

Talk Master™

ii3 intercom system

Software Users' Guide



For all ii3 series 10/100
Ethernet Intercoms
Models ii3-m, EDB, EDW

**DIGITAL
ACOUSTICS**
CORPORATION

TABLE OF CONTENTS

OVERVIEW	4
TYPICAL SYSTEM CONFIGURATIONS.....	5
CONFIGURATION AND IP ADDRESSES	5
INTERCOM CONFIGURATION UTILITY.....	6
MAIN SCREEN CONTROLS	8
INTERCOM LISTINGS.....	10
MESSAGES WAITING.....	10
MENU SELECTIONS	11
TALKMASTER PREFERENCES.....	12
AUDIO MESSAGE PLAYER.....	13
DIRECT MODE CONNECTION AND SETUP.....	14
TROUBLESHOOTING.....	15
TALKMASTER ONLINE UPDATES	16
TECHNICAL SUPPORT	16
ORDERING INFORMATION.....	17

OVERVIEW

Digital Acoustics IP (Internet Protocol) Intercom modules provide a functional audio equivalent to the basic "push to talk" (PTT) intercom. Simply connect the ii3-ED Desktop intercoms to a 10/100 Ethernet connection and communicate to a host server PC by voice.

- Talk to/from any station to host PC server
- High quality, clear transmit and playback audio
- Simple operation utilizes push buttons for commands
- Fixed, automatic and DHCP compliant IP assignment
- Hands-free listen mode at stations
- Directly connects through 10/100 ethernet system
- Highly scalable and seamless expansion
- Field upgradeable OS using internal *Flash* memory
- TalkMaster™ host software access and controls ii3 clients
- Application SDK for Windows® available for developers
- Perfect for business, industrial and consumer applications

Audio features include:

- Audio modes compatible with PC multimedia PCM, WAV and uLAW codecs
- High quality, internal low noise microphone amplifier with dynamic gain, AGC and compression
- Buffered audio line out and internal 2 watt speaker amplifier
- Digital volume control, adjustable locally and remotely.
- Low latency, with optimized and adjustable buffering

