Simple Paging Start-Up Guide

About the Barix Simple Paging Solution

The Barix Simple Paging solution is based on a number of Barix devices that come ready to use, enabling to you setup a paging system in minutes.

Every endpoint or Paging Zone can be individually addressed, or combined to belong to one or more Paging Groups.

Paging Heads, or Masters, are devices where a page can be made from. They can be Barix desktop units, or an iDevice, for paging when you are on the move!

In case an iDevice is used the system also need a Paging Gateway device.

About this document

This document guides you in setting up the Barix Simple Paging solution for the first time. It also explains the basic functionality of the system, and provides a walk through example of setting a system up and configuring groups both on fixed and mobile paging devices.

For a complete guide to all features please refer to the users manual.
1 Setting up the system

Barix devices ordered specifically for use with Simple Paging are delivered with the application firmware and are ready to use.

If you already have Barix devices and want to use them for Simple Paging, you can get the firmware from the Barix website, and load it to the device, as with any other Barix application

1.1 Supported Hardware

Masters (Paging Head):
• Annuncicom PS16, Annuncicom PS1, Annuncicom 60 and iPhone or iPad with Barix Simple Paging App loaded.
  The Simple Paging App can be downloaded from the Apple store for free

Zones (End Points):
• Exstreamer 1xx, Exstreamer 2xx or Exstreamer P5

Paging Gateway:
• Exstreamer 100.
  Gateway firmware can also be loaded on other Exstreamers, but can not be ordered preconfigured on other devices

1.2 Connecting the devices

Use the step by step description in the Quick Installation Guide provided with your devices to install the hardware.

<table>
<thead>
<tr>
<th>The PS16 can be powered by PoE on LAN port 1, or by an external PSU. If using a PoE switch, no separate PSU connection is necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect the device to the network switch and power (if not using PoE)</td>
</tr>
<tr>
<td>=&gt; the device will boot up, displaying its IP address, before indicating that it is ready to page.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The PS1 is powered by PoE no separate PSU connection is necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect the device to the network switch</td>
</tr>
<tr>
<td>=&gt; the device will boot up, announce its IP address, and is ready to page when button ‘A’ shows green</td>
</tr>
</tbody>
</table>
The Exstreamer is powered by the provided PSU.

Connect the device to the network switch, and power it using the power supply that came with the unit. The device will boot up, announcing its IP address on the RCA and headphone outputs.

The Exstreamer P5 is powered by PoE only.

Connect a suitable 8 ohm speaker to the Exstreamer P5 “Speaker” connector.

Connect the LAN port of the Exstreamer P5 to a PoE network switch: the device will boot up, announcing its IP address.

The iDevice must have the free “Barix Simple Paging” app installed.

On iTunes search for the “Barix Simple Paging” App and install it. On startup the App will automatically connect to the Gateway, and show the groups available for paging.

Once all components are connected, the system is ready to use.

1.3 Make your first announcement from desk station

Out of the box, the Simple Paging Solution is configured such that all the devices, or Zones, are in Group1. This means that after the initial installation an announcement will automatically be heard everywhere when paging to Group1.

Note that Masters are also serving as Zones. This means that they will also play the announcement.

This is an excellent way to verify everything is connected correctly. Let’s try paging from the different Masters;

1.3.1 Paging from PS1

The PS1 Master has two buttons on the front ‘A’ and ‘B’. By default button ‘A’ is preconfigured to Group1. Button ‘B’ is not configured.

Press and hold button ‘A’ while talking, you will make an announcement to all Zones. Releasing button ‘A’ will end the announcement.
1.3.2 Paging from PS16

The PS16 Master has two rows of buttons mapped as shown;

By defaults all Zones are available in Group1, whereas the other groups are not configured.

Select group 1 by pushing its button “Group 1” once, two yellow LEDs will indicate the group is selected. Press and hold down the “Page” button while talking, you will make an announcement to all Zones. Releasing the “Page” button will end the announcement.

To clear the group selection either press the selected group button or the “Select All” toggle button.

1.4 Make your first announcement from iPhone or iPad

The Simple Paging solution allows you to make pages from an iPhone or iPad when on the move while connected to a wireless access point on the same network as the paging devices.

1.4.1 Connecting to the system.

Make sure you have turned on the WiFi on your device, and then start the Simple Paging App. On startup it will automatically search the network for a ‘Gateway’

The Gateway is the interface between the iDevice and the Simple Paging Solution, it must be present on the network to enable paging from iDevices. When the Gateway is found by the Simple Paging App, it will automatically show the Groups available for paging.

1.4.2 Paging from iDevice

To make an announcement from the iDevice, simply tap the ‘Group 1’ icon, a ✅ indicates the group is selected.

Tap the microphone icon 🎤 and make your announcement.

By default all Zones are in Group1, and your announcement from your iDevice will therefore go to all Zones.

After the end of the announcement, tap “Stop Paging” and the announcement will end.

You cannot page to an iDevice
2 Setting up Paging Groups

If your paging needs are as simple as ‘Page to All’, no further configuration is required, but if more flexible Paging is needed you can setup individual groups to page to.

