Application Notice
IP220 and External Paging

Description

Use the IPitomy HD-Audio IP220 for a paging system interface!

Often there is a need for a simple and inexpensive connection to external paging apparatus. The IPitomy IP220 provides this solution.
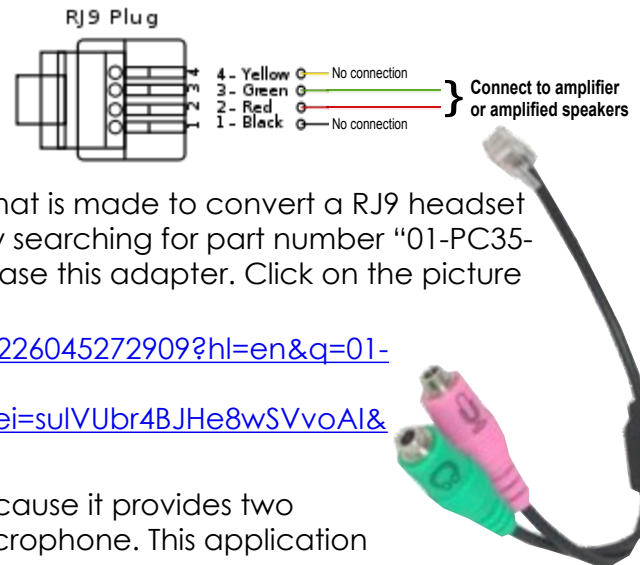
When configured, the IP220 is set for Auto Answer and Answer in Headset Mode. The connection of the external paging equipment is made to the RJ9 headset jack on the back of the telephone. The two center-pins are the receiver audio pair and these are connected to the amplifier or amplified-speaker input.

The telephone is called from any extension to make a page announcement. Since the IP220 can subscribe to up to five Multicast Page addresses, this interface connection facilitates Multicast Paging requirements as well.

When the IP220 is being used in this manner it is best to dedicate the telephone to that purpose so that the mode of operation is not impeded by varied uses.

Connection

The cleanest method of connection is to obtain a RJ9-to-X adapter. The "X" is whatever connector is most easily connected to your external paging apparatus. The photo at the right shows an adapter that is made to convert a RJ9 headset jack to a PC-style headset. We found it on the web by searching for part number "01-PC35-RJ9". Google had several places from which to purchase this adapter. Click on the picture or follow the link to get this adapter…

RJ9 Plug
4 – Yellow — No connection
3 – Green —
2 – Red —
} Connect to amplifier or amplified speakers
1 – Black — No connection

https://www.google.com/shopping/product/7321720226045272909?hl=en&q=01-pc35-rj9&oq=01-pc35-rj9&gs_l=products-cc.12...0.0.0.5146.0.0.0.0.0.0.0..0.0...0.0...1ac.&sa=X&ei=suIVUbr4BJHe8wSVvoAI&ved=0CEYQ8wIwAQ

This adapter will work especially well in most cases because it provides two connections - one for the receiver and one for the microphone. This application will use only the Receiver connector... the green connector.

At the telephone, connection is simple... plug the RJ9 Plug into the RJ9 Jack. Done.

At the paging equipment... mate the green female adapter to the input connection required on the amplifier. This may require hard-wire adapting if your amplifier has just terminals available for hook-up.

Configuration

The IP220 must be set for "Auto Answer" and "Auto Answer Mode = Headset". In addition, the telephone should be set to **NOT** get configuration updates since these updates do not include these parameters and will therefore be lost if configuration updates is selected.
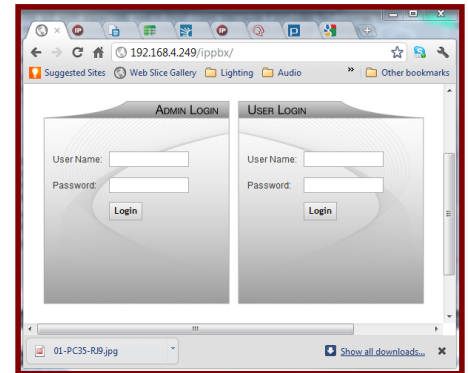
To set these options you must enter into the telephone GUI (Graphical User Interface) [web page programming].

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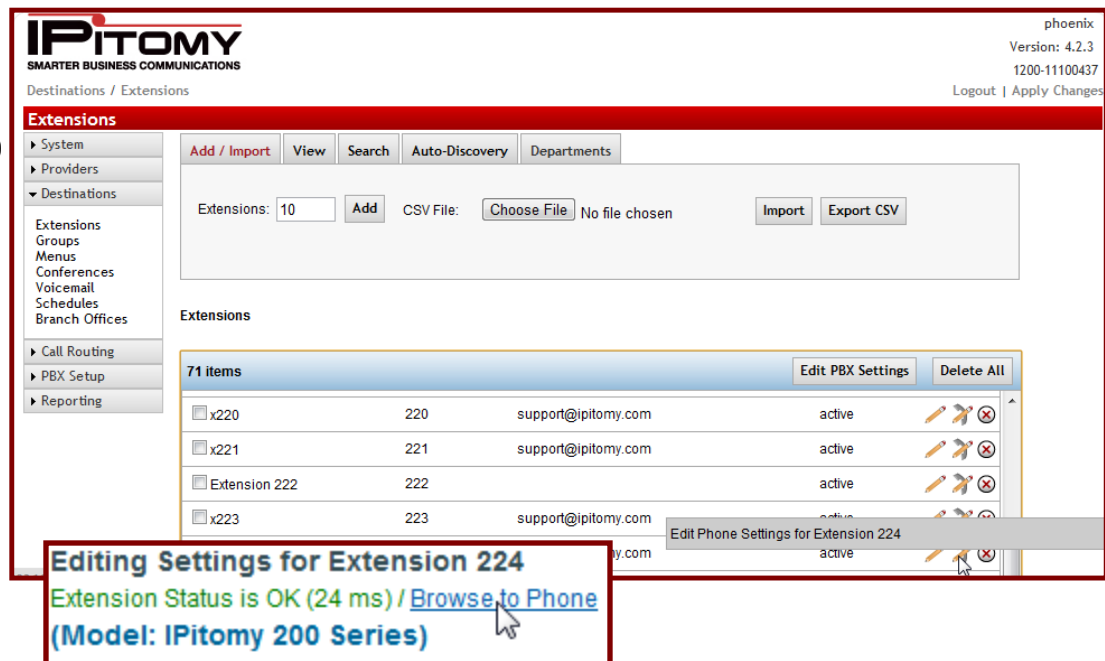## Configuration (continued)

