) idle, 34 dB(A) max. fan speed	@ 0.7m (noise emission meets GK15 / DIN 15996)
Environment	Operating temperature	0 ... +45°C	
	Storage temperature	-30 ... +80°C	
	Humidity	20 ... 90 % relative (non-condensing)	
	Max. altitude	3000 m AMSL	