

# IP SCHOOL COMMUNICATION SYSTEM

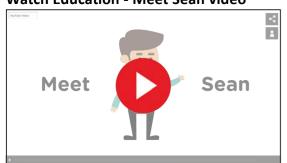
Within schools it is vital that; individuals are able to focus on learning and teaching in a safe, carefree environment. To ensure the safety, security and peace of mind of students and teachers it is essential for a comprehensive security communications system to be in place.

Jacques offers an integrated IP intercom, public address & school bell system that provides options suitable for primary, secondary or multi-campus schools of all sizes. Jacques systems feature user-friendly communication devices, full integration with third party systems and audio monitoring capabilities for maximum security. After recent threats and tragedies at schools, security remains at the forefront of concern. Remove that extra stress from students, teachers and loved ones and enable a positive learning environment with Jacques comprehensive integrated IP audio and video intercom, public address & bell system.

#### SYSTEM SUMMARY

Jacques IP communication system easily adapts to meet the specific needs of each school. Through the PA system, school admin is able to broadcast live or pre-recorded announcements, warning alarms or tones, music and schedule school bells. Furthermore, PA announcements and bells can be broadcast to one, multiple or all PA zones, meaning each announcement can be specifically broadcast to a single or multiple buildings, classrooms or outdoor sports areas. Add a series of classroom intercom terminals and access intercom terminals at key administration areas for a complete safe school solution.

#### Watch Education - Meet Sean video



vimeo.com/350229895





#### **SYSTEM FEATURES**

#### **3rd party integration**

Integration of video and/or audio intercom communication with CCTV heightens security for staff and students on campus at all times. Should an incident occur, video and audio recording facilitated by the system can provide critical information to authorities. Integration to access control systems ensures buildings are accessed only by those allowed

#### **Convenient communication**

The system offers direct voice and/or video communication with campus security for help and assistance from various help points and intercom stations located throughout a campus. Simplified one button calling ensures help and assistance is always close by

#### **Relay modules**

Configurable relay modules exist on intercom terminals to activate external equipment – control doors, boom gates, lights or signal CCTV camera presets. Alternatively create an evacuation panel with push buttons configured to play any tones or alarms you want

#### True IP digital technology

Jacques systems are based on Ethernet network standards and TCP/IP protocols, which use commercially available network equipment and infrastructure.

#### **Integrated PA**

The PA system offers PA zoning, meaning a school can create a PA zone for each classroom, social area, office and sports area. Reception administration can then easily broadcast live or pre-recorded announcements or tones to one, multiple or all PA zones

