

Direct Mode

Configuring two Intercoms/Paging Endpoints for Direct Mode allows them to communicate with each other without the need of a PC. One Intercom is configured as a **Server** and the other is configured as a **Client** that connects to the **Server**. The following options can be set on the **Server** Intercom:

- **Server-Peer Hands Free Mode** – Selecting this option allows the **Client** Intercom to place a call to the **Server** Intercom. The **Server** Intercom must answer the incoming call and end it when the call is over. The **Server** Intercom monitors¹ the **Client** Intercom so it can operate “hands free” during the call. This option cannot be used when the **Default to Listen (Direct Mode)** option has been selected
- **Default to Listen** – This option allows the **Server** Intercom to automatically place the **Client** Intercom in monitor mode as soon as the **Client** Intercom is able to establish a connection with the **Server**. This option cannot be used when the **Server-Peer Hands Free Mode** option has been selected
- If neither of these options is selected, then both the **Server** and **Client** Intercoms operate in push-to-talk mode. Both the **Server** and the **Client** must press and hold the PTT/Talk switch to send audio to the other Intercom.

Additional capabilities of the **Server** Intercom (typically, a model IP7-EDx/ESx) are:

- Sending a “Door Open” command to activate the **Client** Intercom’s dry contact Relay
- Turning on the **Client** Intercom’s microphone for monitoring purposes
- Audio sent by the **Server** Intercom will always overrides audio coming from the **Client** Intercom

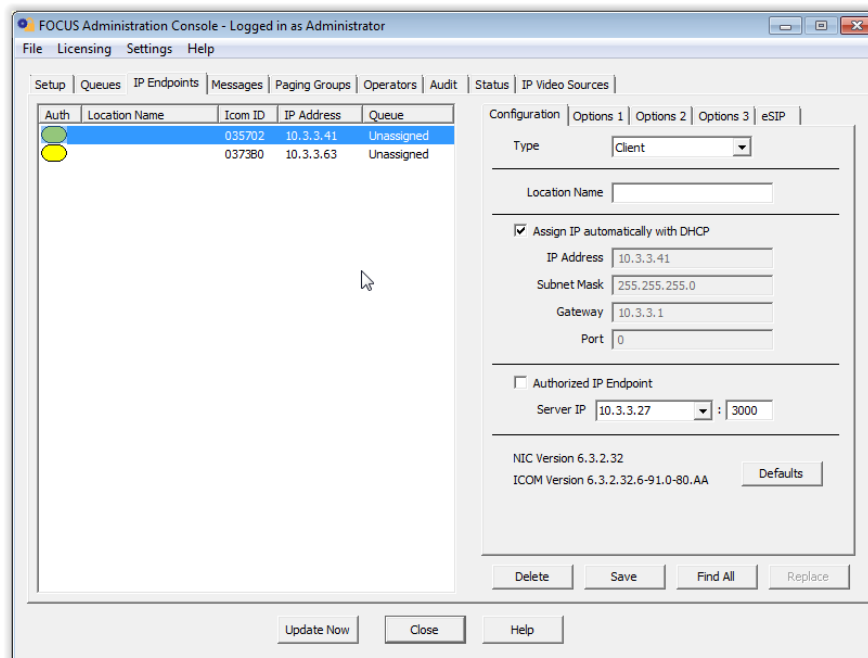


¹ Monitor – When the Server monitors the Client Intercom, the Client Intercom’s microphone is turned on and the Server Intercom is able to listen without any interaction from the Client

Configuration using the Admin Console

Download TalkMaster Solo from the Digital Acoustics website and run the installation option for **Install TalkMaster Server/Admin Console**

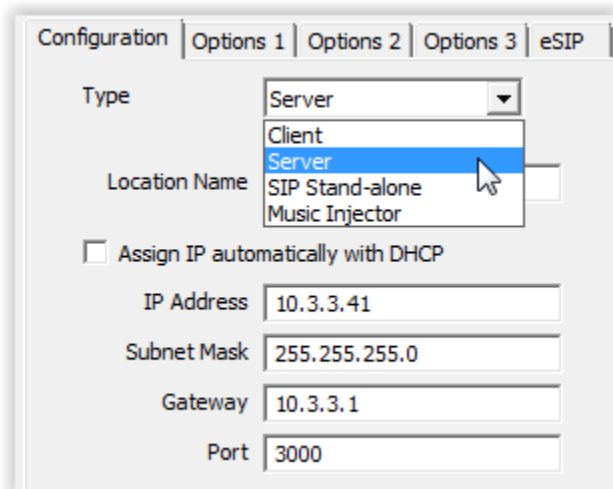
- Connect the Intercoms to the network and power them up
- Open the **TalkMaster Admin Console**
- Logon with the default UserID and Password of: admin
- Select tab **IP Endpoints** → **Configuration**
- Press the **Find All** button on the bottom right of the screen
- The two Intercoms should appear in the left hand side of the screen



Configuring the Server Intercom

Click on the Intercom to be used as the **Server** (match the ICOM ID on the screen to the ID number on the intercom) and enter the following configuration parameters:

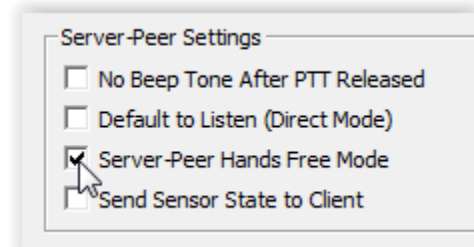
- **Type** – Select **Server** from the drop down
- **Location Name** – Enter a description such as “Server Intercom”
- **Assign IP automatically with DHCP** - This option is automatically unchecked
- **IP Address** - Enter a **fixed** IP address of the **Server** Intercom.
- **Subnet Mask** - Enter the Subnet Mask
- **Gateway** - Enter the Gateway address. If no Gateway is available, use the IP Address
- **Port** - Enter the Port number of the **Server** Intercom. The default port is 3000
- Click on the **Options 2** tab



