

JACQUES Multi-zone Paging Console

Description

The JACQUES IPM-650PA is an operator console for a Public Address system. It is used to make announcements via one or more groups of public address speakers. It can be used in either the JACQUES 550 Series Networked Intercom System or the JACQUES 650 Series VoIP Intercom System.



Features

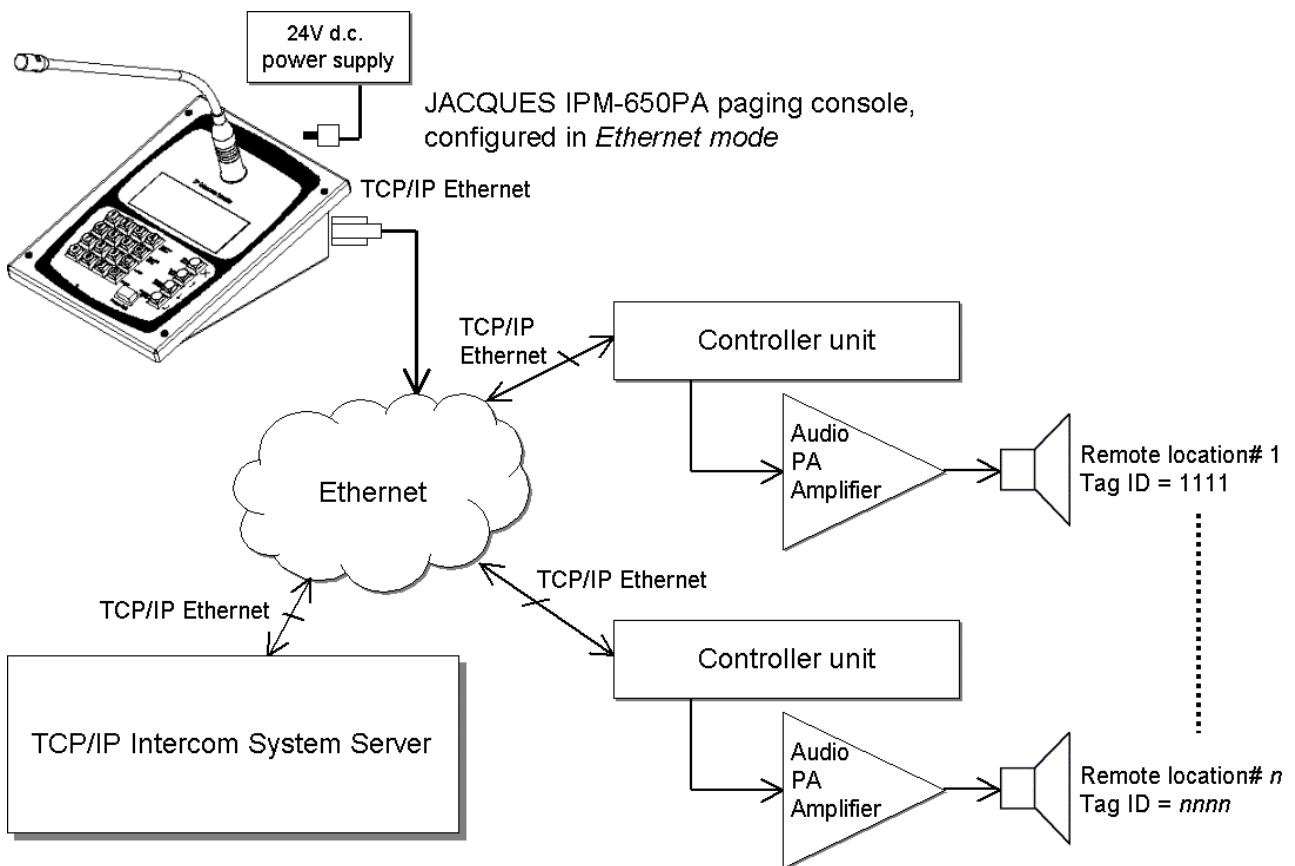
- Professional and attractive heavy-duty front panel
- Simple to install and use
- Large 2 line by 16-character LCD display
- Crystal-clear voice communications
- Balanced audio output of mixed speaker/microphone audio for recording
- Retrofit capability – seamlessly integrates into an existing 10/100 Ethernet network
- Powered via PoE (*in Ethernet Mode*) or plug pack
- Easy expansion for small or large systems
- Reliable, long life keypad

Applications

- Shopping centres / supermarkets
- Rail and Bus stations
- Secure Facilities
- Auditoriums
- Schools and universities

