



1200 SERIES SMARTPANEL

RSP-1232HL / RSP-1216HL

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Riedel's next-generation SmartPanels open new perspectives into multifunctional user interfaces.

Building upon the technology that powers Riedel's SmartPanel app-driven user interfaces, the new 1200 Series SmartPanels represent a quantum leap forward in workflow flexibility, power, and connectivity. Featuring multiple full-color multi-touchscreen displays, innovative hybrid lever keys, the ability to leverage apps for multifunctionality, and the ability to easily adapt to the various workflows in use today, these new panels are poised to allow you to work the way you always have while opening up entirely new workflow possibilities.

Completely new from the ground up, the 1200 Series SmartPanels are Riedel's smartest panels yet! The SmartPanel concept decouples the panel's capabilities from its hardware and turns it into a generic device on which customers can install different apps to enable different capabilities. With a Riedel SmartPanel, you not only get what the panel is capable of today – but also what it will be capable of in the future.

The 1200 Series **Intercom App** supports 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, with the users selecting which signals to turn off. Users can decide which mode they prefer on a per-panel basis. New features that further enhance the panel's ease of use include Riedel's new Logical Groups concept. Logical Groups allow users to choose custom colors for the key labels or the LED rings around the keys. Each key label has an 8-character main label, a 16-character sub label, and user-defined icons. Other icons provide information about the state of each key at any point in time. The "open mic", "muted key", "incoming beep", or "port busy" prompts are easy to read and understandable at a glance. Users can get as much or as little information about any given key as needed.

Connectivity is king at Riedel. The new panels take advantage of the AES3 digital connectivity that Riedel has always used along with SMPTE 2110-30 (AES67) connectivity. AES67 connection is provided via fiber SFPs or RJ45 connections, creating a variety of daisy-chaining and redundancy options to realize

extraordinary cabling flexibility and resilience. Stereo speakers optimized for high speech intelligibility and audio fidelity maintain a balanced sound even at high volume levels. Other include front-panel mic mute and sidetone adjustments, front/rear USB ports, Bluetooth and NFC connectivity, GPIO and 4-wire ports.

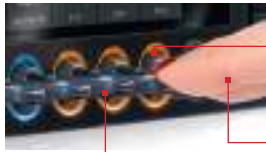
With the new **Control Panel App**, third-party control, monitoring, and automation systems can be adapted to the SmartPanel's easy-to-use and highly intuitive user interface. Its feature set is surprisingly simple but incredibly powerful. Users can trigger actions in third party systems with the panel's keys and rotaries, and get visual feedback on configuration status and changes via colors, labels, and symbols on touchscreens and LEDs. The Control Panel App is built on open NMOS standards for easy interoperability and scalability. Key to this is the NMOS IS-07 standard which allows the exchange of event/state information (e.g. the press of a button or the color of an LED) across systems of different vendors.

The **Audio Monitoring App** enables users to keep track of their audio quality while managing a production via the Intercom App. The app directly connects to any SMPTE-2110-30 (AES67) stream available within the network, which makes selecting and managing monitoring sources incredibly flexible and surprisingly simple. Users may monitor up to 16 mono AES67 channels in parallel from a total of 128 channels which they can swiftly manage within the app's intuitive browser-based configuration tool. As all SmartPanel apps run simultaneously, users will never miss an important call: Intercom calls will automatically dim the monitoring volume and also be indicated within the panel's info display.

Uniting powerful intercom, control and audio monitoring functionalities in a single keypanel, the 1200 Series SmartPanels deliver a truly unique combination of capabilities that empowers users while saving valuable rack or desk space. The software-defined SmartPanels are set to keep up with new technologies and workflows in the dynamic environments of broadcast, event production, and Pro AV, as their capabilities continue to evolve with industry demands.



Unique new key design: The Hybrid Lever Key



Combines lever and rotary into one single key: control countless parameters with one key

Comfortably rest your fingers on the lever, always ready to talk

LED ring allows for easy grouping of keys based on colors

Full color, high-resolution, sunlight readable touch screen

8 character titles plus 16 character subtiles allow expressive labeling

LED color rings



Reactive multi-touch display

Icon support

Hybrid Lever Key

Info Display & Key Banks

- No mixing of "operating mode" and "menu mode"
- Stay fully operational (i.e. you do not lose access to your intercom keys) when accessing additional settings or menus
- Find additional information and navigation for your current working context (e.g. key banks)



- Create one page with all relevant keys for your your show rehearsal

- Quickly change to all relevant keys for your for your live setup with just one tap
- Users can still see status messages (open mics, incoming calls, and other) from key banks which are currently not visible

Logical Groups

Quickly identify the teams / team members you need to talk to

- Flexibly choose between 16 individual group colors and assign them to either the key label or the LED color ring
- Create a simple way to show relationships between keys



Assign group colors to the LED rings or on the key labels

Control Panel App (available 2021)

API based on open NMOS standards:

Discover via IS-04, connect via IS-05, transport via IS-07



Trigger actions in 3rd party control, monitoring and automation systems

Get visual feedback on configuration status and changes

Audio Monitoring App (available 2021)

