

mini **iVENCs**

IP enabled long-line PA and Voice Alarm control

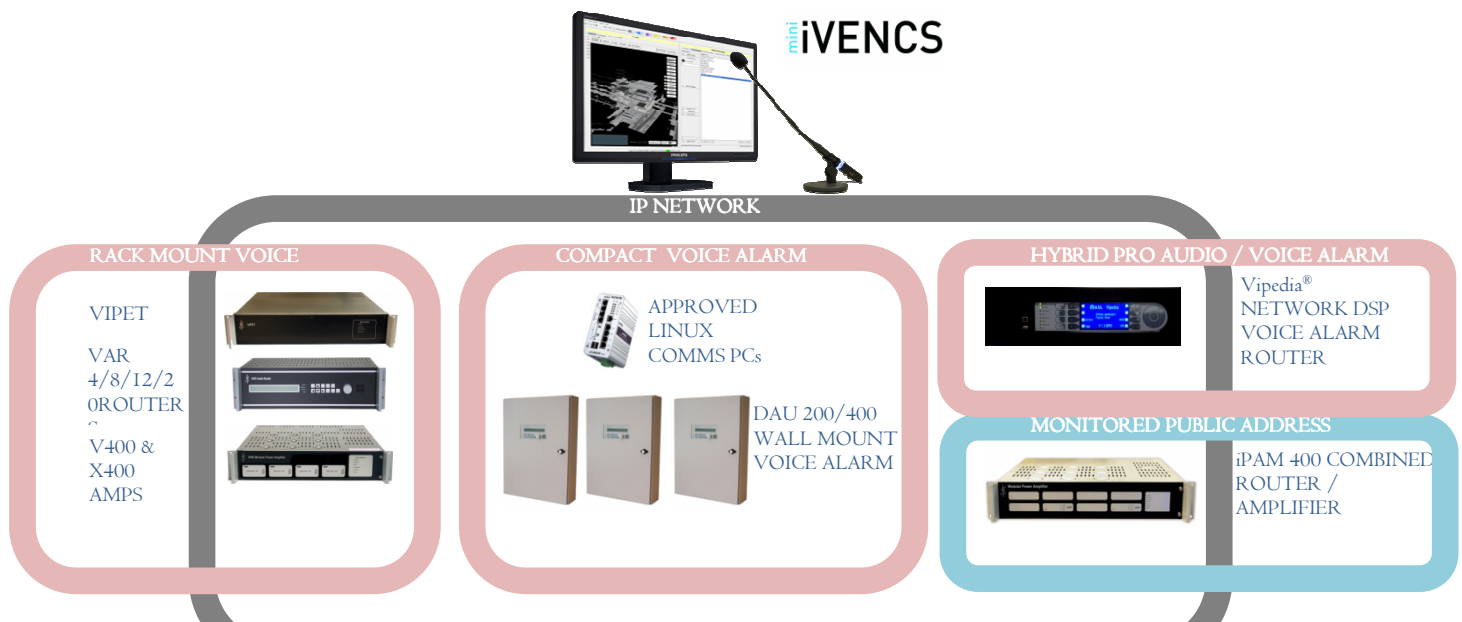


Announcing a new dimension in control

mini-iVENCs® is the name for ASL's networked Public Address and Voice Alarm control and monitoring platform. The product is based on the open, scalable and highly robust VIPA software platform which has been tried and tested on many international Long Line Public Address and Intellevac® voice alarm projects, ranging from international air and rail hubs to metropolitan light rail schemes, shopping centres and stadia venues.

Full control and monitoring is provided for any ASL products with VIPA based field equipment such as iPAM monitored PA systems and VIPET-enabled VAR/V400/X400 Intellevac® systems. Ruggedized and inexpensive industrial communications computers in the field allow mini-iVENCs® to communicate with ASL's wall-mounted Intellevac® products directly the manufacturers existing PA equipment.