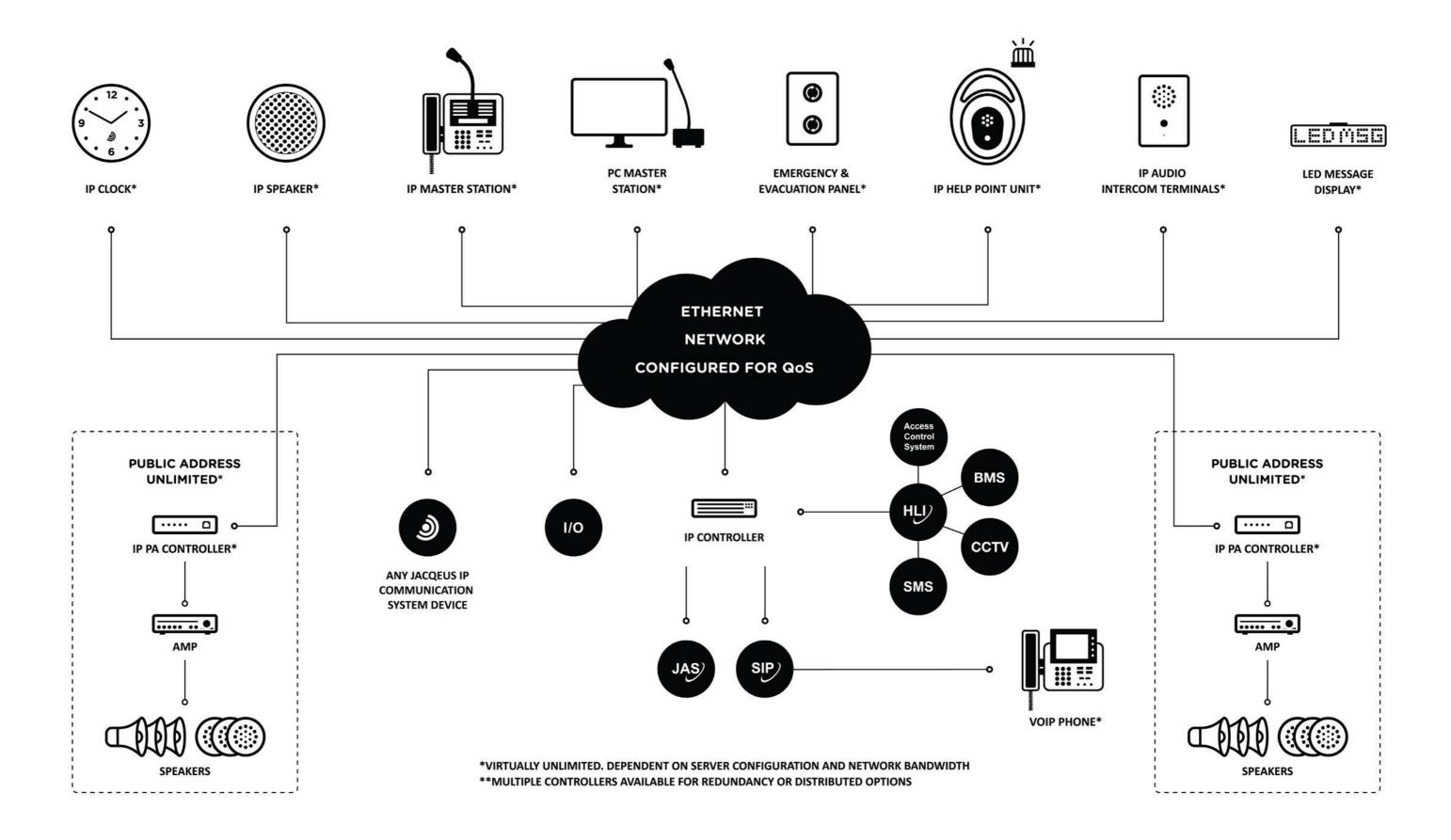
#### Flexible system architecture

Scale the system to suit your school now and into the future. Create small, large or multi-site communication systems. Our system allows for virtually an unlimited number of intercom, help point or public address endpoints to be connected, integrated and managed

#### Threshold alarm monitoring

When the noise level in a classroom reaches above a predefined point, a notification will be triggered on the PC master station, alerting school administration. This allows the principal and teachers to develop a behaviour management plan and identify corrective measures

# System diagram



# ANNOUNCEMENT SCHEDULING REIMAGINED

#### **JAS** software

With flexible scheduling and audio upload options, school admin staff can broadcast announcements at their convenience – managed via our calendar view, mobile-friendly interface.

# Jacques Announcement Scheduler (JAS) software allows schools to:

- Facilitate pre-recorded announcements, bells, tones & warning alarms across the school or campus
- Allows for the uploading of any audio files for broadcast including songs, tones, bells
- Flexible audio, featuring text to speech & record audio from your mobile device
- Build timetables of announcements, bells & tones for broadcast at allocated times to select or all PA zones
- Apply schedules to days, weeks or months based on a site's broadcast requirements
- Management of the scheduler via a user-friendly calendar view
- Edit schedules on-the-fly via mobile device
- Trigger customisable warning, alert or evacuation tones quickly via mobile device

