JACQUES
Future Proof Communications

IP Emergency Help Point Unit Communication System

Whitepaper and Project References

THE PROBLEM

Public safety across cities is an important priority to councils and state governments. Convenient, reliable access to emergency communications allows for the access to help and assistance should it be required in the case of an emergency. Similarly, emergency mass communication systems are required by security and infrastructure operators in the case of an emergency, threat or danger that may impact on the safety of residents and visitors as well as the public spaces, infrastructure and transport networks they occupy.

THE SOLUTION

The Jacques IP Emergency Communication System provides councils, state governments, communities and organisations with a security solution that offers reliable and integrated help, emergency assistance and information dissemination. The emergency communications system features easy-to-operate, robust, highly visible help point units which offers callers connection to a central control location to provide help or assistance. The system is inbuilt with detailed reporting and system monitoring function ensuring ultimate reliability demanded in emergency situations.

EMERGENCY COMMUNICATION POINTS

Jacques' communication system can ensure the public are confident and assured knowing there is safety and security nearby should an emergency or threat occurs. With an eye-catching, stylish design, Jacques Help Point Units (HPU's) located in strategic, visible and accessible locations offer an identifiable calling station to users, ensuring easy access to help and assistance when required.

Jacques range of Help Point Units (HPUs) are user-friendly, reliable, robust IP call points, specifically designed for environments where public safety is important. The HPUs offer one or two button calling with connection to central control once the call button is pressed. Available with emergency or dual emergency and information buttons, the units are ideally suited to applications where assistance may be required in addition to emergency calling. On board configurable relays can be utilised to control lighting, duress alarms, CCTV or gate controls common within public safety and transport environments.

Additional security is provided by threshold monitoring whereby a call is automatically connected to a master station or an alarm notification is activated should a predetermined ambient noise level be exceeded at any configured help point unit. This provides central control with additional security functionality especially for public safety environments such as traffic tunnels monitoring noise and the potential of a traffic accident, to a train station at night monitoring passenger behaviour. Triggers identified by threshold alarm monitoring can activate CCTV pre-sets ensuring complete audio and video viewing and recording of the situation.

Furthermore, acoustic echo cancellation (AEC) functioning when devices are operating in full duplex mode significantly reduces unwanted interference from acoustic reflections and feedback. This ensures security personnel can still hear someone speaking into an intercom terminal or help point unit even if loud background noise from air traffic, trains or a bustling crowd is present.

CENTRAL CONTROL MONITORING

Central to communications control is the Jacques master station (PC or audio), both specifically designed for continued, high volume usage, ensuring hassle-free system operation. Calls can be transferred between master stations while auto remote configuration ensures unattended master stations will transfer calls to other master stations – or be directed to a SIP enabled phone system, ensuring real-time user flexibility.

The system provides specialised call handling to and from multiple control rooms via hierarchical and/or peer to peer predefined structures. This provides users with the flexibility of priority queuing and selective answer of call waiting and call forwarding capabilities ultimately ensuring emergency calls are actioned are never lost and with urgency.

Jacques range of Help Point Units (HPUs) are user-friendly, reliable, robust IP call points, designed for emergency calling

RECORDING & REPORTING

Important to the management of public spaces and transport network environments is call recording. The Jacques system interfaces call audio to third party recording devices including digital or SIP recording devices whereby an output to record conversations is available. Data relating to calls including time, date and duration is defined and made available in call reports for management should the need to recall a conversation arise.

Detailed system reporting aids in the successful management of any environment, especially those running multiple, detailed and critical systems. Jacques systems provide complete event logging of all call activity and fault conditions for incident reporting or maintenance in alignment with public safety and emergency procedure requirements. The results from intercom self-acoustic testing of the speaker and microphone is recorded and alerts maintenance that there is an audio issue impacting on the audio quality

of the call to or from the intercom device. All Jacques intercom terminals have inbuilt tamper detection, integrity and diagnostic testing whereby unsuccessful tests to any device will activate a system alarm and record the event in a slaved log file. This ensures all intercom terminals within a system can be monitored for any vandalism allowing for timely maintenance ensuring real-time communication can be maintained across the system.

To further enhance reliability of the call button, Jacques intercom terminals can be equipped with unit self-test buttons. These mechanical call buttons allow for the testing of the push button mechanism, acoustics and data communications remotely whereby diagnostic tests are logged and recorded. Any tests reporting a test fail shall trigger an alarm within the system ultimately ensuring adequate public safety duty-of-care while also alerting staff to any maintenance issues.

INTEGRATION

Integration of Jacques communication systems with many security, building and video surveillance management systems provides public safety management with complete facility control and ultimate security. The system easily integrates via high level interface (HLI) with most commercially available network equipment and infrastructure. It is fully supported by leading CCTV, access control, telephony and building/security management systems ensuring a totally integrated and secure approach to prison management.

Audio and video integration allows for public safety, transport & infrastructure monitors to listen and see, ensuring a 360 degree perspective on a situation. In high level CCTV integration applications a 3rd party camera feed is automatically initiated and video is displayed when a call, event or alarm is triggered at a Jacques intercom terminal.

RELIABILITY

System reliability is vitally important in the business of public, site and organisational safety. As such Jacques offers ultimate system reliability via our high availability packages. Sites can operate a redundant controller set up with automatic controller switch-over or they can operate our distributed server framework whereby a secondary controller may take control of their sub networks should connectivity to the primary controller be lost. High availability configuration eliminates single points of system failure ensuring system robustness and the continued reliability demanded in corrective facilities environments.

LONGEVITY & SCALABILITY

The expandability and flexibility of the Jacques IP Communication System ensures exceptional longevity. Using standard Ethernet networks for operation ensures seamless integration with structured cabling systems or existing data networks, ultimately reducing cabling and installation costs.Jacques help point units are constructed from stainless steel and are often surface mounted with security screws, ensuring robustness and device longevity while having the ability to withstand high volume usage. Given the robustness of Jacques IP communication system devices, their life cycle far extends the standard, ensuring guaranteed system endurance.

Jacques is proud to have completed many national and international emergency call point projects.

PROJECT REFERENCES

AIRPORTS
Christchurch Airport Car Park (NS)
Melbourne Airport (Passenger & Airside) (VIC)
Perth Airport (WA)

PORTS
Auckland Ports Authority (NZ)
Broom Port Authority (WA)
Fremantle Ports (WA)
Gladstone Port (QLD)
Port of Melbourne (VIC
Tasmania Ports (TAS)

RAIL & BUS
NSW Rail (NSW)
Perth Rail (WA)

ROADS, BRIDGES & TUNNELS
Brisbane Busway Network (QLD)
Goodwill Bridge (AU)
Kurilpa Bridge Brisbane (AU)
Wellington Airport Tunnel (NZ)

PUBLIC SAFETY
Brisbane City Council Community Gardens (AU)
City Safe, Queens Street Mall (QLD)
Riverwalk (AU)
Roma Street Parklands (AU)
Southbank Parklands (AU)
Taronga Zoo (AU)
Frankston Aquatic Center (AU)

COMMERCIAL
East Ledang (MYS)
Kings Park (AU)
Mumbai Carpark (IN)

MALLS
Express Mall, Chennai (IN)
Robina Town Centre (QLD)
Dubai Mall (UAE)
Kawana Shopping Centre (QLD)

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