

FOR AUDIO



FOR SAFETY
FOR SECURITY
FOR COMMUNICATION

***WELCOME TO A NEW ERA
A NEW GENERATION
A GENERATION OF
COMMUNICATION FOR YOU***





GEN4

Jacques introduces it’s fourth generation of solutions to you. A generation redeveloped to further enhance our communication solution across more markets, with more features and greater security. The platform delivers a new look with superior performance and ultimate reliability.

For Security

Encryption

- Encryption for enhanced security*

Superior Edge processing

- More processing power at the device means greater capability to perform complex audio functions like AEC, threshold monitoring and endpoint analytics

ONVIF camera support*

Multiple and configurable audio/video streams

- Determine the output and destination of each stream
- Achieve 24/7 monitoring and continuous recording simultaneously
- Dedicated digital recording channel

Support of RTSP protocol

- Support of RTSP direct from an endpoint in order to stitch CCTV footage with audio from Jacques devices in sync

Improved tamper detection

- Accelerometer with proximity sensor to alert should an intercom is tampered with in any way

Enhanced system redundancy

- Enhancements to our system failover process to ensure less overall system downtime

Integration to leading security systems

- Continued development of our integration capabilities to drive added value to our customer

For Safety

Maintain vandal resistant and weather-proof characteristics

Smart diagnostics

Health check

Upgraded reporting capabilities

For Communication

Improved audio processing power

Improved audio sampling rate

- Adjust audio sampling rates to 20khz dependent on audio characteristics, environment and enabled features

Multiple audio codecs

- We are delivering more options for audio codecs to deliver higher quality audio.
- G711 (baseline)
- G722
- Jacques alaw
- Opus

*Available in native mode

Digital microphones

- We are delivering digital microphones to achieve higher dynamic range, less variables and achieve more advanced echo cancellation

Multi-modal

Product release phase 1

- Emulation mode
- Native mode

Product release phase 2

- SIP mode

Product release phase 3

- SIP standalone

Local, advanced acoustic echo cancellation

Noise filtering

For Longevity

Developed for the future

- We’ve developed this generation with the future and our customers in mind. We’ve built in capacity to our electronics and software to respond quickly to customer-based product feature requests. With the ability to upgrade our CPU core, our possibilities are endless

Backwards compatibility to current audio and video intercom ranges

- We’ve made sure our new generation will fit seamlessly into your current Jacques system ensuring you can replace an aged intercom with a current one without upgrading your entire site. Simply swap out endpoints

Upgrade gradually

- With backwards compatibility, you can upgrade a large site overtime to benefit from new and more advanced features. We recognise that it isn’t always economical or feasible to upgrade a live site, especially in a secure environment. Adding new generation endpoints as a site expands or endpoints need replacing ensures a gradual and controlled process to site upgrades

Ultimate reliability

- Our reputation is built on reliability. Like our previous generations, this generation is built tough. It has been put through its paces from a testing and compliance perspective
- Support the development of additional market driven features and functionality
- Offer a selection of base and expansion boards to provide flexible functionality
- Streamline production, testing and commissioning of products & systems

For you

We’ve listened to our customers and have responded to their requests

Upgraded interfaces

- New, user friendly interfaces to many of our software modules
- New & easier configuration

User security

- Greater security around system and feature access
- Encryption

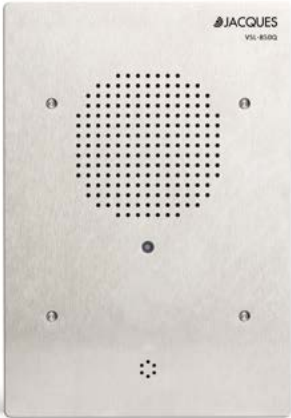
Greater product range

- More options on products

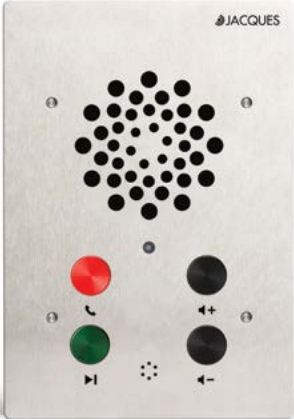
Greater regulatory compliance for worldwide markets



Secure series



Retro series



***The customisation
experience***





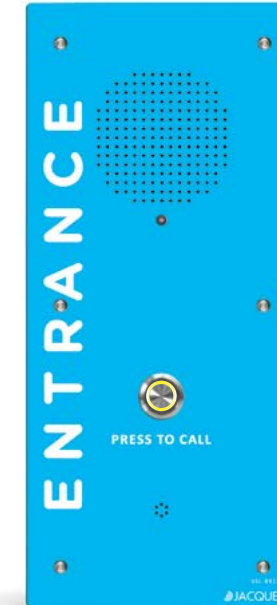
Intercom terminals



Classic red



Classic orange



Classic blue



Custom colour (single)