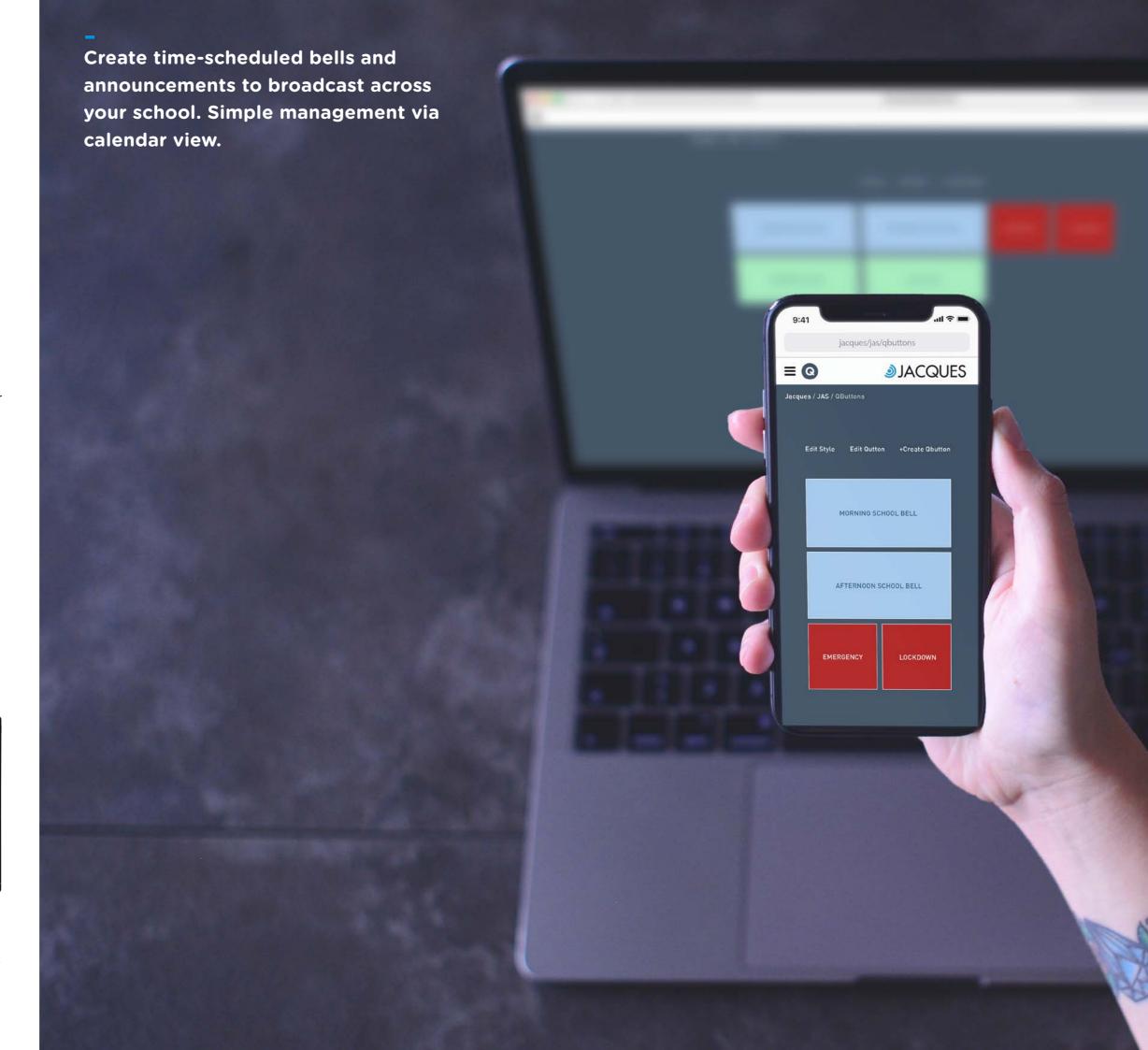
Introducing QButtons – a quick button to broadcast a warning, bell or pre-recorded announcement. Developed for the education market, requested by YOU.

- Designed for mobile use
- Trigger announcements and tones on-the-fly
- Customisable style (text, size, colour, and icon)
- Broadcast to select, many or all PA zones

#### Watch JAS user guide video



vimeo.com/426144942



MNS facilitates the distribution of written notifications via SMS, desktop app,
Telegram, email, and more, so that you can get the word out when it's needed



# COMMUNICATION TO SAFEGUARD, PROTECT & IMPROVE

#### **MNS** software

In today's fast-paced world, it is crucial to ensure that you inform people quickly and efficiently during critical events. Our Mass Notification System (MNS) is designed to keep you informed and connected through various communication channels, providing a comprehensive solution to safeguard people, assets and businesses.