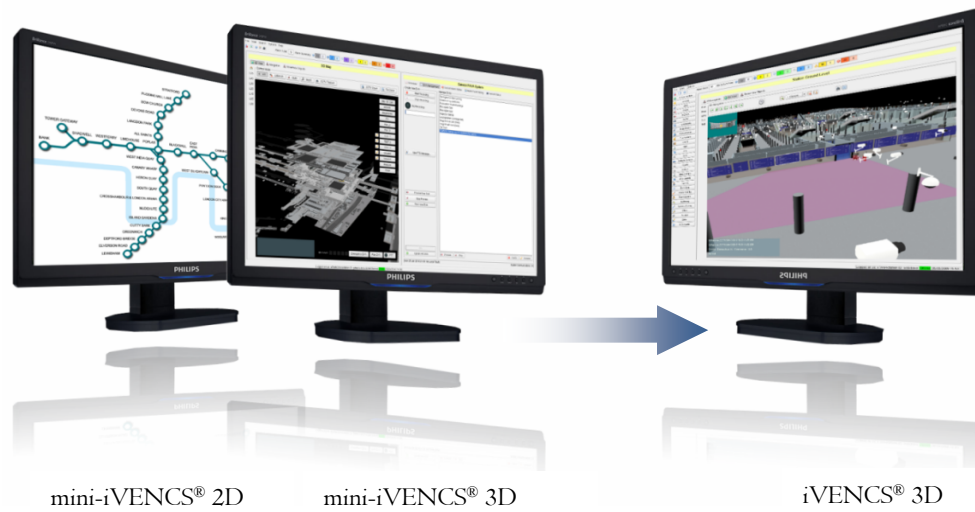
- Available on Linux and Windows® platform
- Real time display of announcement zone status
- User configurable announcement zones and soft grouping buttons
- Feedback for speech volume, busy, alert, evacuate and higher priority inputs
- Pro audio announcement mic and Operator Listen-in function
- Flexible and robust PMC (Portable Media Carrier) VoIP protocol supports synchronised compressed and uncompressed audio
- Background music routing from external source or local MP3 playlists
- Priority graded alerts with network-wide fault-tree drill down for monitored PA equipment
- 3D equipment editor for placement of speakers, amps, routers and other rack equipment
- Management, recording, scheduling and distribution of Digital Voice Announcements
- Optional Text-to-Speech engine with support for 25 languages
- Compatible with ASL's Night volume control and Dynamic Ambient Noise Sensor® functions



A combination of rack mount, compact and pro-audio can be used on local Intellevac® copper networks at each location

A sound platform for growth

A simple upgrade path allows expansion of the system to incorporate the control and monitoring of other assets such as Passenger Information Systems (PIS), CCTV, Building Management Systems (BMS), Access Control, Fire panels & detectors, Help Points, Intercoms and Data switches.



A simple upgrade path from initial management of PA/VA to a total control room solution covering all communications, security and life-safety subsystems

Scalable and available

mini-iVENCs® uses a distributed architecture based on Jabber®/ XMPP, a unique next generation messaging and presence protocol which achieves high levels of availability by using a mesh-redundancy and diverse routing model. This is particularly suited to applications such as Long Line PA where a large number of locations must be controlled across limited network bandwidth.

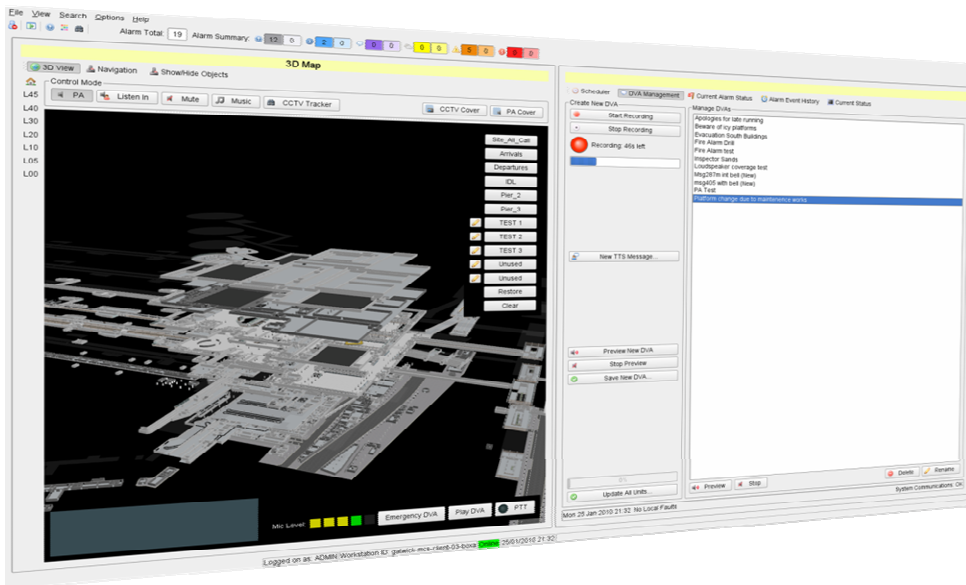
Software is provided on a perpetual license basis with no ongoing annual license fee. Licenses are charged for each live operator position and not for back-up servers and workstations; meaning that systems can be made redundant for only the cost of additional hardware. mini-iVENCs® is cross-platform and based on COTS hardware configurations suited to a range of applications, depending on the requirement for availability. Single or multiple screens can be configured according to space requirements in the control room or at remote locations with touch screen wall and desk-mounted Panel PC options.