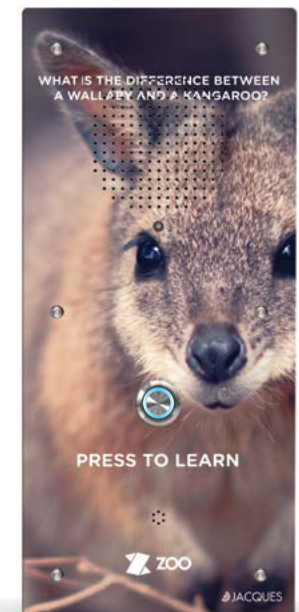
Custom text vertical



Custom text horizontal



Custom design



Custom photo



Help point units



O1

Classic orange / One colour



O2

Classic orange / Two colour



B1

Classic blue / Two colour



B2

Classic blue / Two colour



Y1

Classic yellow / One colour



Y2

Classic yellow / Two colour



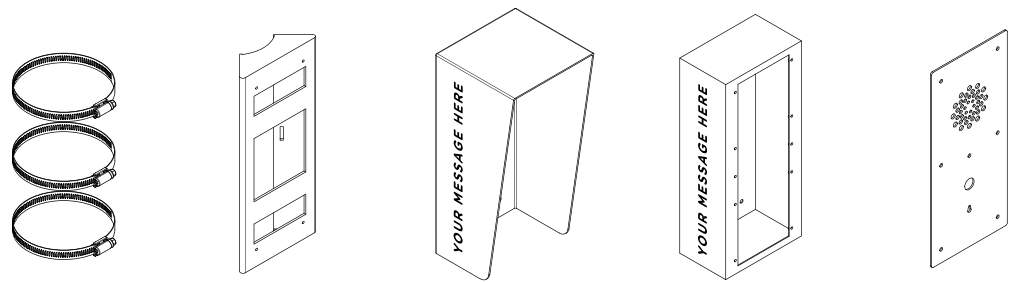
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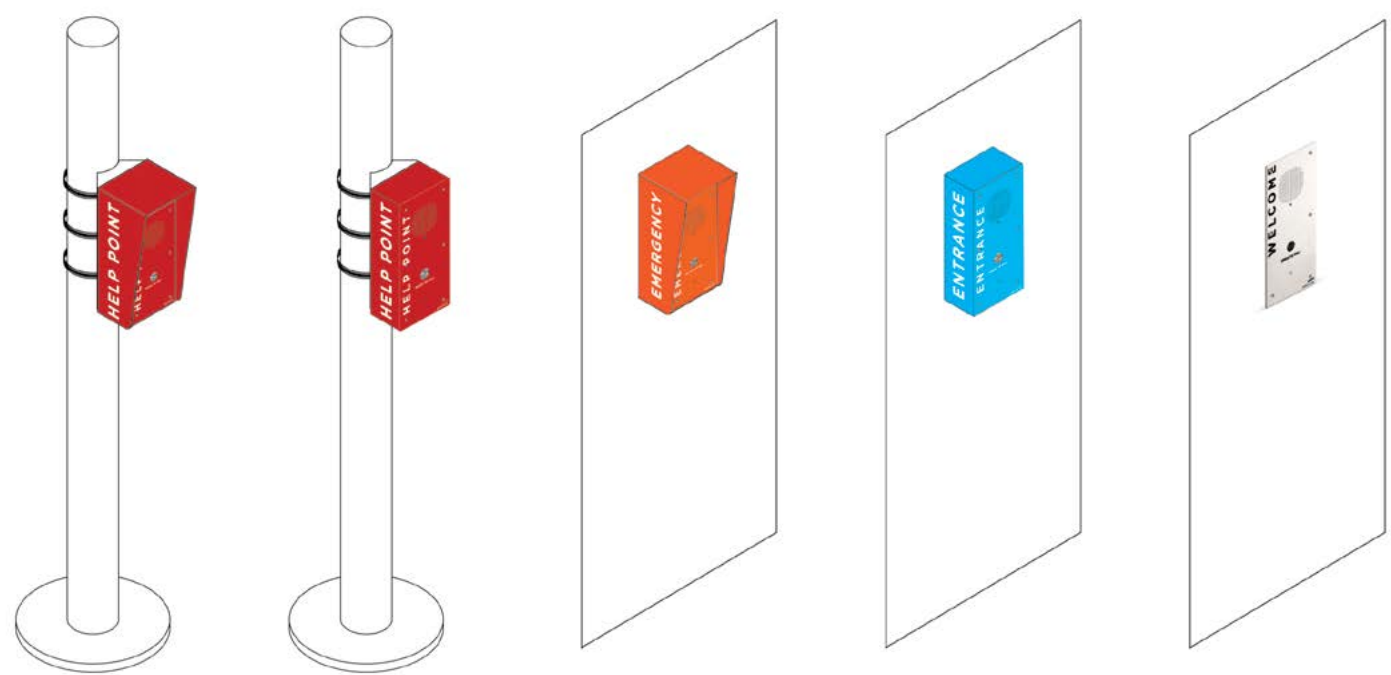
Custom text