Monitor up to 16 mono AES67 channels from a total of 128



Quickly switch back to intercom via key banks

Benefit from the panel's high-fidelity sound, making a separate audio monitor obsolete

The smartest SMARTPANELS™

RSP-1232HL
& RSP-1216HL



BACK VIEW



Front view

- ① Logical groups:
Choose custom colors for key labels or LED rings
- ② High-resolution, bright color, sunlight readable TFT displays with multi-touch control
- ③ 2× multi-touch color key displays
- ④ 32×16x hybrid lever keys with rotary encoder & LED key rings
- ⑤ NFC / Bluetooth connection (future use)
- ⑥ Front USB connector
- ⑦ Rotary encoder (sidetone control & menu navigation)

Back view

- ⑧ Power supply
- ⑨ 2x SFP slots (AES67/ethernet)
- ⑩ Rear USB connector
- ⑪ MicroSD card slot
- ⑫ 2× ethernet connectors (AES67/ethernet)
- ⑬ Expansion / management port (future use)
- ⑭ Artist matrix connector (AES3)
- ⑮ Artist coaxial connector (AES3)
- ⑯ DisplayPort (future use)
- ⑰ GPI input/output connectors
- ⑱ 2× analog 4-wire input/output connectors
- ⑲ 2× headset connectors

| HARDWARE FRONT ELEMENTS | RSP-1232HL | RSP-1216HL |
|-------------------------|--|--|
| Keys & rotaries | 32× software-assignable lever keys with rotary encoder and push button 2× rotary encoders | 16× 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 | 1× full-range, DSP-controlled |
| USB | 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) | |
| Light sensor | Adaptation of the display brightness to the environment (future use) | |

| HARDWARE REAR ELEMENTS | RSP-1232HL | RSP-1216HL |
|------------------------|---|------------|
| 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, Umax 48 V / 300 mA, protected by self-healing fuse | |
| Sub-D9 (female) | 3× GPI input, Uin = +5 V ... +48 V | |

| AUDIO SPECS | RSP-1232HL | RSP-1216HL | |
|--------------------------|-------------------------------|--|-----------------|
| Maximum level | Audio A/B input // output | +24 dBu // +24 dBu | |
| | Headset phones | +20.5 dBu | |
| | Headset microphone | +6 dBu | |
| Frequency response | Internal speaker | max. 110 dB SPL | max. 101 dB SPL |
| | 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 | |
| | Headset phones | 20 Hz ... 20 kHz, -0.4 dB | |
| | Audio A/B input // output | 20 Hz ... 20 kHz, -0.4 dB // 20 Hz ... 20 kHz, -0.3 dB | |
| | Internal speaker | 120 Hz ... 16.6 kHz, -10 dB // 140 Hz ... 16.6 kHz, -10 dB | |
| Sample rate / resolution | 48kHz / 24 Bit | | |

| GENERAL | RSP-1232HL | RSP-1216HL | | | |
|------------|---|---|---|---|--|
| Power | Supply voltage | 100 – 240 VAC, 50 – 60 Hz | 100 – 240 VAC, 50 – 60 Hz | | |
| | Power consumption | ≤20 W, ≤70 BTU/hr | ≤15 W, ≤50 BTU/hr | | |
| Dimensions | Form factor | 19", 2 RU | 19", 1 RU | | |
| | Width × height × depth | 483 (445) × 88 × 138 (95) mm / 19 (17.5) × 3.5 × 5.4 (3.7) " outer dimensions (installing dimensions) | 483 (445) × 44 × 138 (95) mm / 19 (17.5) × 1.7 × 5.4 (3.7) " outer dimensions (installing dimensions) | | |
| Weight | 3.4 kg / 7.4 lbs | | 2.3 kg / 5.1 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) | <23 dB(A) idle, 26 dB(A) max. fan speed | @ 0.7m (noise emission meets GK10 / DIN 15996) |
| | | Environment | Operating temperature | 0 ... +45°C | 0 ... +45°C |
| | Storage temperature | -30 ... +80°C | -30 ... +80°C | | |
| | Humidity | 20 ... 90 % relative (non-condensing) | 20 ... 90 % relative (non-condensing) | | |
| | Max. altitude | 3000 m AMSL | 3000 m AMSL | | |

| SOFTWARE LICENSES | RSP-1232HL | RSP-1216HL |
|---------------------------------------|------------|------------|
| Intercom App Pro | ✓ | ✓ |
| AES3 License | ✓ | ✓ |
| AES67 4-Wire License | ✓ | ✓ |
| Control Panel App (available 2021) | ✓ | ✓ |
| Audio Monitoring App (available 2021) | ✓ | ✓ |

| ACCESSORIES | RSP-1232HL | RSP-1216HL |
|---|------------|------------|
| MIC-30 electret microphone, cardioid, length 30cm | ✓ | ✓ |
| MIC-3 electret microphone, cardioid, length 3cm | ✓ | ✓ |





Riedel Communications GmbH & Co. KG
Uellendahler Str. 353 | 42109 Wuppertal | Germany
Phone +49 (0) 202 292-90 | info@riedel.net | www.riedel.net