Installation and configuration of mini-iVENCs® software is typically carried out according to an approved hardware configuration and set of testing procedures. For larger projects the system can be acceptance tested at the same time as the PA / VA system itself. Installers and systems integrators can enrol in the [ASL Academy](http://www.asl-control.co.uk) for training courses to develop skills in this area. For further details visit www.asl-control.co.uk.

One screen, complete control



“a genuine innovation with 3D graphics allowing site users not only intuitive access to devices they need to control, but also detailed levels of asset management, tracking and fault finding”



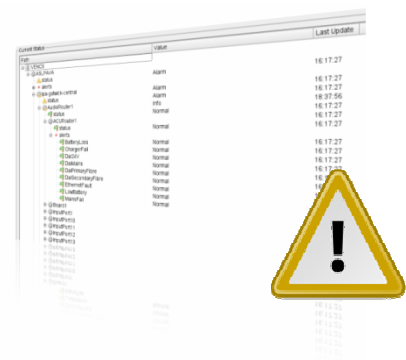
Judges' comments, AV Awards 2009

The mini-iVENCs® user interface is powered by the same award winning software engine first developed in the full iVENCs® site management product. Models are stored in the open-source OGRE “mesh” format allowing import from off-the-shelf CAD packages such as 3ds MAX®, or the free to download Google SketchUp®. Creation of a 2D or 3D model from standard CAD files of a station, airport, office or stadium is straightforward. Once imported into iVENCs®, a model can be populated and speaker coverage laid out using mini iVENCs' built in 3D Equipment editor mode. The ASL Academy offers training courses for systems integrators and installation partners wishing to build and populate models. SketchUp video tutorials can be downloaded from the website.



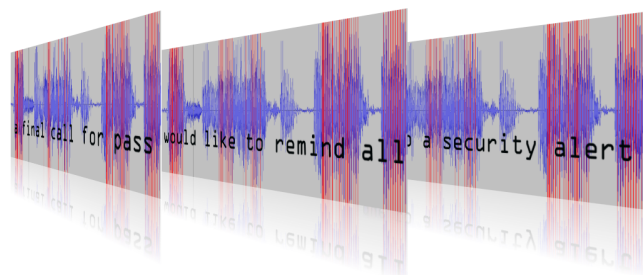
Powerful fault reporting

mini-iVENCs® workstations provide detailed fault-tree diagnostics for all of ASL's VIPA software enabled systems. Fault reporting is available for third party equipment via ASL's BMB01 I/O expansion units using analogue and digital signals. This provides SCADA type functionality within the LLPA system which includes incoming connection monitoring.



Text-to-speech

mini-iVENCs® supports an optional text-to-speech engine allowing male and female speech broadcasts from PIS generated messages or text typed and saved by operators. The speech engine also allows the correction of words which are routinely mispronounced with the use of a phonetic mapping table.



Supported Text-to-speech voices

American Spanish	English x 4	
Arabic (SA) x 2	English (US) x 5	Polish
Brazilian Portugese	Finish	Portugese
Canadian French	French x 5	Russian
Czech	German x3	Spanish x2
Danish	Greek	Swedish x 3
Dutch (Belgian) x 2	Italian x 2	Turkish
Dutch (Netherlands)	Norwegian x 2	

PIS integration

mini-iVENCs® can automatically generate PA announcements and drive displays devices. Additional interfaces can be supported on the provision of a sample system interface protocol or data for evaluation.