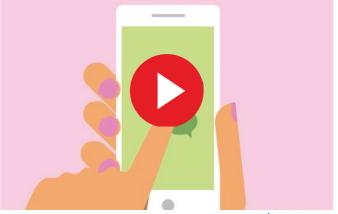
#### Mass Notification system (MNS) software allows schools to:

- Dynamic event triggers
  - Tamper (device has been tampered with
  - QButton activation
  - Noise threshold exceeded
  - Offline (endpoint, device, system controller)
- Customisable message content
  - Templates with dynamic & static content
- Contact list management
  - Bulk upload contacts
  - Email &/or phone number for each contact
  - Segments and epitets for tailored contact lists
- Reporting
  - History of notifications with send data

# Automated alerts based on system events, ensuring that you are informed of critical updates in real time

- SMS
- Email
- Desktop alert application (push notifications)
- Messaging app (Telegram)

#### Watch MNS video



vimeo.com/903194576

#### **PCC-650WIN (J650UI)**

# **Customised graphical user** interface

You can create a variety of maps and submaps to suit your school environment

#### **Graphics & maps**

- Upload any map, plan or graphic to a map page to showcase the location (floorplans, levels, schematics)
- Add any image, logo or graphic as an overlay. Ideal for branding, keys and button differentiation
- Configure jump-to-map to allow the automatic switching of maps to display the active map (map with incoming call)
- Add submaps or buttons to control navigation between maps
- Add labels and text
- Add functionality to map

Endpoints (icons for intercoms & PA devices)

Relays (trigger intercom relay)

Locations

Sliders (volume & channel)

• Buttons can be added to perform the following functions

Go to page

Monitor

Dial predefined number

Trigger tests

• Quick import all endpoints to begin placement

#### **Icons**

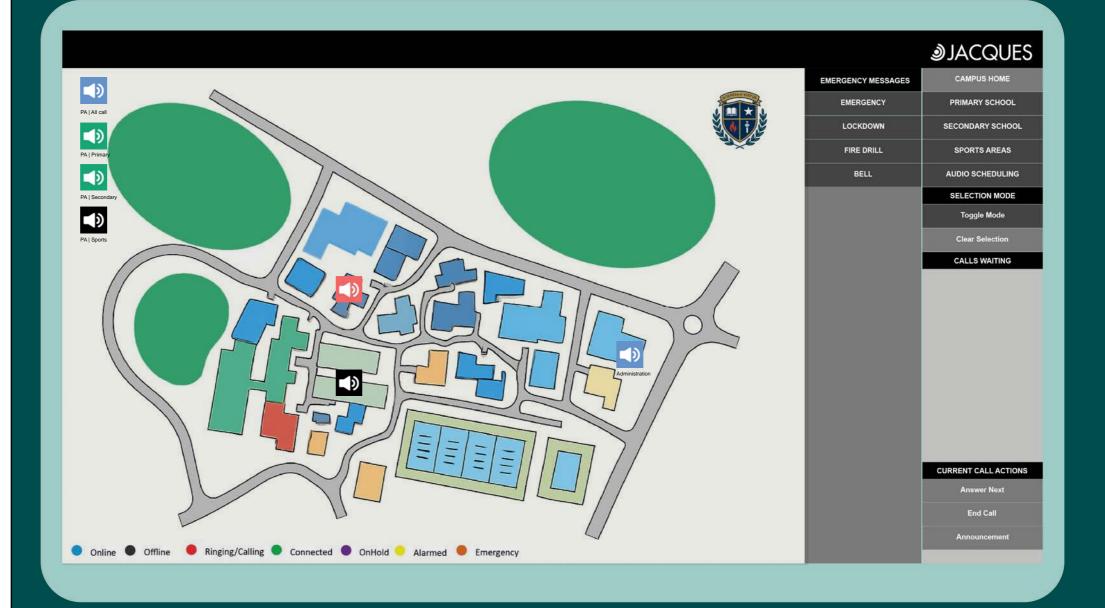
- Flexibility of position & size on maps or within grids
- Colour changing of icons based on status signal directs user attention & response
- Audible call ringing tone

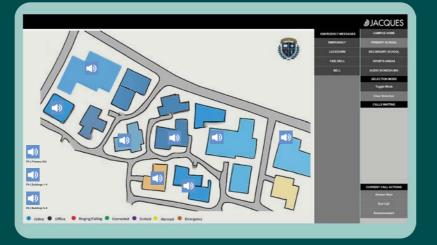
#### **Aesthetics customisation**

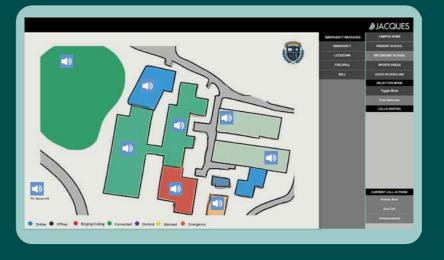
The GUI aesthetic elements can be edited to achieve the visual requirements of a sit e or pr oject. This includes:

- Logo
- Header & navigation panel button & text colours
- Labels, text colours and font

## Create customised map pages









# **Vivi Integration**

A new level for emergency messaging in schools with seamless Vivi screen graphics and audio alerts for emergency situations.