Groups can be setup on all paging Masters and on the Gateway for iDevices. After definition of a Group you can page to this specific Group or any combination of Groups (only on PS16 and iDevice). On the PS1 two individual Groups can be defined, on the PS16 and the Gateway 14 Groups can be defined on each.

To define the groups either the web UI or the Simple Paging configuration tool can be used.

The configuration tool is a java tool that allows you to manage your Simple Paging solution from one single interface.

- Download the Simple Paging Configuration Tool from the Barix website
- Unzip the package and double-click on the file “ConfigTool.jar”

The tool will start and automatically discover all online Barix Simple Paging Solution components on the network.

The web UI is accessed directly on the device by entering the device IP address into a web browser (please refer to the installation guide for details)

For setting up the Groups in the next step, we will use the example pictured below.

In this example there are 3 Paging Zones available: a lone unit in Group 1 and two devices in Group 2.

2.1 Zone Names and IDs

Every device has an address, an identifier called the “Zone ID”, which is used to recognise them, send audio to them and exchange status information. ‘Out of the box’ every device has a Zone ID of 1, and all Masters are setup to have a Paging Group that talks to devices with the ID of 1.
This means that when devices are connected up for the first time, a Paging Announcement, made to Group 1 will go to all Paging Zones and all other Masters.

A Zone Name can also be assigned to each Zone. This name is used in the tools and Apps to refer to the Zone to make it easier to remember however Zone Names are optional.

- Creating different Paging Groups is simply a case of telling each Paging Head “this Paging Group consists of the following IDs” and then assigning those IDs to the relevant devices – see the worked example later in this document.

- Many devices can share the same Zone ID if required, the result is that these devices will always make announcements at the same time – useful if you have 3 Paging Endpoints in a long corridor, for instance.

- If a device must be individually addressable, it needs a unique Zone ID assigning to it.

- All of the Barix Simple Paging devices share information, which allows them to understand what other components are present and display status information about the system as a whole.

The configuration tool also uses the same method to identify devices and make updates to their configuration. If the tool is not used, changes can also be made directly on each device’s web UI.

In our working example above the following combination of IDs and names are used for the devices:

<table>
<thead>
<tr>
<th>Zone ID</th>
<th>Zone Name</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Administration</td>
<td>Annuncicom PS16</td>
</tr>
<tr>
<td>128</td>
<td>Paging Gateway</td>
<td>Exstreamer 100</td>
</tr>
<tr>
<td>11</td>
<td>Assembly Hall</td>
<td>Exstreamer P5</td>
</tr>
<tr>
<td>21</td>
<td>Juniors</td>
<td>Exstreamer P5</td>
</tr>
<tr>
<td>22</td>
<td>Seniors</td>
<td>Exstreamer P5</td>
</tr>
</tbody>
</table>

The Zone ID can be any integer from 1 to 127. The ID=128 is reserved for the Gateway and should not be used by any other device.

The Zone Name is a 15 character string allowing use of characters, numbers and blanks.

2.1.1 Assign Zone Names and IDs with the web UI

Open the web UI and go to Configuration. On the top of the page the desired ID and Name can be set. After modification of the ID and Name, click “Apply” on the left hand side of the interface to update the configuration on the device.

<table>
<thead>
<tr>
<th>HOME</th>
<th>CONFIGURATION</th>
<th>STATUS</th>
<th>DEFAULTS</th>
<th>UPDATE</th>
<th>REBOOT</th>
</tr>
</thead>
</table>

Simple Paging Endpoint

<table>
<thead>
<tr>
<th>Basic Settings</th>
<th>BASIC SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Settings</td>
<td>My Zone ID: 11</td>
</tr>
<tr>
<td></td>
<td>My Zone Name: Assembly Hall</td>
</tr>
<tr>
<td></td>
<td>Output Volume: 50 %</td>
</tr>
</tbody>
</table>
2.1.2 Assign Zone Names and IDs with the configuration tool

On startup the tool automatically finds and reports to the devices on the network being part of the Simple Paging Solution.

For our example above the initial screen looks as follows;

The fields in the columns Zone ID and Zone Name are editable. Click on the cell and enter the desired ID or Name. One or more devices can be edited. Modified fields not yet saved are shown in blue.

After the desired modifications are done click ‘Push Config’. The new settings will then be sent to the devices and they will automatically reboot to activate their new settings.

During the update you will see the devices going off-line and then being available again with their new ID and Name.

2.2 Group definitions

After the Zones have gotten individual IDs, Groups can be defined using the individual Zones according to the example above.

After setting the Zone ID and details, the next step is to define groups by adding one or more IDs to it. Groups are defined on Masters and the Gateway in the same way. Groups that are defined on the Gateway will automatically appear on the iDevice when the App is running.

Any Zone can be used in one or more Groups. There is no practical limit to the maximum number of devices in a Group.

2.2.1 Defining Zone Groups with the web UI

On the web UI again on the Configuration tab, but just below where the ID and Name were set previously, the Groups are defined.
Note that the ‘Group 1’ in the default configuration is containing ID=1 and no other Groups are configured.

