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Annuncicom 200-RAVA Quick Start Guide

This document details how to set up an Annuncicom 200-Rava device to act as a Rava SIP based door station for use in a Crestron environment.

This document details the basic hardware setup and device configuration to allow the device to be able to make and receive calls to/from other stations and Groups.

The system is designed to operate in half-duplex mode controlled using the PTT button of the Crestron panel.
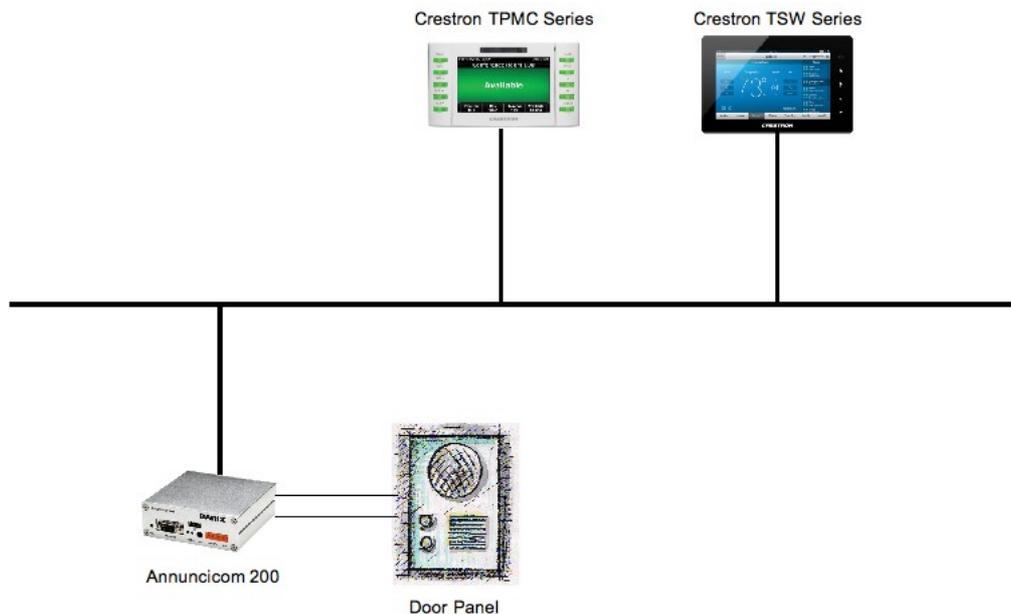

Illustration 1: System overview

1 Connect up the Annuncicom

STEP 1:   **Connecting the audio input**

The Annuncicom 200 works with electret microphones by providing 2.7V bias power (max 300µA). Wire the electret microphone to the Annuncicom as shown in Illustration 2: Connecting Annuncicom 200.

For 2 pin microphones you will need to short the "Mic" and "+" pins on the upper 6-pin connector of the Annuncicom. If your mic has 3 pins (output, bias/power, ground) then connect them to pins "Mic", "+", and "GND" accordingly.

For other microphones, refer to their technical specification for wiring.

STEP 2: **Connecting the speaker**

Connect the loudspeaker to pins 5 and 6 of the upper 6-pin connector. The Annuncicom 200 built-in amplifier is able to drive up to 8W through 8Ω speakers. If more power is required, then use the Annuncicom's Line Out output and connect to an external audio amplifier.

STEP 3: **Connecting the door ring button**

A button is needed to be able to initiate a call, and to answer/close incoming calls. Connect the button of door station on pins 1 and 3 of the Annuncicom's lower 6-pin connector. When the button is closed, input 0 (IN0) will be shorted to ground, activating the digital input.
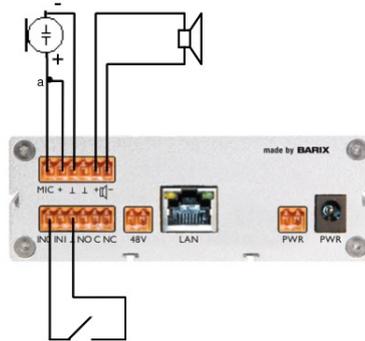
Annuncicom 200 rear connector pinout		
Pin	Upper connector	Lower connector
1	Mic input	Dry contact input 0
2	Mic Power (bias)	Dry contact input 1
3	Ground	Ground
4	Ground	Relay open (NO)
5	Speaker +	Relay common
6	Speaker -	Relay Closed (NC)

