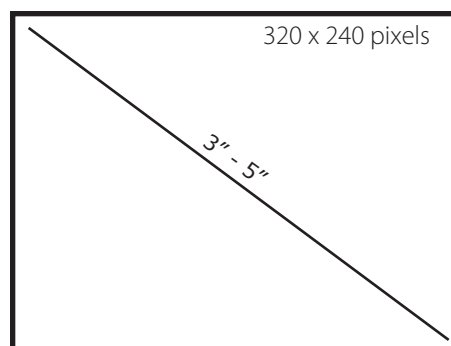


PANDORA[®]

Reference Design for Small-Screen Electronic Devices

updated November 22, 2008

Introduction



This document provides a generic look at the basic elements of the Pandora experience that should be present in a digital home entertainment system with a small screen display interface. Typically these interfaces are in the range of 3-5 inches and are 320 pixels x 240 pixels.

Optional functions that would bring Pandora on a digital home entertainment system with a small screen display interface more in-line with the full experience available at Pandora.com are also highlighted.

This document should not be taken as an exact specification but rather as an general outline of the basics of Pandora. Every device may have its own unique requirements that will be taken into account on a case-by-case basis.

Functionality

Required

Free Trial**

Listener can use Pandora for a limited period of time after registering for the service.

Register

Listener creates a username and password for an account that will maintain information such as, but not limited to, the stations they create and the feedback (thumbs up/down) that they give.

Sign-in

Listener signs in with a username and password that they have previously created.

Password Recovery

Accessed from sign-in screen.

Create a new station

The user must be able to enter keyword information from which a matching artist, song or classical composer will be found and from which a station will be created.

This process must include steps for disambiguating multiple matching results.

List user created stations

Listeners can create up to 100 different stations. This list must be accessible and have the ability for the listener to select and play each station. This list must include "QuickMix". This would play the mix of stations the user created at their account on Pandora.com.

Play music

Music plays based on the selected station. A display of the song, artist and album information for the music playing must be shown.

Rate song (Thumb up or down)

Listener give positive or negative feedback on a song.

About Pandora

**User will have to subscribe at Pandora.com after the free trial period expires

Optional

Rename Station

User can edit the name of each station in her station list.

Delete Station

User can permanently remove a station.

Why is this song playing?

Display description of the criteria for playing the selected song in that particular station and playlist.

Sort station by name

User can order the list of stations alphabetically by the name of the station.

Sort station by date

User can order the list of stations by the date the station was created with the most recently created station at the top of the list.

I'm tired of this song - don't play it for a month

User can choose to not have a song in a playlist not play on that station for a month.

Add more songs or artists to this station

User can add more seed songs or artists to her station.

Invite friends to connect on Pandora

Send emails inviting friends to be connected to you on Pandora.

Friends list

See friends you have connected with on Pandora and their most recent station and bookmarks.

Leave comments

Comment field to leave a comments on a profile.

"Backstage" is a term used internally to refer to a collection of web pages with information about music and Pandora users and their stations. The pages are listed below. Pages with an asterisk (*) are searchable by backstage search:

Listener profile * / My Profile *

Edit Profile

Station definition*

Podcast

Blog

About the Music Genome Project

Generic Pandora Navigation Diagram for Small Screen Devices

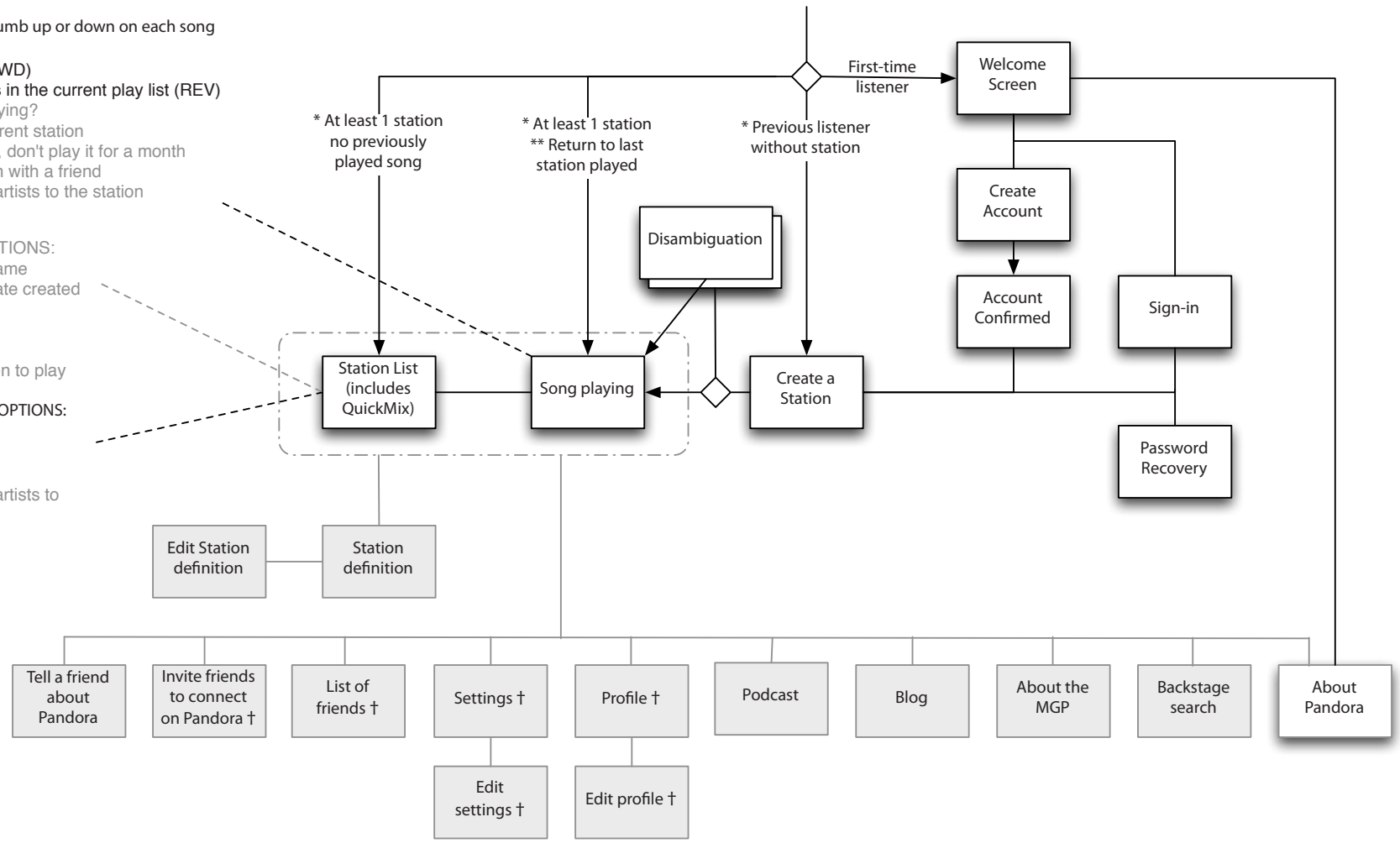


Listener can give a thumb up or down on each song
 Play/Pause song
 Skip to next song (FWD)
 View previous songs in the current play list (REV)
 Why is this song playing?
 Move song to a different station
 I'm tired of this song, don't play it for a month
 Share current station with a friend
 Add more songs or artists to the station

STATION SORT OPTIONS:
 Sort station list by name
 Sort station list by date created
 Show All
 Show only { genre }
 Edit QuickMix
 Select a genre station to play

INDIVIDUAL STATION OPTIONS:
 Play the station
 Rename the station
 Delete the station
 Add more songs or artists to the station

Listener launches Pandora



* Listener who has signed in on the device previously will remain signed-in
 ** Last Station/Song played will begin playing automatically
 † Requires registrations

