

# DIGITAL ACOUSTICS

## IP7-SE8 Getting Started Guide



### Introduction

The IP7-SE8 IP paging endpoint enables 2-way IP audio from an analog microphone and speaker with TalkMaster™ software and/or VoIP Systems supporting industry standard SIP 2.0 (VoIP) protocols. The internal audio amplifier can drive a maximum of 8 watts to one or more speakers. Standard features include, PoE/External Power, Dual Ethernet ports and Talk/Relay/Sensor connections.

The SE8 is configured using TalkMaster Admin Console software. This *Getting Started* booklet covers basic hardware installation and software configuration of the IP7-SE8

## IP7-SE8 Installation



Please refer to the IP7-SE8 Reference Manual available on the **Software Installation CD** for additional information on installation and setup

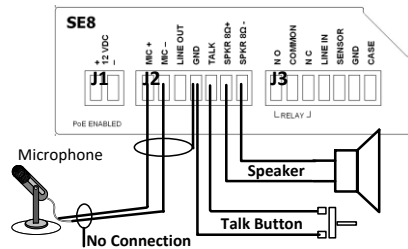
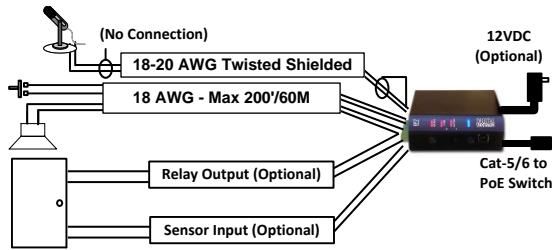
### Important Installation Guidelines

- Use two conductor 18-20 AWG **shielded**, twisted wire for microphone signals
- Use 18 AWG wire for speaker connections. Select wire gauge suited to minimize power loss for specific distribution method and wire run distances
- Avoid sharing AC power and audio signals in conduit runs
- Do not install near power distribution equipment or noise generating equipment such as stepper motors
- Conform to industry standard practices for grounding

### IP7-SE8 Installation - Call Station Installation

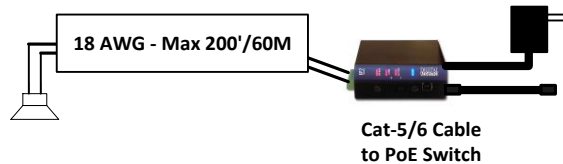
- Connect **MIC+** (J2-1) and **MIC-** (J2-2) from the IP7-SE8 to the Microphone terminals in the call station
- Connect **SPKR 8Ω+** and **SPKR 8Ω-** (J2-6 and J2-7) to the speaker terminals on the call station (polarity independent)
- Connect **TALK** (J2-5) and **GND** (J2-4) to the contacts on the call station's TALK button
- Connect **GND** (J2-4) to the shield of the shielded wire. Do not connect the shield at the door station

## IP7-SE8 Wiring (2-way Intercom/Paging mode)



## IP7-SE8 Installation (Paging Mode Only, 8 Ohm Speaker)

- Connect **SPKR 8Ω+** and **SPKR 8Ω-** (J2-6 and J2-7) to the terminals of an 8 Ohm speaker (polarity independent)



## Relay Options

- The integrated **Relay** uses **COMMON** (J3-2), along with **NO** - Normally Open (J3-1) or **NC** - Normally Closed (J3-3). Use Admin Console to configure the options

## Sensor Options

- The integrated **Sensor** can be used to monitor the status of a door by connecting **Sensor** (J3-5) and **GND** (J3-6) to a contact closure sense switch. Use Admin Console to configure the options

## Power Options

- Power over Ethernet (PoE - 802.3af compliant) - requires 15.4 Watts from Power Source Equipment (PSE)
- 12VDC at 15 watts via J1-1 and J1-2 connectors (polarity independent)
- 12VDC at 15 watts via the Aux Power 2.1mm barrel connector
- An external power supply, if detected, overrides PoE power

## Network Installation

- Connect an RJ-45 cable between the **Ethernet 10/100** connector and a network switch
- After the **Ethernet 10/100** is connected, another IP device can be connected to **Port 2 10/100** jack

## Mounting Instructions

The IP7 series is design to be mounted on standard 35mm DIN rail or surface mounted using the surface mounting plate.

- **DIN Rail Clip** – Tilt top of unit (J1, J2, J3 connectors facing up with Volume buttons facing forward) back towards the DIN Rail until the IP7 DIN clip catches the top of the rail. Press in at the bottom of the IP7 to snap into place
- **Surface Mount Plate** – Snap the surface mount plate in half and secure it to the back of the unit using the provided screws so that the mounting holes extend past the edges of the case

# TalkMaster™ Software

TalkMaster™ Server Software is a suite of Windows® based applications used to configure and manage Digital Acoustics IP7™ and ii3™ Intercoms and Paging endpoints. Applications included with the TalkMaster Server are the **Admin Console** for configuration of the Server and IP Endpoints and the **Operator Console** for managing 2-way Intercom calls and 1-way Paging announcements.