a: short for 2 pin Electret Microphone

Illustration 2: Connecting Annuncicom 200

STEP 4: **Connecting the LAN and Power**

If you are using PoE, connect the Annuncicom to the PoE switch using a standard network cable, otherwise connect the Annuncicom to the LAN and connect the separate power supply to the device.

2 Configuring the SIP-RAVA Client FW

STEP 5: **Startup of the device**

On startup, the Annuncicom 200-Rava will try to get an IP address using DHCP, and announce it on the speaker. Type this IP address into a web browser to get access to the home page of the SIP-RAVA client. The device is configured by default in "Door Station" mode.

| HOME | PROFILES | CONFIGURATION | STATUS | DEFAULTS | UPDATE | REBOOT | | Annuncicom 100   MAC: 00:08:E1:00:59:53   FW VB1.11 |

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SIP Door Station
APPLICATION STATUS

Application Mode	Peer to Peer
Call State	Idle
P2P Remote Party	

AUDIO STATUS

Current Set Volume	50 %
Left Output Peak Level	-99 dBFS
Right Output Peak Level	-99 dBFS
Left Input Peak Level	-99 dBFS
Right Input Peak Level	-99 dBFS

DEVICE & X8 I/O STATUS

I/O Contacts	7	6	5	4	3	2	1	0
Inputs	☒	☒	☒	☒	☒	☒	☐	☐
Relays	☒	☒	☒	☒	☒	☒	☒	☐

Help

Home page
Gives an overview of the most important settings of the unit.

APPLICATION STATUS

Application Mode
Shows the current mode of the application, and may take the following values:

- *Device is still booting ...*
The Boot process has not finished yet.

- *SIP mode*
The device is in SIP mode. The SIP server name, and the SIP ID are also shown in this case

- *Peer to peer mode*
The device is in P2P mode, and configured to call to only one remote peer. Incoming calls will be accepted only from this peer.

Time till next Registration
Shows the remaining time till the next registration attempt. The

Illustration 3: Home page of SIP-RAVA Client

Refer to the *"NETWORK SETTINGS"* section from the *"Configuration page"* chapter of the **SIP-RAVA Client User Manual** if you need to configure the device with a static IP.

STEP 6: **Assign the SIP ID**

The device needs a SIP ID to communicate with other SIP devices. Click on the *"CONFIGURATION"* tab of the navigation menu. The Basic configuration menu page will be displayed.
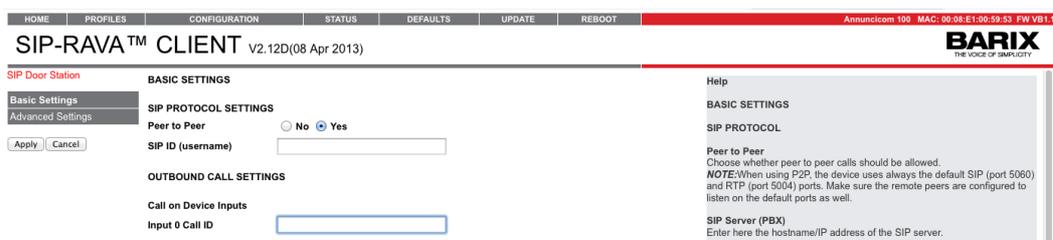
- Assign an ID to the device in the 'SIP ID' field.

Illustration 4: SIP-RAVA Client Basic Settings menu page

STEP 7: **Configuring Calling target**

The device can both make and receive calls, and must be told how to do that by configuration.