TalkMaster System Requirements

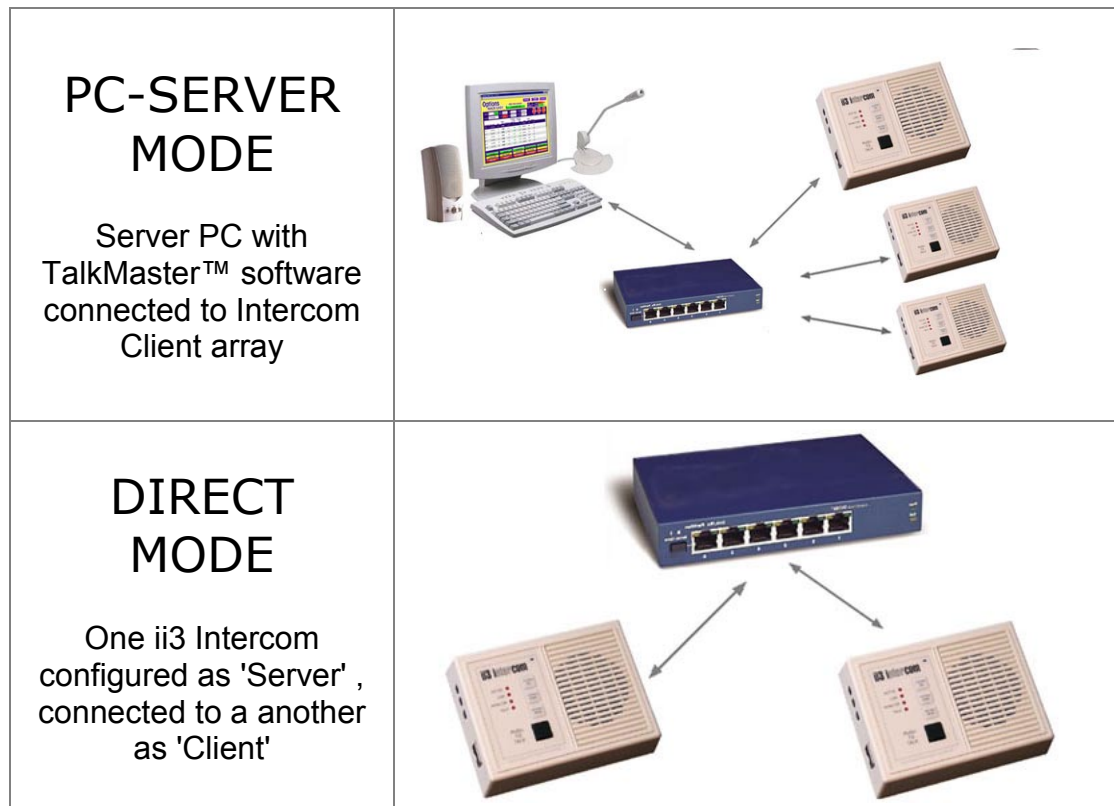
Operating System

- Windows® 98, Windows ME, Windows 2000, Windows XP

Minimum Hardware Requirements

- Processor – Pentium® II 500 mhz or greater.
- Memory – 128MB or greater
- Installed Disk Space – 6MB
- Sound card (full duplex)

TYPICAL SYSTEM CONFIGURATIONS



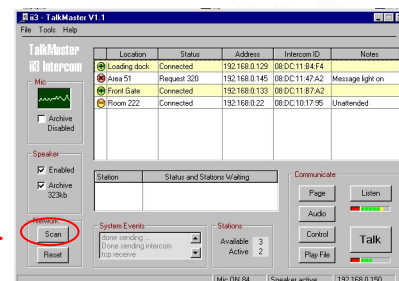
CONFIGURATION AND IP ADDRESSES

TalkMaster™ LE software downloads are available online
Access www.digitalacoustics.com/talkmaster for downloads and mode information.

Talk Master™

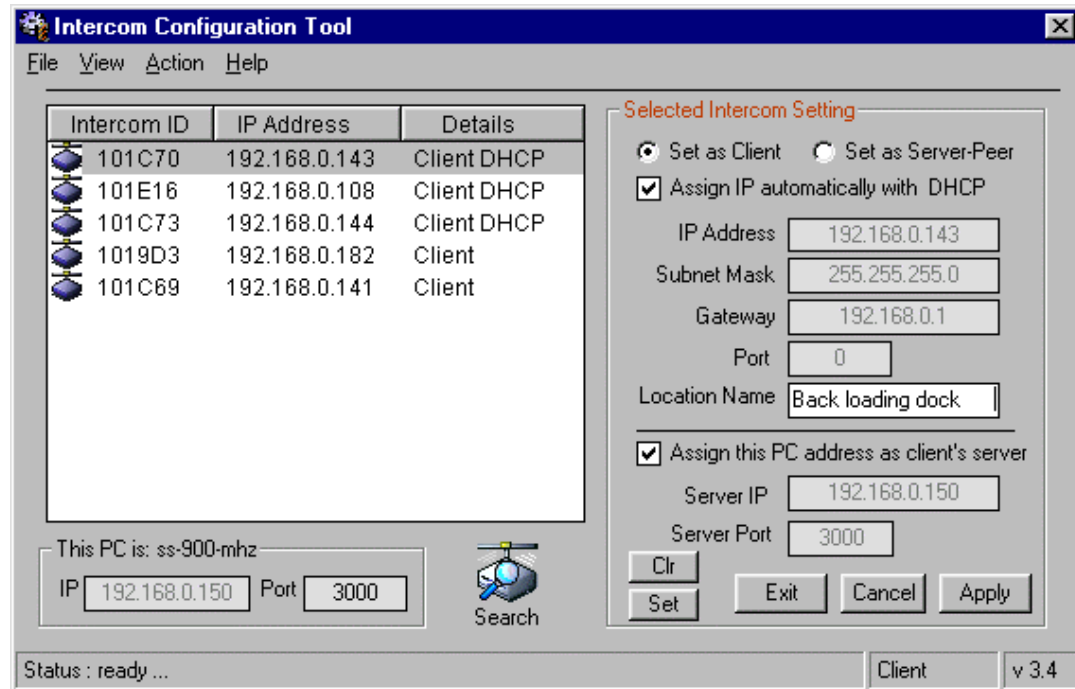
Quick reference:

1. Install and start TalkMaster™ software
2. To configure your intercoms, **Scan All**
3. Select and assign intercoms IP addresses
4. Press **Exit**



INTERCOM CONFIGURATION UTILITY

The Intercom configuration Utility scans your local networks and detects ii3-intercoms that are correctly installed using LAN 10/100 connections.