By clicking on ‘Setup’ on the right hand side of the interface, a page is visible with a matrix of 128 IDs. By clicking on the numbers, that IDs is added or removed to the Group. The IDs marked in green are ID currently assigned to at least one device on the network. At the end of the update to the Group click ‘Apply’ to save the configuration.

After the update the new Groups are visible on the web UI Configuration tab. Below is an illustration of how it looks after the Group configuration from the example has been setup;

2.2.2 Defining Zone Groups with the configuration tool

Using the configuration tool you can either click on the icon “Set Groups” on the right hand side of the line with with desired Master, or you can change to the “Group Setup” tab and there select the desired Master. For this example select the group setup of the Gateway.

The tool switches to the Group Setup view showing a matrix with 128 IDs on the left and current Group members on the right. IDs highlighted in green represent devices with this ID that are present on the network.

Above the matrix is a series of Group tabs, by default only ‘Group 1’ is set. First select the Group to program, by clicking on its tab, and then simply clicking on the IDs in the matrix that should be included in the Group. As IDs are selected the associated Zones are displayed in the members field on the right. This gives an easy overview of the Zones currently available in the Group. If more Zones share the same ID all will be listed.

Double click on the Group tabs and assign a name to the Group. This name will be reported on the iDevice.

To setup the system in the worked example, select first the Gateway, then click on ‘Group 1’ and tick ID=11 in the Matrix.

Then select the second group tab, name it ‘Group 2’ and here click ID=21 and ID=22 in the matrix. The Group Setup on the configuration tool should now look like this;
Click on “Save & Send”. The configuration file will be saved, sent to the device, and the device will reboot to activate the configuration.

To set the same configuration on the PS16, select it from the Master pulldown list on the ‘Group Setup’ tab, and now simply click “Import file” and select the file just saved. After loading, again click “Save & Send”. The PS16 and the Gateway now have the same Groups configured. Each Master can have completely independently groups if required.

### 2.3 Set password on Gateway

The App is freely available on iTunes. It is important to protect the paging system using a password.

This can only be done from the Gateway web UI by going to CONFIGURATION>Advanced Settings>Security

After the password on the Gateway is set, a pop-up box will prompt for the password next time the App is started and connects to the Gateway. The password is stored in the App and only needs to be entered once.
2.4 Paging to a Group

After Groups have been configured, you can now page to these groups just by selecting the respective Group on the Master or the iDevice. In the case of a PS16 Master or an iDevice any combination of groups can be dynamically selected.
3 Using Simple Paging

The Simple Paging solution supports simultaneous announcements from different Masters and at the same time provides a number of features for reporting status and potential issues.

Below is an overview of the actions and notification features;

### 3.1 Making Announcements

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>PS16</th>
<th>PS1</th>
<th>iPhone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Group(s)</td>
<td>Press each of the target Group buttons to select</td>
<td>Press and Hold “A” or “B” button</td>
<td>Tap target Groups</td>
</tr>
<tr>
<td>2</td>
<td>Make Announcement</td>
<td>Press and hold “Page” button (PTT)</td>
<td>Keep button pressed (PTT)</td>
<td>Tap</td>
</tr>
<tr>
<td>3</td>
<td>End Announcement</td>
<td>Release Button</td>
<td>Release Button</td>
<td>Tap “Stop Paging”</td>
</tr>
</tbody>
</table>

### 3.2 System Feedback

<table>
<thead>
<tr>
<th>Meaning</th>
<th>PS16</th>
<th>PS1</th>
<th>iPhone</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Idle</td>
<td>Simple Paging Ready</td>
<td>Solid Green on ‘A’</td>
<td>No Icon</td>
</tr>
<tr>
<td>Group(s) selected</td>
<td>Solid yellow LED on Group key(s)</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Sending Page</td>
<td>Paging</td>
<td>Flashing Red on ‘A’</td>
<td>Paging</td>
</tr>
<tr>
<td>Incoming page</td>
<td>Receiving From</td>
<td>Flashing white on ‘B’ and green on ‘A’</td>
<td>---</td>
</tr>
<tr>
<td>Device(s) in Group Busy</td>
<td>Flashing yellow LED on Group key(s)</td>
<td>Flashing Red on ‘A’</td>
<td></td>
</tr>
<tr>
<td>Device(s) in Group Offline</td>
<td>Flashing yellow LED on Group key(s)</td>
<td>Flashing Red on ‘A’</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 iDevice status information

The iDevices offer a number of features reporting the status of the system.

If a device is busy or off-line within a group, it is possible to identify which device it is by tapping ‘Details’ in the top right corner of the App, and a list of groups will appear.

In the list of groups, those marked with red are either busy or off-line, those marked with green are ready to be paged to.

Tapping on a Group will produce a list of Zones in the Group. The Zones listed are also marked in green or red for easy identification of any issues.

Each Zone is clearly identified in the first line by its Zone Name, followed in line two by the IP address and unique MAC address. The Third line shows the type of device, it’s Zone ID, and its status. It is here the source of the problem can be identified.

Below are examples of Zones in a group being busy:
And off-line;

Happy Paging

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