When the Door Station ring button is pressed (activating input 0) the Annuncicom will initiate a call to the target defined in the field 'Input 0 Call ID'. The target for the call can be either a single device, or a Group. Either:

- To call a specific device (Crestron panel, SIP extension) simply enter it's SIP ID in the field 'Input 0 Call ID' e.g. "1234", or "Reception"

or

- To call a Group enter: *"CALL:"* followed by the group name you would like to call e.g. *"CALL:RTEST"* in the field 'Input 0 Call ID'. Do NOT use Group "All".

then

- Click *"Apply"* to save the settings. The device will reboot.

NOTE: The SIP RAVA Client FW supports SIP group calls to maximum of 8 peers

NOTE: Do not use Group "All" as a call target, see paragraph "4 Restriction".

STEP 8: **Configuring Group membership; setting the device to receive group calls**

The Annuncicom 200-Rava can be used for receiving SIP multicast paging calls, and for initiating SIP group calls. By default the SIP RAVA client is configured to be a member of the group *"ALL"*, so if no other group names are used, this step (8) can be ignored.

- click on the *"Advanced Settings"* button,
- select "SIP Protocol" and scroll down to the *"CIP protocol Settings"* section,
- add the desired groups (e.g. *"ALL,RTEST"*) in the *"SIP Groups"* field.
- Set a display name in the *"SIP Display ID"* for the Annuncicom, this will be used by the Crestron panels (e.g. *"SIP CLIENT 5"*),
- click *"Apply"* to save the settings. The device will reboot.

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SIP Door Station

Basic Settings
Advanced Settings
Network
SIP Protocol
Outbound Calls
Inbound Calls
Audio
Control Interfaces
Security

Apply   Cancel

SIP PROTOCOL SETTINGS

Peer to Peer	◯ No ◉ Yes
SIP ID (username)	99995
Listen SIP Port	0
Listen RTP Port	0
Default REGISTER Time	1800
Send NAT-keepalives	◉ No ◯ Yes
Periodically Renew DNS	◉ No ◯ Yes
Debug Mode	◉ Off ◯ On

CIP PROTOCOL SETTINGS

CIP Port Number	41794
SIP Groups	ALL,RTEST
SIP Display ID	SIP CLIENT 5

Help

SIP PROTOCOL SETTINGS

Peer to Peer
Choose whether peer to peer calls should be allowed.
*NOTE:*When using P2P, the device uses always the default SIP (port 5060) and RTP (port 5004) ports. Make sure the remote peer is configured to listen on the default ports as well.

SIP Server (PBX)
Enter either the hostname/IP address of a SIP server.

SIP ID
Enter the SIP ID (username) that has been created for this device.

SIP Password
Leave this field empty if the PBX doesn't require authentication.

Listen SIP Port

Illustration 5: SIP-RAVA Client CIP Protocol settings

From the examples used above, the SIP-RAVA Client is ready to receive SIP paging calls for the groups *"ALL"* and *"RTEST"*.

3 Making and receiving calls

Making a call

Once the device has restarted, test the configuration by pressing the Door Ring button; the Annuncicom will make a call to the configured target. While ringing the status *"Calling out"* will be displayed on the device's web UI home page, this will change to *"In active call"* when the call is answered. If the call is not picked up within a set time, the call will time out and be aborted by the device.

If you configured a Group target, make sure that all devices in the Group ring, and that when any member picks up the call, the others stop ringing.

Receiving a call

When the device rs called, it will automatically answer.

Ending a call

The Annuncicom 200-Rava in door station mode cannot end a call, this is done by the remote party.

4 Restriction

Because the Annuncicom 200-Rava in door station mode will auto-answer an incoming call and a user cannot end a call, it is important that you do not configure such devices to call each other. Make sure that other Door Stations , either as a direct target, or by configuring them in Groups that other Annuncicom 200-Rava devices in door station mode can call.

For information about our devices and the latest version of this manual please visit www.barix.com.