Vivi offers wireless screen mirroring and digital signage devices designed for education. The integration allows Jacques school system to trigger Vivi emergency screen graphics when an emergency button or JAS Qbutton is alarmed.

### Watch the Vivi integration video



vimeo.com/844072920



Build your school intercom & Public Address system following these simple steps



#### **SCHOOL SYSTEM**

Begin with an Ethernet Network configured for QoS

1

#### **CONTROLLER PACKAGE**

Choose a controller package which can manage your system size and offer the functionality you require

SILVER | GOLD | GOLD VIRTUAL | PLATINUM

2

#### **MASTER STATION**

Choose your master station. They can make and receive intercom calls and make public address announcements

IPM-4360 | PCC-650MX



#### **PA FUNCTIONALITY**

Choose your Public Address components to achieve the required functionality

IP SPEAKERS | UAI-4000 | AMPLIFIERS



#### **INTERCOM TERMINALS**

Choose your intercom terminals. They call pre-defined master stations and can initiate relays within your system

VSL-45xx | HPU-4Dxx



#### **ACCESSORIES**

Choose your accessories. They provide additional functionality to your system

ADAM RELAY MODULE | IP CLOCKS | BACKGROUND MUSIC STREAMING UNIT



#### **OPTIONAL EXTRAS**

Customisation of Graphical User Interfaces (GUI) and/or integration with CCTV & access control systems

Controller packages	SILVER 25 endpoint licences		GOLD 100 endpoint licences		PLATINUM 100 endpoint licences	
			HARDWARE	VIRTUAL	HARDWARE	VIRTUAL
IP PUBLIC ADDRESS SYSTEM FUNCTIONALITY						
Controller size	Medium	Virtual	Large	Virtual	Large	Virtual
Dynamic grouping of PA zones+	✓	✓	✓	✓	✓	✓
Unlimited* number of PA zones, or the number of groups within a zone	✓	✓	✓	✓	✓	✓
Time scheduled bell & pre-recorded announcements to all/selected PA zones	✓	✓	✓	✓	✓	✓
Bell scheduling interface	✓	✓	✓	✓	✓	✓
Run multiple bell/announcement schedules per day (ideal for multi campus schools)	✓	✓	✓	✓	✓	✓
Pre-recorded, time scheduled announcement scheduling interface (include warning, emergency or evacuation alarms)	✓	✓	✓	✓	✓	✓
Create detailed announcement files	✓	✓	✓	✓	✓	✓
Broadcast live PA announcements to one, selected or all PA zones+	✓	✓	✓	✓	✓	✓
Create and store virtually an unlimited number of audio files (pre-recorded announcements/tones) for use within the system. Number only limited by system server & network	✓	✓	✓	✓	<b>√</b>	✓
Number of included sound and tone files included (audio/music files)	4	4	10	10	10	10
Background music streaming	<b>4</b> ✓	<b>4</b> ✓	10 ✓	10 ✓	√ ×	√ ·
Number of channels for background music	1	*	2	*	2	*
Number of chamics for background made	1	<b>本</b>	2	本		Α
INTERCOM & HPU SYSTEM FUNCTIONALITY						
System can include video & audio intercom & HPU devices+			✓	✓	✓	✓
Intercom call functions+      Answer     Forward     Monitor     End     Hold			✓	✓	✓	✓
Intercom activated relays: door, gate, light and/or strobe+			✓	✓	✓	✓
Evacuation/Emergency panels available which broadcast evac/warning alarms at the push of a button+	✓	✓	✓	✓	✓	✓
Audio threshold alarm monitoring of classroom noise. If a predefined noise limit is reached an automatic call to reception will be triggered			✓	✓	✓	✓
	51789	52536	51883	52192	52643	52644
OPTIONAL EXTRAS						
SIP integration- make and answer intercom calls via SIP digital phone system			✓	✓	✓	✓
Mass Notification System (MNS) Software Application	✓	✓	✓	✓	✓	✓
GUI customisation	✓	✓	✓	✓	✓	✓
HLI integration- to CCTV & access control systems			✓	✓	✓	✓
Additional channels for background music streaming			*	*	*	*
VIVI Integration	✓	✓	✓	✓	✓	✓