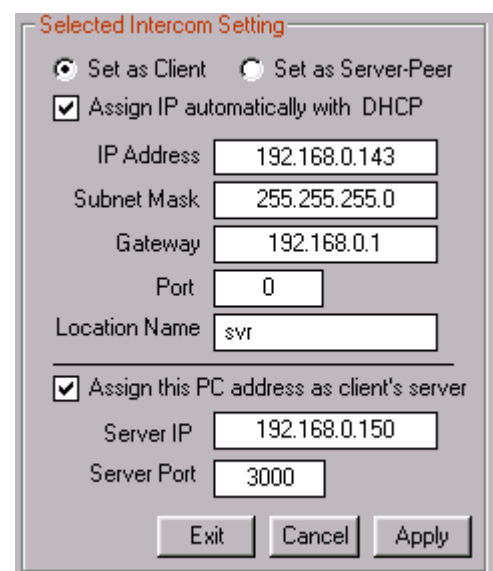


Before you can configure your intercom system you must execute a **system scan** by pressing the Search button

Select Client or Server Mode

ii3 intercoms are normally configured as a **Client**. This configuration sets the intercom to search and connect to a Server (the PC running TalkMaster).

In some cases a "Direct Connection" is used to connect 2 ii3 intercoms to each other, *without a PC*. In this case, *ONE* of the two intercoms must be assigned a "server". Refer to this link for more information on client server Direct Mode.



Assign IP address as Static or use DHCP

Select DHCP mode to allow your network server to automatically assign the IP address, subnet, and gateway to the intercom. *Your system MUST have DHCP assignment capability if you choose use this option. If you are unsure, do NOT use DHCP.*

After assigning DHCP, press APPLY. The results on the board list will show the selected IP address, Subnet mask, and Gateway that were acquired from the DHCP server

Setting the Intercom Alias "Friendly Name"

Location Name: Set a recognizable text name to reference a specific Intercom

Choose the Intercoms Server IP address

A client intercom will always attempt to connect to the Server IP when it is first turned on. This IP address must be assigned by the Intercom Configuration Utility. It can be assigned manually or automatically.

Assign this PC address as client's server

When checked, the Server IP text box will be automatically set with the IP address of the PC running TalkMaster. This will instruct the intercom to search for the PC running TalkMaster.

When unchecked, the Server IP box may be manually assigned.

Server IP IP address of the Server

Server Port Port for use in connections (default is 3000)

Saving your configuration

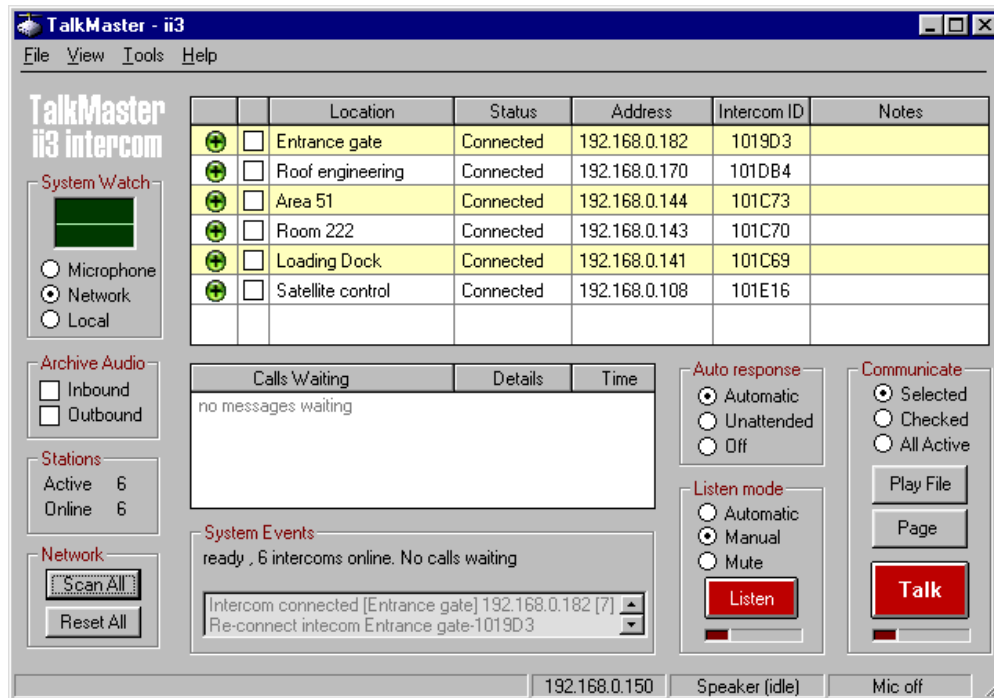
Apply Save settings to selected intercom