The passenger information system interface initiates the broadcast of 'next train / flight' and similar announcements to relevant PA zones, while time server synchronised messages are shown on associated displays. PA and display messages are formed from a library of recorded DVA fragments or Text-to-speech phrases, and are permanently stored and password protected at central and distributed locations. Where a requirement exists for multi-lingual support, each message will be recorded and stored in each of the languages, or multiple TTS languages can be used.

Flight	Gate	Remarks
FR3916	42	Final Call
FR2372	41	Final Call
FR3002	54	Final Call
FR232	53	Final Call
FR901	58	Final Call
FR434	45	Go To Gate
FR034	55	Go To Gate
FR2314	48	Go To Gate
FR203	44	Go To Gate
FR584	56	Go To Gate

Network agnostic

ASL VIPA systems use standard IPv4 UDP multicast with IGMPv3 which is compatible with all modern networks including SDH, ADSL over legacy copper, leased lines, private and public fibre networks, and any other multicast capable Ethernet implementation. Different network equipment can be used at different points in the network.

ASL can supply a test tool that can be used to make sure that your network equipment is compatible with multicast.



VIPA® software is optimised for challenging networks

Bandwidth efficient

Live broadcasts made to several locations require no more bandwidth than for an announcement to a single station. For information on how to configure your network visit the [ASL KnowledgeBase](http://www.asl-control.co.uk) at www.asl-control.co.uk

mini-iVENCs® offers flexible audio compression according to the availability of bandwidth. Dark fibre networks usually allow uncompressed audio while with ADSL networks, or where bandwidth contention dictates, audio is compressed using Speex®; an open and free codec which is optimised for speech.



The Speex® compression algorithm used by ASL requires a minimum of 64kbps per live audio channel. Audio is normally broadcast twice to improve the network integrity, so a practical minimum should be taken as being 128kbps. Note that for the case of poor network integrity due to traction current surges causing data loss on legacy copper network hardware, ASL can offer a number of retransmission and buffering techniques, which increase network integrity but with an overhead bandwidth requirement.

Specifications

Usage Case	Redundancy	Operator screens	Operator workstations	Servers	Notes
MCS01 Single instance 2D system with PA / VA monitoring	No	15" or 17" Projected capacitive touchscreen	Desk or Wall mount Panel PC Pentium / Celeron M 1.8 / 1.5GHz with Pro-audio soundcard		Suitable for use with gloved fingers. IP65 NEMA compliant
MCS02 Single instance 2D or 3D system with PA/VA monitoring	No	19" LCD (2D) 24" LCD or, Dual 19" LCD	I Intel® Core™ i7 Processor 950 (3.06GHz, 8MB cache.) Includes mouse, keyboard and integrated 'Listen in' speaker	0	Multiple role based logon support OpenGL graphics support required for 3D
MCS03 Multiple mini-iVENCs® with PA/VA monitoring	Workstation only	24" LCD or, Dual 19" LCD	I – 20 Intel® Core™ i7 Processor 950 (3.06GHz, 8MB cache.) Includes mouse, keyboard and integrated 'Listen in' speaker	0	Multiple role based logon support and global DVA message store with real time synchronisation of scheduling and zone status.
MCS04 Dual failover 3D mini-iVENCs® with PA/VA monitoring	Workstation and server	24" LCD or, Dual 19" LCD	I – 20 per server Intel® Core™ i7 Processor 950 (3.06GHz, 8MB cache.) Includes mouse, keyboard and integrated 'Listen in' speaker	ⁿ servers as required Intel® Core 2 Duo Processor E8400 (3.00GHz, 1333MHz, 6MB cache)	No additional software license fee for multiple servers at each location
Full iVENCs®	Distributed architecture with server clustering	24" LCD or, Quad 19" LCD	I-20 per server Intel® Core™ i7 Processor 950 (3.06GHz, 8MB cache.) Includes mouse, keyboard and 'Listen in' speaker	ⁿ servers as required Intel® Core 2 Duo Processor E8400 (3.00GHz, 1333MHz, 6MB cache)	No additional software license fee for multiple servers at each location