Master stations

Intercom terminals



#### **PC MASTER STATION**

#### PCC-4650WIN | 52257, PCC-4650WTS | 52258

- Complete intercom call handling functions
- Complete Public Address functionality
- Make live and pre-recorded announcements
- Broadcast tones, bells & alarms
- Visual display of PA zones
- (unlimited number of zones depending on controller)
- Selection and playback of recorded announcements
- Diagnostics and reporting
- Alarm notifications including device state
- Touchscreen compatible interface
- Map, grid and database views
- Upload multiple site maps to suit application/site
- Customisable layout/functions



#### IPM-4360 | 52256

- 4th generation IP master station for intercom call and
- Powered via IEEE 802.3af PoE or external power
- Supports up to 1 Gb/s Ethernet network connection
- · Built in digital microphone
- Large LCD display with backlit display for reliable viewing in dark conditions
- 4 USB 2.0 ports for Jacques compatible accessories
- · Options for gooseneck, handset and headset

#### **INTERCOM TERMINAL**

#### VSL-461Q | 52247

- IP audio intercom terminal for in classrooms or building
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Single call button
- Water and vandal resistant

#### **HELP POINT UNIT**

#### HPU-4D1FS | 52251

- 4th generation IP help point unit
- Powered via IEEE 802.3af PoE
- Edge processing for intelligent data transmission
- Options with & without camera
- Bi-directional audio transmission with echo cancellation capabilities
- Simple one & two button operation for emergency and information calling (refer to Product variations table)
- Automated self-test feature allows for the testing of the push button mechanism remotely (refer to Product variations table)
- One-touch operation with hands-free communication, once call is established
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- · Vandal and water resistant piezo electric call button
- · Highly visible, solid, vandal resistant unit, designed



PA functionality

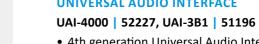
**Accessories** 



#### **IP SMART CEILING SPEAKER**

#### SCS-150+ | 52011

- IP PoE internal ceiling speaker
- Dual cone flush mount option
- Internal microphone for automated speaker output fault
- Two configurable relays
- Tamper detection and device removal notification



#### **UNIVERSAL AUDIO INTERFACE**

- 4th generation Universal Audio Interface between Jacques
- Public Address interface
- One used per zone within school PA system

IP system and analogue audio devices

- · Provides balanced line output for connection to PA amplifiers
- 3rd party audio input



#### **IP SMART SURFACE SPEAKER**

#### SCS-4100 | 52296

- 4th generation IP PoE smart surface speaker
- Powered via IEEE 802.3af PoE
- Edge processing for intelligent data transmission
- Bi-directional audio transmission with echo cancellation
- Internal microphone for automated speaker output fault detection
- Configurable relay contact
- Tamper detection and device removal notification
- Ideal for classrooms, hallways, boardrooms or office environments
- Water and vandal resistant



#### **EMERGENCY & EVACUATION PANEL**

#### 2 or 4 BUTTON OPTION

- Evacuation and lockdown push buttons
- Stainless steel vandal resistant panel
- · Custom etching available
- Configurable buttons to trigger tones & alarms



#### **IP POE NETWORK CLOCK**

#### CLOCK241

- IP PoE internal wall clock
- Standard PoE powered (IEEE 802.3af) Supports up to 10
- SNTP servers for redundancy DHCP or static IP addressing
- Support for any time zone
- Automatic Daylight Saving Time adjustment Polycarbonate