Cancel Cancel settings before saving

Exit Close the Configuration Utility Screen

MAIN SCREEN CONTROLS

Before you can use TalkMaster to communicate you must setup and configure the intercoms on your network. To setup, click **Scan All** to launch the TalkMaster *Intercom Configuration Utility*.



Communicate

To call an intercom listed in the intercom 'listbox' select the intercom, then press TALK. The Talk button will appear lighted (Red).

To turn off your microphone and wait for a reply press 'Talk' Again.

Intercom Array destination specifies which intercom is addressed on the system. The default is "selected"

- **Selected** Manual listen mode (client must press button)
- **Checked** Turn off local listening
- **All Active** Listen automatically after talking ""hands-free""

To send a file or signal (rather than your voice using a PC microphone) select one of the two choices, Play or Page

- **Page** Play an audible audio file (tone) to the intercom array
- **Play File** Play Windows 'wav' audio file to intercom array



Listen mode

The "Listen" button will allow the operator to turn on the audio microphone as any remote client intercom. This provides a means of creating a *hands-free* mode for the remote intercom or simply monitoring audio at a remote intercom site.



- | | |
|------------------|---|
| Automatic | Listen automatically after releasing the Talk button, ("hands-free") |
| Manual | (Default) Client operator must press the intercom 'Talk' button to speak to the server. |
| Mute | Turn off local listening |

Network

- | | |
|------------------|--|
| Scan All | Scan/Manage intercom network settings
Configure intercom IP addresses and arrange communication parameters. |
| Reset All | Reset all network connections by disconnecting all intercoms from TalkMaster. All intercoms will automatically reconnect to TalkMaster within a few seconds. |

Archive Audio

Archive Audio is used to save all incoming and outgoing audio to the TalkMaster PC hard disk. Files are available for copy and renaming and located in the '*TalkMaster\iArchive*' folder.

- | | |
|-----------------|--|
| Outbound | Log audio to disk file ' <i>Saved Microphone audio.wav</i> ' |
| Inbound | Log audio to disk file ' <i>Saved Speaker audio.wav</i> ' |

System Watch

Graphical display shows real time conditions helpful in diagnostic and general information.

- | | |
|-------------------|--------------------------|
| Microphone | Microphone audio display |
| Local | Local bandwidth |
| Network | Network bandwidth |

Note: Vertical bars show transmission (up) and reception (down)
Positioning mouse over display area will provide additional details.



Auto Response

Auto-response provides a convenient method of notifying a caller that the TalkMaster station attendant is away ("no one is available" message), or talking to another party ("please wait" message).

Automatic Respond to Calls Waiting with default 'busy' message

Unattended Respond to ALL calls with a 'not available' message.

Off Do not play automated responses

INTERCOM LISTINGS

The intercom listbox displays the detected array of intercoms. Status and events are displayed that are specific to each intercom on the network.

	Location	Status	Address	Intercom ID	Notes
	<input type="checkbox"/> Entrance gate	Connected	192.168.0.182	101D03	
	<input type="checkbox"/> Roof engineering	Connected	192.168.0.170	101D84	
	<input type="checkbox"/> Area 51	Connected	192.168.0.144	101C73	
	<input type="checkbox"/> Room 222	Connected	192.168.0.143	101C70	
	<input type="checkbox"/> Loading Dock	Connected	192.168.0.141	101C69	

Right mouse clicking over a selected row will display a menu dialog of additional commands. These include connection details and display options, such as modifications of an intercom "alias".