To accomplish this, open your browser and:

1. Browse to the IP PBX and login as usual.

   1. User Name: pbxadmin
   2. Password: ipitomy

2. If Multicast Paging is to be part of your application, complete that programming now for the IP220 extension. (This procedure is not covered in this guide, please reference our WIKI at wiki.ipitomy.com for futher information on setting up Multicast Paging.)
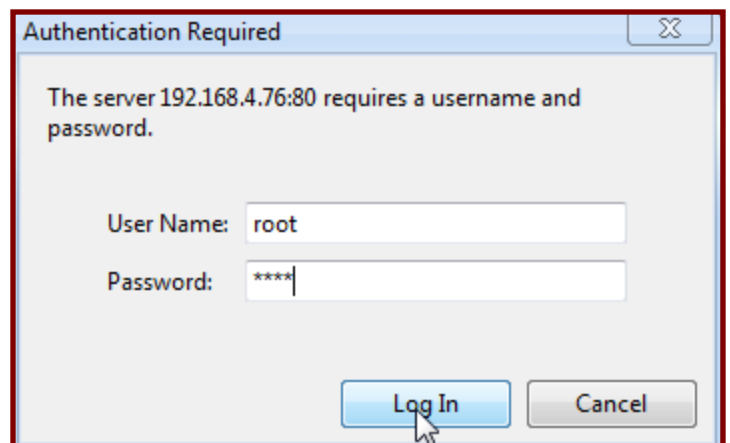
http://wiki.ipitomy.com/images/4/46/Multicast_Configuration_Quick_Guide.pdf

3. Navigate to Destinations/Extensions page and select the extension that is the IP220 telephone that will be used for the external paging interface. (In the example we've used extension 224.)

4. Select the "Edit Phone Settings..." icon (pencil with handset) .

5. Once in the extension programming, click on the "Browse to Phone" link in the upper left of the page.

6. Enter into the Phone GUI by inputting:

   1. User Name: root
   2. Password: root

7. Then click Log In

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Configuration (continued)

8. In the Phone GUI, navigate to Advanced/Phone Settings and select:

   1. Auto Answer "ON"
   2. Auto Answer Mode "Headset"

9. Then click "Submit".

10. Navigate to the Phone Maintenance / Auto Provision page

11. Deselect:

    1. "Auto Download Config File", and
    2. "Booting Checked"
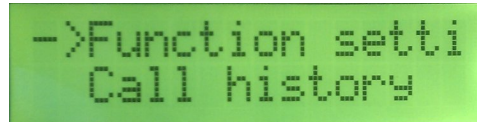
12. Then click "Submit".

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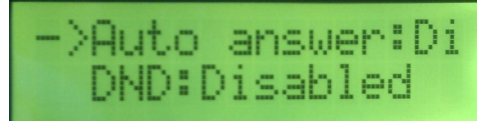## IP220 and External Paging

Configuration (optional)

OPTIONAL: There is an alternate method to engage Auto Answer and Answer in Headset Mode. You can do these things using the telephone user interface. This is for your information. (Only one method is required to engage AA and AA Mode.)
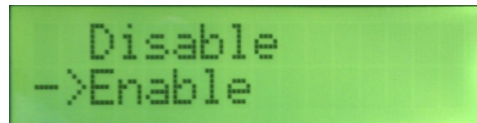
1. Enter into the telephone menu by pressing the Menu button or the navigation "OK" key

2. Use the navigation keys to select "Function Settings" and press OK

3. Select "Auto Answer" and select from:
   1. Disable
   2. Enable
   3. Device (to select Headset Mode)

4. When settings are made, press the Clear button repeatedly to exit the menu.

Operation

At this time the telephone should be in Auto Answer and Answer in Headset Mode

- To make a page announce simply dial the IP220 extension number from any other extension.

  The call is automatically answered and connected to the external paging equipment.

- If the IP220 is part of a MultiCast Paging Group, calls to the MCPG will be connected to the external paging equipment.

Considerations

1. Programming Multicast Paging is not covered in this application notice. Please refer to the IPitomy PBX Plus (1100+) Installation and Maintenance Manual for this programming information.

2. You may wish to use an UPS for the power of this telephone so that power outages are less likely to affect the setting of Headset Mode.