The following options can be used to change the operation of the **Server** Intercom (typically an IP7 EDx/ESx series)

Server-Peer Hands Free Mode

- Pressing the **Client** Intercom's PTT/Talk switch initiates a call. Both the **Client** and **Server** begin ringing
- The **Server** presses its PTT/Talk switch to answer the call and to speak to the **Client**
- When the **Server** Intercom's PTT/Talk switch is released, the **Client** Intercom's microphone is switched on and the **Client** can respond without pressing any buttons
- The **Server** Intercom's PTT/Talk switch can be pressed at any time to speak to the **Client** Intercom
- The **Server** Intercom must end the call by pressing the **Monitor/Open** button or activating the IP7's Sensor
- The **Server** Intercom can send a "Door Open" command to the **Client** Intercom by pressing and holding the **Monitor/Open** button or Sensor for at least two seconds
- If no call is in session, pressing the **Server** Intercom's PTT/Talk switch allows the **Server** Intercom to talk to **Client** Intercom. When the PTT/Talk switch is released, the **Client** Intercom's microphone will be turned on so the **Server** Intercom can listen to the **Client** Intercom
- If no call is in session, pressing the **Server** Intercom's **Monitor/Open** button or Sensor will turn on the **Client** Intercom's microphone so the **Server** Intercom can listen to the **Client** Intercom



Default to Listen (Direct Mode)

- As soon as the **Client** Intercom connects or reconnects to the **Server** Intercom, the **Client** Intercom's microphone is switched on so the **Server** can listen to the **Client**
- The **Server** Intercom's Talk switch can be pressed at any time to speak to the **Client**
- When the **Server** Intercom's Talk switch is released, the **Client** Intercom's microphone is switched back on and the **Client** Intercom can talk to the **Server** Intercom without pressing any buttons
- The **Server** may turn off the **Client** Intercom's microphone by pressing the **Monitor/Open** button or activating the IP7's Sensor. If the **Server** presses the **Monitor/Open** button again, the **Client** Intercom's microphone is turned back on
- The **Server** can send a "Door Open" command to the **Client** by pressing and holding the **Monitor/Open** button or Sensor for at least two seconds

Neither option set

- Pressing and holding the PTT/Talk switch on the **Client** Intercom sends audio to the **Server** Intercom
- Pressing and holding the PTT/Talk switch on the **Server** Intercom sends audio to the **Client** Intercom
- The **Server** Intercom can send a "Door Open" command to the **Client** Intercom by pressing and holding the **Monitor/Open** button or Sensor for at least two seconds
- The **Server** Intercom can send a "Door Open" command to the **Client** Intercom by pressing and holding the **Monitor/Open** button or Sensor for at least two seconds

No Beep Tone after PTT Released – When an Intercom's speaker is turned off, a beep is played to inform the listener that it is their turn to speak. When this option is checked, the Beep Tones are disabled in Direct Mode. This can be used in conjunction with any other option.

Press the **SAVE** button to save the changes to the Server Intercom

Configuring the Client Intercom

Click on the Intercom to be used as the **Client** (match the ICOM ID on the screen to the ID number on the intercom) and enter the following configuration parameters:

- **Type** – Select **Client** from the drop down
- **Location Name** – Assign a descriptive name such as “Client Intercom”
- **Assign IP automatically with DHCP** - Check this box to automatically assign an IP address to this device. To manually assign an IP address, uncheck the **Assign IP automatically with DHCP** box and type in the **IP Address**, **Subnet Mask** and **Gateway**. The **Port** can be ignored
- **Server IP** - Enter the **IP address** and **Port** of the **Server** Intercom

The screenshot shows the 'Configuration' tab of the Client Intercom configuration window. The 'Type' dropdown is set to 'Client'. The 'Location Name' field contains 'Client Intercom'. The 'Assign IP automatically with DHCP' checkbox is checked. Below it, the 'IP Address' is 10.3.3.63, 'Subnet Mask' is 255.255.255.0, and 'Gateway' is 10.3.3.1. The 'Port' field is 3000. The 'Authorized IP Endpoint' checkbox is unchecked. Below it, the 'Server IP' dropdown is set to 10.3.3.41 and the port is 3000.

Additionally, the Client's Relay can optionally be configured to open a Door

- Click the **Option 1** tab
- **Relay Mode** – Select **Door / Relay Output** from the drop down
- **Door Relay Activate** – Enter the number of seconds for the Relay to stay engaged

The screenshot shows the 'Options 1' tab of the Relay configuration window. It features three 'Fail Forward IP' fields, each with a value of 0.0.0.0 and a port of 0. There is an unchecked checkbox for 'Enable Automatic Return to primary'. The 'Relay Mode' dropdown is set to 'Door / Relay Output' and the 'Door Relay Activate' field is set to 5.

Press the **SAVE** button to save the changes to the **Client** Intercom

The two Intercoms will connect and play a confirmation tone.

Hardware Notes

Typically the IP7-EDx/ESx is used as the **Server** intercom, but any other IP7 model Intercom can be used. configured as a Server. Please note the following when configuring other IP7 models as the **Server**:

- The **TALK** switch (J2-5) works the same as the PTT button on an IP7 Desktop
- The **SENSOR** (J3-5) works the same as the Monitor/Open button on an IP7 Desktop