	Location	Status	Address
	<input type="checkbox"/> Entrance gate	Connected	192.168.0.182
	<input type="checkbox"/> Roof engineering	Connected	192.168.0.170
	<input type="checkbox"/> Area 51	Connected	192.168.0.144
	<input type="checkbox"/> Room 222	Connected	192.168.0.143
	<input type="checkbox"/> Loading Dock	Connected	192.168.0.141

Options for "Roof engineering"

Add Alias (Create Friendly Name)

Send announcement to selected units

Activity and Connection Details ▶

Reset connection

OS version: v1.6.66.5

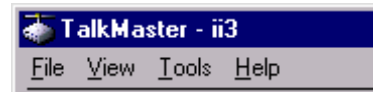
MESSAGES WAITING

The intercom message displays a list of old and new message activity. Messages are created automatically when TalkMaster is engaged in a call and additional calls are placed from other intercoms. Message playback is available using the integrated *Audio Message Player*.

Calls Waiting	Details	Time
Area 51 [10:49 AM]	message in ...	07:50
Loading Dock	new message	00:00

MENU SELECTIONS

FILE



Audio Archives

View and manage audio archive files

Exit

Quit / Exit TalkMaster

VIEW

Event log

Display a short list of recent program events

Screen position

Save current view or Reset to default

Preferences

Launch Preferences menu for custom configurations and options

TOOLS

Microphone and Speaker Levels

Set and adjust your PC Microphone and Speaker levels

Common IP ports

A List of commonly assigned Network Ports

Record program events to file

Save program runtime information for support

ii3 Intercom OS update

Special mode for re-programming intercoms

HELP

Online Help

Link to online help, the supplement to this help file.

Digital Acoustics Web Site

Link to Digital Acoustics' Internet web site

ii3-M technical overview

PDF with detailed hardware information

Check for new versions online

Select to check the Internet for automatic updates.

TALKMASTER PREFERENCES

Ping Interval

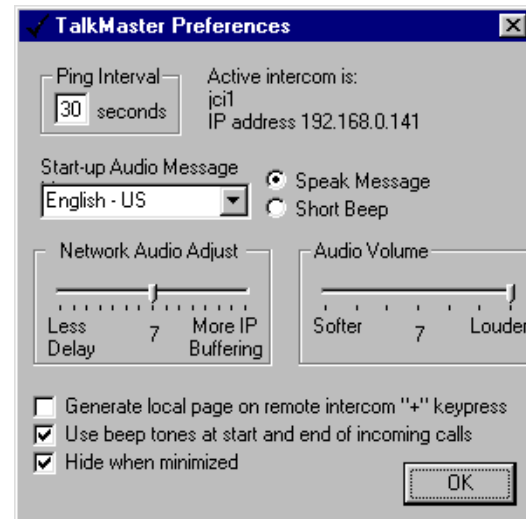
Intercoms on the system are contacted at intervals ranging from 5 to 90 seconds. In large systems, this interval can be set to the maximum amount to limit network traffic.

Audio Volume

Intercom volumes are adjustable at the intercom and can also be controlled using the volume slider.

Use beep tones at start and end of incoming calls

By default, a short audio tone is generated to indicate the stop and start of a user's call. This feature provides a convenient method for indicating microphone transmission state to the remote party.



Hide when minimized

Use this option to hide TalkMaster in the Windows status bar. TalkMaster will continue to be visible in the system tray (near the PC clock icon).

Start Up Audio Message

All intercoms produce a signal when they are initially connected to TalkMaster. This can be either a short signal tone "beep" or a pre-recorded audio wave file.

- **Language** Choose from several international languages. Use drop down dialogue to choose the pre-installed language or create a custom announcement using a "User Defined" file.
- **Speak Message** Check to enable playback of the selected language file
- **Short Beep** Check to disable audio language playbacks with a short beep.
-

Generate local page on remote intercom ""+"" keypress

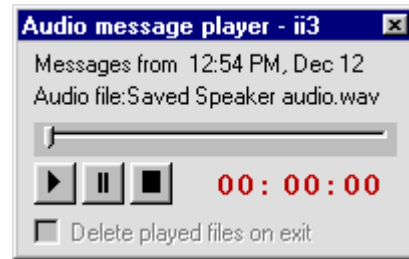
Select to enable remote intercom paging to the server PC running TalkMaster. When checked, ALL intercoms on the system will play a local wav file (normally a beep or alert tone).