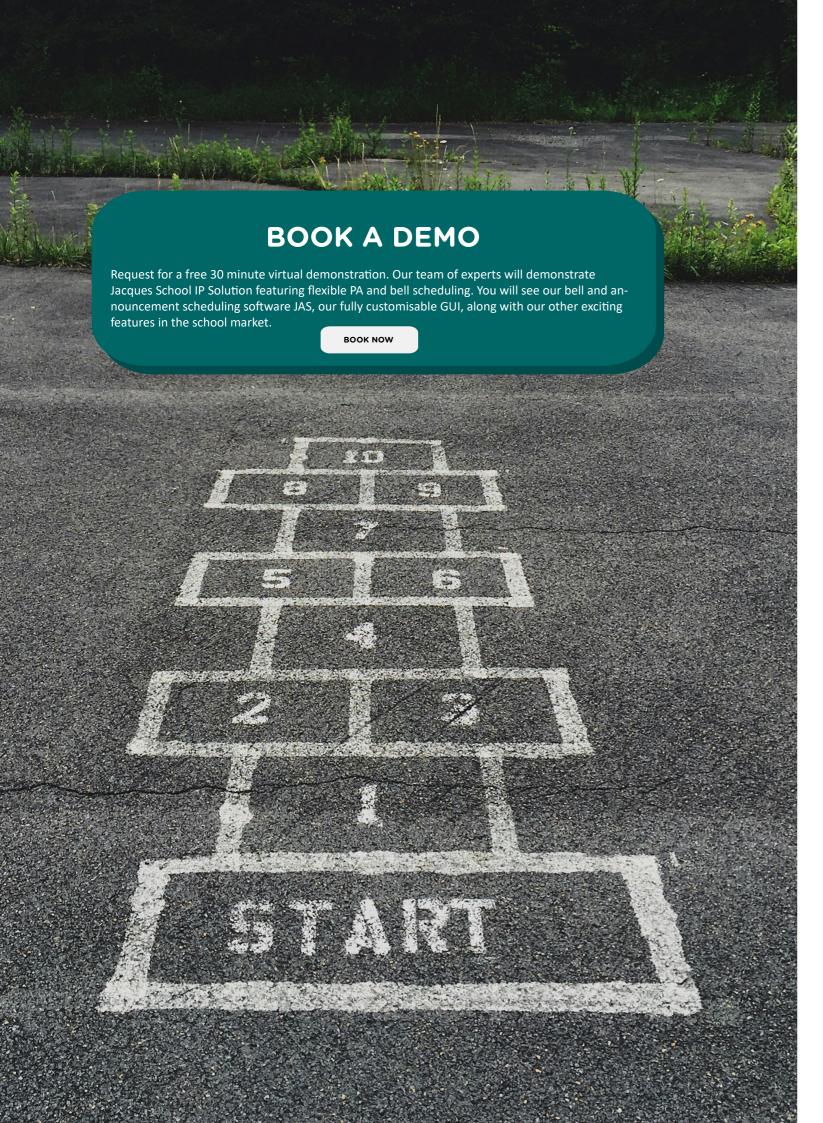
Additional products available, click here to visit our School System products page











# **IP 650 System specifications**

#### SYSTEM CAPACITY

Intercom stations	Unlimited*
Master stations	Unlimited*
Stored announcements	Unlimited*
Call queue size	Unlimited*
Groups	Unlimited*
Simultaneous conversations	Unlimited*
Audio communication between any endpoint	yes +
Auxiliary channels	16 (typically up to 4 live captured sources)

#### **AUDIO CHARACTERISTICS**

Frequency response	200Hz - 7 kHz ± 3 dB	
Transmission format	Real-time transport protocol (RTP) streaming	
Digital audio format - voice	A-law compressed PCM 16 kHz sampling rate	
Audio streaming bandwidth	128 kb/s one way, 256 kh/s full duplex	
Acoustic echo cancellation	Yes	

#### **VIDEO CHARACTERISTICS**

Multi-standard video codec	MPEG-4 part 2, siple profile; H.264 baseline profile; H.263 part 3		
Video streaming bandwidth	500 kb/s - 6 Mb/s		

#### **CALL HANDLING**

Call topologies	Intercom/hierarchical/peer/public address/zoned	
Call priorities	256 priority levels	
Call features (basic)	Auto-answer, hold, forward, diversion, directory, group call, caller-ID, bridged call appearance	
Call features (specialised)	Isolate nuisance callers, covert monitor, dynamic group call, stored announcements, master call, remote mode, priority queuing, selective answer of call waiting	

#### **NETWORK**

Addressing	TCP/IP IPV4, static or dynamic (DHCP)
Interface media	IEEE 802.3 10/100 Mb/s Ethernet
Standards	IEEE802.1P LAN Layer 2 prioritisation
	IEEE802.1Q Virtual LAN
	RTP - Real-Time Transport Protocol (RFC3550/3551)
	TOS - IPV4 Type of Service (RFC791)
	DTMF - RTP payload for DTMF digits (RFC2833)
	Multicast - IP Multicasting (RFC1112)
	Diffserv - Differentiated Services (RFC2474/2475)
	NTP - Network Time Protocol (RFC1305)
	IGMPv2 - Internet Group Management Protocol v2 (RFC2236)
	DHCP - Dynamic Host Configuration Protocol (RFC1531)

#### CABLING

Power input/ethernet	4 pair UTP CAT-5/5e/6, multi-strand, 24 AWG -100m (328 ft) max.
rowei iliput/etilelilet	4 pair 017 CA1-3/36/0, iliuiti-strailu, 24 AVVO -100111 (320 It) iliax.