Please refer to the *TalkMaster Admin Console Reference Manual* on the **Software Installation CD** for additional information and software setup options

- Install the TalkMaster software using the Software Installation CD
- Refer to the previous section to power up and connect the IP7 series device to the network.
- Record the unique ID# from the bottom label of the IP Endpoint and note the location where it will be installed

- Start the Admin Console and logon with an Operator ID of **admin** and the default password of **admin**

A dialog box titled "Logon Required" with fields for "Logon ID" and "Password", and "OK" and "Cancel" buttons.

- Click the **Settings → Endpoint Defaults** tab and make any changes required for your installation. For instance, if you want to assign static IP Addresses, uncheck the **Assign Automatically with DHCP** checkbox

The "Endpoint Defaults" configuration window shows various settings for an IP endpoint. The "IP Endpoint Type" is set to "Client". The "Assign Automatically with DHCP" checkbox is checked. Other settings include "Use UDP / RTP" (checked), "Authorized Endpoint" (checked), "Server IP Address" (10.3.3.242), "Port" (3000), and "Attempts to Main Server before Fail Forward" (18).

- Click the **IP Endpoints** tab and press the **FIND ALL** button in the lower right hand corner of the screen. Newly discovered IP Endpoints appear in the list

A row of four buttons: "Delete", "Save", "Find All", and "Replace". A mouse cursor is pointing at the "Find All" button.

- Click on the IP Endpoint to be configured (the "Icom ID" column must match to the Intercom's previously recorded ID#)

Auth	Location Name	Icom ID	IP Address	Queue
		0397C6	10.3.3.21	Unassigned

- Click the **Defaults** button and enter a descriptive name into the **Location Name** field
- Make any other desired changes, then select the **Options 1** tab

The "Configuration Options 1" tab shows settings for a "Client" type endpoint. Fields include "Location Name", "IP Address" (10.3.3.21), "Subnet Mask" (255.255.255.0), "Gateway" (10.3.3.1), and "Port" (3000). There are checkboxes for "Assign IP automatically with DHCP", "Authorized IP Endpoint", and "Assign this machine's address as the IP Endpoint's server IP". A "Defaults" button is visible at the bottom right.

Optional configuration options include:

### Options 1 tab: Relay Options

- **Door Open** - adds an **ICON** to the **Operator Console** to activate the Relay for an electronic door strike
- **PTT** - Activates the Relay when the 'Talk' switch (J2-5) is grounded
- **Activate on Speaker and/or Mic** - activates the Relay when either or both of the IP7 audio channel are active

**Sensor Options** - Used in conjunction with **Door Open Relay**. Changes the color of the **ICON** in the **Operator Console** when the door is open

- **Active when Closed to Ground** - when J3-5 is closed to ground
- **Active when Open to Ground** - when J3-5 is open to ground

### Options 3 tab

IP Endpoints can be optionally assigned to **Queues**

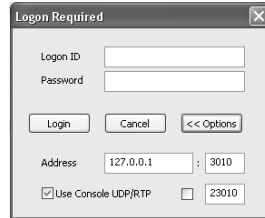
- **Assigned Queue** – select the Queue that the IP7 has been assigned to

Change additional IP7 Configuration Options and click **SAVE** when changes have been completed

Press the **Update Now** button and close the **Admin Console**

## Start the Operator Console

- Logon with an assigned Operator ID and Password or as the admin
- Specify the IP Address of the TalkMaster Server (specify 127.0.0.1 if the Operator Console is running on the TalkMaster Server PC)
- IP Endpoints will appear on the **Intercoms** tab or as part of the **Paging Groups** tab of the Operator Console



A dialog box titled "Logon Required" with a close button (X) in the top right corner. It contains the following fields and controls:

- Logon ID: [Text Input]
- Password: [Text Input]
- Buttons: Login, Cancel, << Options
- Address: 127.0.0.1 : 3010
- Use Console UDP/RTP:  23010



- The PC's microphone is used to send audio to an IP Endpoint
  - The audio from an IP Endpoint can be heard on the PC's speakers
- ### Inbound Calls
- When the **Talk** button attached to the IP7 is pressed, Operator Console will display the **Incoming Call** dialog and sound an audible alarm
  - Click and hold the **Talk** button, or press and hold the **Space Bar** to speak to the IP Endpoint
  - Release the **Talk** button or **Space Bar** to automatically activate the **Listen** button
  - All incoming calls will be listed in the **Calls Waiting** list and remain "in session" until removed from the **Calls Waiting** list by clicking the **End** button, or pressing the **Escape** key

### Outbound Calls

- To make an outbound call, select an IP Endpoint by clicking on it and press the **Talk** or **Listen** button
- Click the **Listen** button or press the **Escape Key** to end the call

### Open Door

- To open a door, select the Intercom, then click the **Door Open** icon or press the **Enter** key

## IP7-SE8™ Getting Started Guide

Refer to the **IP7-SE8 Hardware Reference Manual** for detailed information on wiring, setup, configuring IP addresses and additional software settings.

IP7-SE8 GettingStartedGuide.docu TalkMaster, IP7 and Digital Acoustics® are trademarks of Digital Acoustics LLC. Other trademarks are the property of their respective owners. All Rights Reserved ©2012 p/n 6621

[www.digitalacoustics.com/support](http://www.digitalacoustics.com/support)