Network Audio Adjust

Advanced setting used to adjust transmission latency (delay).

AUDIO MESSAGE PLAYER

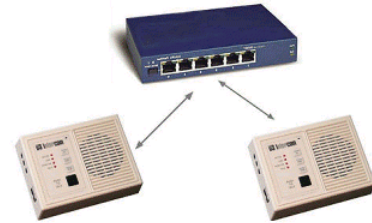
The Audio Message Player provides a convenient means to listen and review messages and archived audio files. Files will be automatically deleted after playback unless you UNCHECK to on-screen delete option.



DIRECT MODE CONNECTION AND SETUP

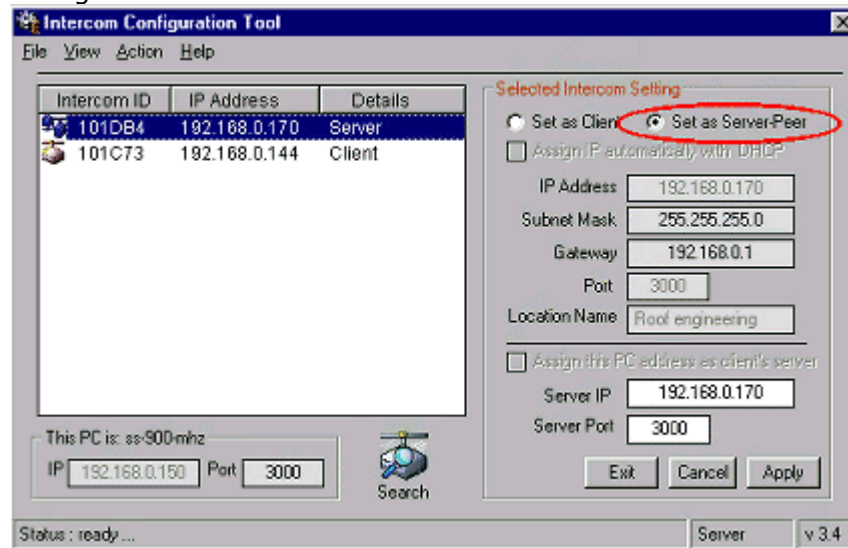
Direct mode connects two ii3 intercoms together in a link that does not require a PC.

Server-Client assignment example



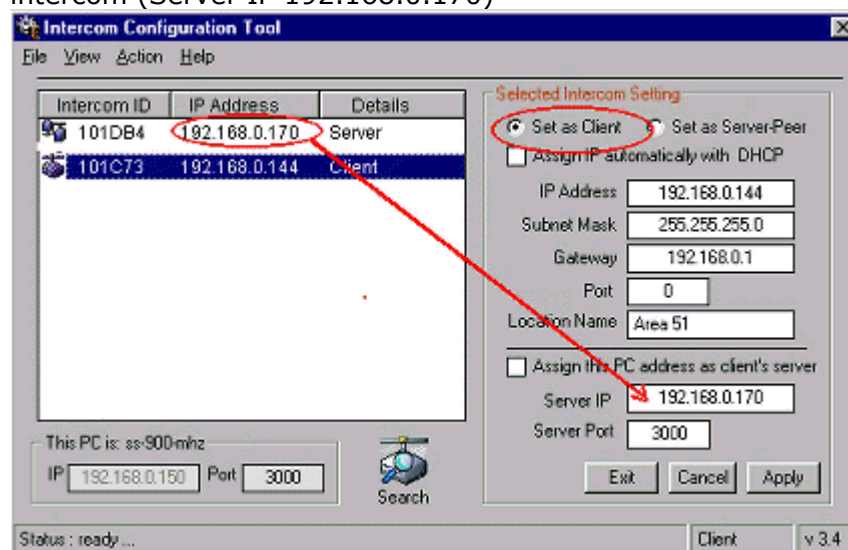
Server selection and setup

This image shows the server selected (highlighted in Blue) and shows its configured IP address set to 192.168.0.170