<sup>\*</sup>Dependent on server configuration and network bandwidth

<sup>+</sup>Dependent on system configuration and permissions granted  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

# PROJECT REFERENCES.

#### Queensland

- Ambrose Treacy College
- Anglican Church Grammar School
- Bohlevale State School
- Brigidine College
- Bundaberg Christian College
- Catherine McAuley College Mackay
- Chanel College Gladstone
- Dalby Agricultural College
- Emmanuel Catholic Primary School
- Emmaus College Rockhampton
- Fraser Coast Anglican College
- Good Shepherd Catholic Primary School
- Goulbourne College
- Griffth State High School
   (Murrumbridgee Regional High School)
- Hambleton State School
- Hillbrook Anglican College
- Holy Spirit College Mackay
- Immanuel College
- Immanuel Lutheran College
- Inner City North State School
- Lourdes Hill College
- MacKillop Catholic Primary School, Mackay
- Marist College Emerald
- Mary MacKillop Catholic College
- Marymount College
- McAuley College
- Mt St Michael's College
- New Farm State School
- Our Lady of the Sacred Heart
- Our Lady's Catholic Primary School Longreach

- Sacred Heart Catholic Primary School, Yeppoon
- Shalom Christian College
- Shalom College Bundaberg
- Somerset College
- Springfield College
- St Andrews Lutheran College
- St Andrews School
- St Anne's Sarina
- St Anthony's Catholic Primary School North Rockhampton
- St Benedict's Catholic Primary School, Yeppoon
- St Brendan's Boarding
- St Brendan's College
- St Brigid's Catholic Primary School, Emerald
- St Francis Catholic Primary School, Tannum Sands
- St Francis Xavier Catholic Primary School Mackay
- St John the Baptist Catholic School, Gladstone
- St John's Catholic Primary School, Walkerston
- St Joseph's Biloela Catholic Primary School,
- St Joseph's Catholic Primary School, Barcaldine
- St Joseph's Catholic Primary School, Blackall
- St Joseph's Catholic Primary School, North Mackay
- St Joseph's Catholic School, Wandal
- St Joseph's Clermont Catholic Primary School
- St Joseph's School Murgon
- St Joseph's School Bundaberg
- St Joseph's Park Avenue Catholic Primary School Rockhampton
- St Mary's Catholic Primary School South Mackay

- St Mary's Catholic Primary School, Bundaberg
- St Mary's Catholic Primary School Rockhampton
- St Patrick's Catholic Primary School Emerald
- St Patrick's College Mackay
- St Patrick's Primary School Bundaberg
- St Paul's Catholic Primary School, Gracemere
- St Therese's Catholic Primary School, Monto
- Star of the Sea Catholic Primary School Gladstone
- · Stuartholme School
- Toowoomba Grammar School
- Wilsonton Senior High School

#### Victoria

- · Aitken College
- Claremont College
- Jacana School for Autism
- Mackillop Catholic College
- MacKillop College Werribee
- Melbourne Grammar School
- Oxley Christian College
- · Saint Ignatius College Geelong
- St Joseph's College Geelong
- Western Port Secondary College

### Western Australia

- Alkimos Primary School
- · Aranmore Catholic College
- Bunbury Cathedral Grammar School
- Byford School
- · Hedlands Senior High School
- Mazenod College
- St Emilies Catholic Primary School

· Willeton Senior High School

#### **New South Wales**

- Amity College
- Eileen O'Connor Catholic College
- · Malek Fahd Islamic School
- Merrylands High School
- · Mulyan Public School
- Pal Buddhist School
- Robert Townson High School
- St Columba Anglican School
- St Finbarrs School
- St Peter's Anglican School
- · Unity Grammar School
- Yandelora School

### South Australia

- Cedar College
- Garden College
- Scotch College

#### Tasmania

- Claremont College
- · University of Tasmania

## **Northern Territory**

 Our Lady of the Scared Heart Thamarrurr School, Wadeye