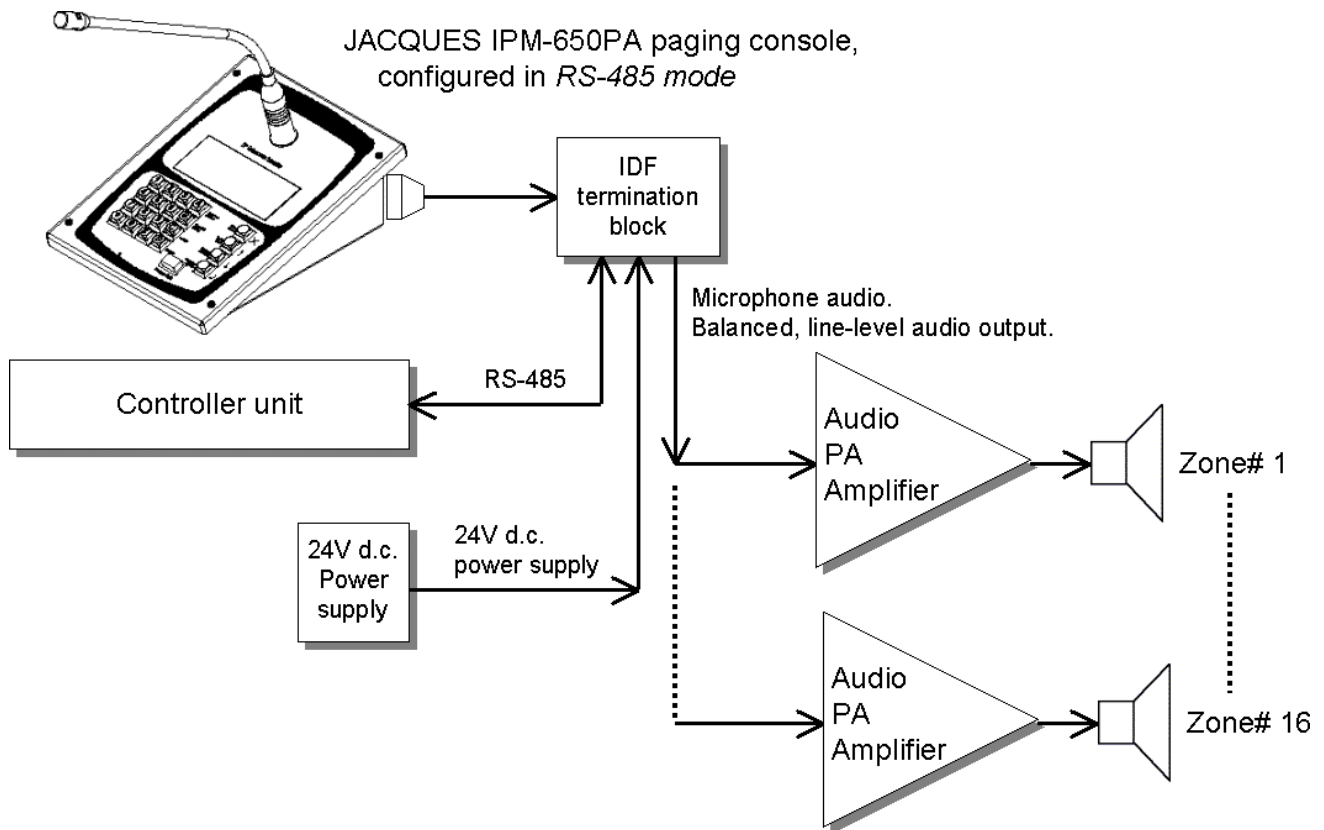
Block Diagram – Ethernet Mode

In the diagram below the IPM-650PA is used as a central Public Address station. Announcements can be made to one, a subset, or all PA zones throughout a TCP/IP network. The Ethernet Mode of the Jacques IPM-650PA operates on an Ethernet network using TCP/IP protocols to communicate with the System Server. All communication for both voice and data directly connect into an existing LAN/WAN via a single Ethernet RJ-45 connector.



Block Diagram – RS-485 Mode

In the following diagram the Jacques IPM-650PA is configured in RS-485 mode. The IPM-650PA can call up to 16 PA zones within a localised area. Announcements can be made to any combination of these 16 zones selected by the operator. Selections can also be saved in 4 presets to be recalled instantly. The connections are made via an IDF or similar termination block. It is used to split the IPM-650PA output into microphone audio out, power supply and RS-485.



Specifications

General requirements

Power Source	Nominal 24V d.c. (16 to 32) V d.c.
Maximum Current	300 mA
Dimensions (W x H x D)	190 x 94 x 255 mm
Weight	1.9 kg (including microphone)

Audio Characteristics

Output Frequency Response	200 Hz – 7 kHz +/- 3 dB
Output Distortions	< 1% (Intercom Master Mode) < 0.4 % (Paging Console Mode)
Transmission Format	Real-time Transport Protocol (RTP) streaming via Ethernet
Digital audio format – Voice	A-law compressed PCM 16 kHz sampling rate
Digital audio format – Music (playback)	MPEG Layer 3 (MP3), typical encoding:128kb/s stereo 44.1 kHz
Microphone	External XLR gooseneck type
Audio Output (Paging Console Mode)	Balanced line level

Network Interface

Interface Media	IEEE 802.3 10BASE-T Ethernet, 10Mb/s
Quality of Service (QoS)	IEEE 802.1P Ethernet/Layer 2, Diffserv (RFC 2998) IP/Layer 3
Protocols Supported	TCP/IP: UDP, DHCP, RTP, RTCP, JCCP
Audio Streaming Bandwidth	128kb/s one way (256 kb/s for full duplex)

RS-485 Interface (Paging Console Mode)

Protocol	9600 baud, 8 data bits, no parity, 1 stop bit
Mode	Half-duplex

Cabling

	Type	Max. Length
Power Input/ Ethernet (Ethernet Mode)	4 pair screened CAT-5, multi-strand, 100 Ω	100 m
Power Input/RS-485/Analogue Audio (RS-485 Mode)	4 pair screened CAT-5, multi-strand	250 m

Environmental

Temperature	(0 – + 50) °C Operating, (-10 – + 60) °C Storage
Humidity	10% - 95% RH (non-condensing)

Compliance

EMC	EN 55022:1998 incl. Amdt1:2000 & Amdt2:2003, Class A C-tick compliant, N12046
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Ordering Information

Part Number	Description
50629	IPM-650PA Multi-zone Paging Console

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268 Montague Road, West End,
Queensland, Brisbane, Australia 4101.
Email: jacques@jacques.com.au

Phone: +61 7 3844 1103
Fax: +61 7 3844 1078
Web: <http://www.jacques.com.au>