Client selection and setup

This image shows the client selected (highlighted in Blue). It is configured with IP address 192.168.0.144 and has its server IP pointing to the other ii3 intercom (Server IP 192.168.0.170)



NOTE: Be sure to UNCHECK the option "assign this PC to the clients server"

TROUBLESHOOTING

TalkMaster requires correctly configured ii3-series intercoms installed on the network to operate correctly. A overview of hardware troubleshooting include:

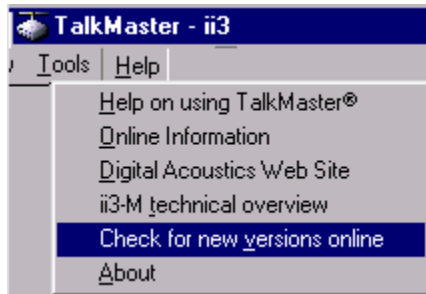
- ❑ Verify power connections. The "Active" LED on should be on or flashing.
- ❑ Refer to LED Indicator section in your hardware manual for valuable diagnostic information.
- ❑ If you cannot detect ii3 units when you SCAN then be sure to verify that the LINK LED is on and TalkMaster is running on the SAME network.
- ❑ If you have multiple network cards on this PC verify that intercoms are connected to the system that is using this computer's IP #. Verify that your connection is on the SAME network that is running TalkMaster.
- ❑ ii3 Intercoms may operate across some firewalls or specific VPNs. They will need to be configured locally (for setup) and will need to be assigned correct STATIC IP addresses for correct detection.
- ❑ If using DHCP addressing try assignments using static IP addresses.
- ❑ If you hear beeps try re-scanning a few seconds after the beep to override DHCP addressing if you think that the intercoms are set for DHCP and are running on a non DHCP network.
- ❑ If you cannot detect any intercoms using the TalkMaster SCAN ALL utility screen try directly connecting the PC (running TalkMaster) to the ii3 intercom *using a crossover cable* (disconnected from the network).



- ❑ Refer to your TalkMaster ii3-m or ED series manual for additional diagnostic techniques and troubleshooting tools.

TALKMASTER ONLINE UPDATES

TalkMaster version updates are available for automatic installation. Use TalkMaster menu selection **"Check For New Versions Online"**.



ii3 intercom hardware is also available for operating system "OS" firmware. Contact Digital Acoustics to for additional details.

TECHNICAL SUPPORT

Technical Support by email is available at:

techsupport@digitalacoustics.com

International telephone support numbers are available online at:

www.digitalacoustics.com/ii3support

Complete online documentation is available at:

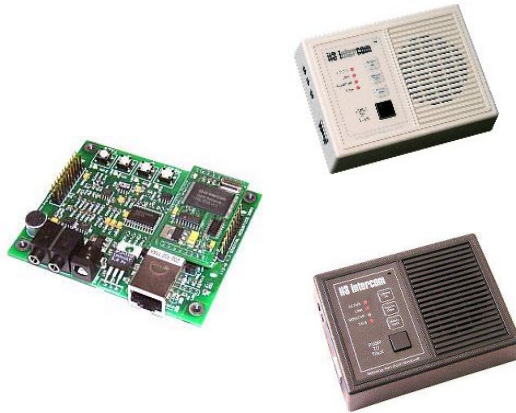
www.digitalacoustics.com/talkmaster
Online web site link

Information online	www.digitalacoustics.com
Email	techsupport@digitalacoustics.com
Telephone	+1 (203)-227-9700 M-F 9-5

ORDERING INFORMATION

ii3 series models

- ii3-m (module)
- ii3-EDW-110
- ii3-EDW-220
- ii3-EDB-110
- ii3-EDB-220



Digital Acoustics Corporation 1 Compobeach Road, Westport, CT 06880 U.S.A.

This document may contain advance information. Contact factory for technical specification before product design and/or use. Design and specifications are subject to change without notice.

Digital Acoustics® and TalkMaster™ are trademarks of Digital Acoustics Corporation, all other marks used are properties of their respective owners. Digital Acoustics' product designs are packaged by leading manufacturers around the world.

ii3-TM-1218B