

BellCommander – Barix IP Audio Client Configuration

BellCommander works with Barix IP Audio Client firmware on the Barix Exstreamer M400 and other Barix devices to play scheduled announcements and live pages using RTP audio.

To configure the RTP Port on a Barix device with the IP Audio Client, open the device’s configuration in a web browser and open the Sources tab. Then, enable an input source and set the type to RTP. Enter a name for the source “BellCommander” and enter the URL as `rtp://@:4446` and select Low Latency for the Playback Mode. A different port can be used, but it must match what is configured in BellCommander.

The screenshot shows the Barix IP Audio Client configuration interface. The top navigation bar includes tabs for Settings, Sources, Streaming, Audio Files, Scheduler, and Speaker Status. The Sources tab is active, displaying the 'Input Sources Priority Table'. There are two sources listed:

- Source 1:** Name: BellCommander, Priority: 1, Type: RTP, URL: rtp://@:4446, Playback mode: Low Latency, Volume: 90%.
- Source 2:** Name: (not configured), Priority: 5, Type: Barix Radio, Volume: 90%.

A help sidebar on the right provides information about the 'Input Sources Priority Table', 'Import' and 'Export' functions, and 'Sources common parameters'.

After updating the settings, click the Submit button to update the settings.

BellCommander Settings:

To configure BellCommander to send to a device with the IP Audio Client firmware, open BellCommander and click the Devices button to open the Device Manager. Then, select Barix Network Devices from the Sound Device Type drop-down. BellCommander will need to be configured to send audio to the RTP port. To configure the RTP settings:

1. Select Use UDP and uncheck the box for “Send UDP Test For Ping” and click the Apply button.

2. Add the Barix device if it hasn't been added yet. If the status remains "False", it's possible that a firewall or Windows security is blocking the ping, but audio may still play to the device.
3. Click the Advanced Settings button and configure the following settings:

If you don't see the Recorded Audio, Live Audio, and General tabs, download the current build of BellCommander using the download instructions for version 5. If you have an older version of BellCommander, contact us for upgrade pricing.

Recorded Audio:

Audio Format: MP3 (default) – MP3 will provide the highest quality audio, but uLaw or aLaw may also be used.

Use RTP: Should be checked

Port Number: 4446 (should match RTP Port on Barix device)

Flush Buffer: Not checked

Live Audio:

Audio Format: uLaw

Use RTP: Checked

Port Number: Same as Recorded Audio RTP Port

General Tab:

Send UDP/RTP Audio If Ping Fails: Checked

The screenshot shows the 'Advanced Barix Settings' dialog box with the 'Recorded Audio' tab selected. The 'Audio Format' section has 'MP3 (default)' selected. The 'Bit Rate' section has '24 kHz' selected. The 'RTP' section has 'Use RTP' checked and 'Port Number' set to '4446'. The 'Flush Buffer' checkbox is unchecked. The 'Packet Size' section has 'UDP/RTP Packet Data Length' set to '480'. The dialog has 'OK' and 'Cancel' buttons at the bottom.

The screenshot shows the 'Advanced Barix Settings' dialog box with the 'Live Audio' tab selected. The 'Audio Format' section has 'uLaw' selected. The 'RTP' section has 'Use RTP' checked and 'Port Number' set to '4446'. The 'Packet Size' section has 'UDP/RTP Packet Data Length' set to '480'. The dialog has 'OK' and 'Cancel' buttons at the bottom.

After changing the settings, the device can be added to BellCommander. To add the device, click the Add Device button. Enter a name for the device and enter the IP address or network name and click the OK button. The device should then appear in the Known Clients list and the Active column should show "True".

A test audio file can then be sent to the Barix device. To send a test file, click the Browse button under the Test Device section and select a MP3 audio file. Then, click the Play Audio File to send the test.

To schedule audio to the device, use the Zone Manager to create a zone and assign the device to the zone. Then, use the Day Scheduler to create a day schedule with at least one bell event to the zone with the Barix device. Finally, use the Calendar to assign the day schedule to the BellCommander calendar. The BellCommander toolbar should show the Next Bell time after an event is assigned to the calendar on the current day or the following day.

SIP Paging:

BellCommander can register as a SIP extension to an IP phone system that supports SIP endpoints, like SIP phones and IP speakers, and receive calls to allow users to activate notifications and make live pages to Barix devices. For live paging, a second low latency RTP port can be added to the Barix devices. For example, port 4444 can be used (rtp://@:4444). Then, in the Advanced Settings for the SIP Extensions sound device type in BellCommander, set BellCommander to forward RTP packets to port 4444. For more information on configuration SIP extensions, refer to the SIP configuration guides at <https://www.acrovista.com/bellcommander/spdownload1.html>. All network editions of BellCommander include the "SIP Extensions" sound device type in the BellCommander Device Manager for calling into BellCommander with one phone allowed to call in with the base license.