MOUNTING OPTIONS



Flexible metal straps Bracket Rain hood Backbox Panel

Pole mount w/rain hood	•	•	•	•	•
Pole mount	•	•		•	•
Wall mount w/rain hood			•	•	•
Wall mount - surface				•	•
Flush mount					•
Mount into custom bollard					•



SPECIFICATIONS

JEM 4 AUDIO INTERCOM

Power input	IEEE 802.3af PoE, class 0
Power consumption	Idle: 2.9 W; Max: 12 W
Ethernet	10/100/1000 Mb/s
Speaker amplifier	2.5 W Class-D amplifier
Speaker	70 mm diameter, 2 W, 4 Ω, max 89 dB SPL ±3 dB @ 1 m
Microphone	Digital MEMS microphone, 64 dB SNR
Audio codecs	Opus, G.711 A-law, G.711 μ-law, G.722, Jacques PCM
Audio processing	Acoustic Echo Cancellation (AEC, based on Speex), noise cancellation Full duplex (AEC, PTU), half duplex (with PTT) Automatic Gain Control (AGC)
Call indicator	High brightness RGB LED, with PWM brightness control
Buttons	Up to four piezo or mechanical buttons (1x call button, 3x BGM control buttons) with Self Testing Button (STB) feature
Tamper detection	Accelerometer, light and proximity sensor, external tamper input
Diagnostics	USB diagnostic port, covert IrDA, JCCP heartbeat
Modes of operation	JEM-4 native JEM-2+ emulation Standalone SIP
Connections	RJ-45 port for Ethernet data and PoE Diagnostics Interface (USB 2.0 OTG) via Micro AB Connector Camera interface via Micro HDMI (Type-D) connector Expansion module socket
Accessories	Standard features available on Basic Multi-function Expansion Module: <ul style="list-style-type: none">2 relays, contact rating 60 V d.c. max, 2 A max (resistive load)2 external inputs (dry contacts)2 external outputs (open drain)1 audio input, line level, single ended, non-isolated1 audio output, line level, single ended, non-isolated12 V d.c. power output, 250 mA max5 V d.c. power output, 250 mA max Jacques Cable Extender Module: <ul style="list-style-type: none">Ethernet to 2-wire communication (data and power)10/100 Mb/sCable extension up to 600 m depending on cable Jacques Camera Module (in design): <ul style="list-style-type: none">5 MP CMOS sensor, 1080p @ 30 fps
EMC/EMI compliance	AS/NZS / EN 55032, CISPR 32 (Class B) – Electromagnetic compatibility of multimedia equipment - Emission requirements AS/NZS / EN 55024, CISPR 24 (Class B) – Electromagnetic compatibility of information technology equipment - Immunity requirements AS/NZS / EN 62368 – Audio/video, information and communication technology equipment – Part 1: Safety requirements FCC Part 15 Class B
Labelling	AS/NZS RCM, CE, FCC, ICES, RoHS, WEEE
IP rating	IP66 (as per AS/NZS / EN 60529)
IK rating	IK10 (as per EN 62262)
Operating temperature	-20 °C to 70 °C
Storage temperature	-20 °C to 70 °C
Relative humidity	<95 % RH (non-condensing)
Dimensions (W x H x D)	(125 x 180 x 45) mm
Weight	655 g

NETWORKING AND PROTOCOLS

Protocols	IPv4, IPv6, SIP, TCP, UDP, TFTP, RTP, RTSP, RTCP, HTTPS, NTP, PTP (IEEE 1588), JCCP, SNMP
LAN protocols	Power over Ethernet (IEEE 802.3af) VLAN (IEEE 802.1Q), STP (IEEE 802.1d), RSTP (IEEE 802.1w)
Management and operation	HTTP/HTTPS (web configuration) DHCP and static IP Remote software/firmware upgrade Centralised monitoring
SIP support	RFC 3261
DTMF support	RFC 2833

MECHANICAL CONSTRUCTION

Face plate material	316 stainless steel, 2 mm or 3 mm thickness
Speaker hole size options	42 x (4 mm to 7 mm diameter holes) vandal resistant design 193 x (1.6 mm diameter holes) anti-ligature and vandal resistant design
Microphone hole size	6 x (1.6 mm diameter holes) anti-ligature and vandal resistant design
Gasket material	Closed cell polyethylene foam
Button options	19 mm piezo button (various colours available), (16 mm panel hole) 19 mm mechanical button (16 mm panel hole) 22 mm Jacques Self Testing Button (19 mm panel hole) Customised options available
Mounting hole options	4 x 4.5 mm diameter holes (5 series panel) 6 x 5.0 mm diameter holes (4, 6, 7 and 9 series panels)
Vandal resistant fixings	Stainless steel M4 security TORX, size TR20 Blind rivet compatible for secure facilities

Notes: All specifications are preliminary and subject to change



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