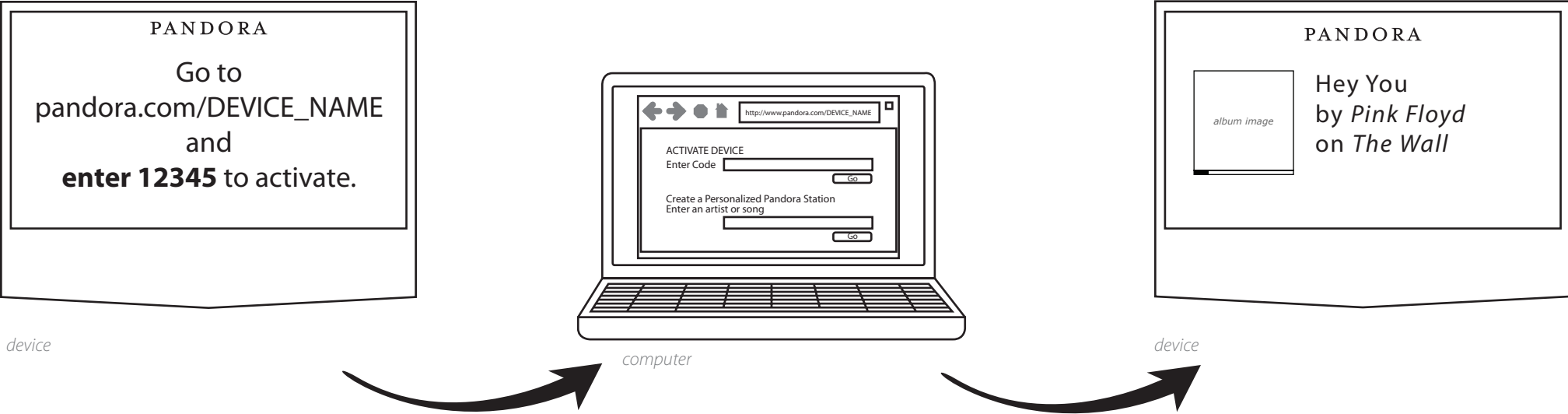


Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

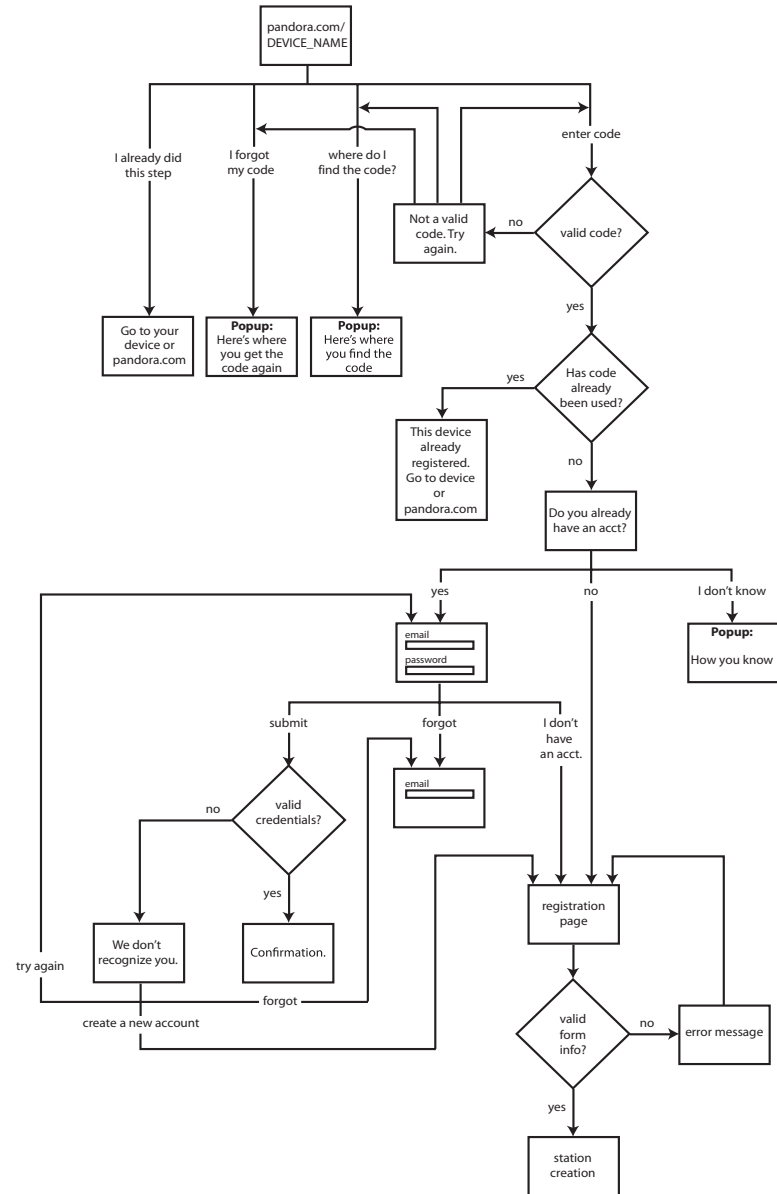
High Level Flow



Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.



1.0

On the device, navigate to Pandora. Find the activation code and set up instructions.

PANDORA

Listen to radio that is personalized
to your tastes.

Go to [pandora.com/DEVICE](#) and
enter 12345 to activate.

Enjoy music you know and discover
music you'll love.

And it's free!

Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

1.1

Set up your DEVICE NAME to use Pandora
step 1 of 3

Please enter the x-digit activation code:

[Where do I find the activation code?](#) (POPS UP A MESSAGE BOX)

[I forgot my code.](#) (POPS UP A MESSAGE BOX)

[I already did this step once before.](#) (GO TO 4.1)

partner branding

picture of device

2.1

Set up your DEVICE NAME to use Pandora
step 2 of 3

Do you already have a Pandora account?

GO TO 3.1 GO TO 3.2

[I don't know if I have an account.](#) (POPS UP A MESSAGE BOX)

partner branding

picture of device

Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.1

Set up your DEVICE NAME to use Pandora
step 3 of 3

Please enter your Pandora account info:
We didn't recognize your email or password.

Email

Password

[Link my Pandora account to my DEVICE NAME](#)

GO TO 3.1.3

[I forgot my password.](#) (GO TO 3.1.1)

[I don't have a Pandora account.](#) (GO TO 3.2)

partner branding

picture of device

3.1.1

Get a password reminder.

Please enter the email you used when you set up your pandora account:

Email

[Email my password](#)

[I forgot which email I used.](#) (POPS UP A MESSAGE BOX, with a link to 3.2)

partner branding

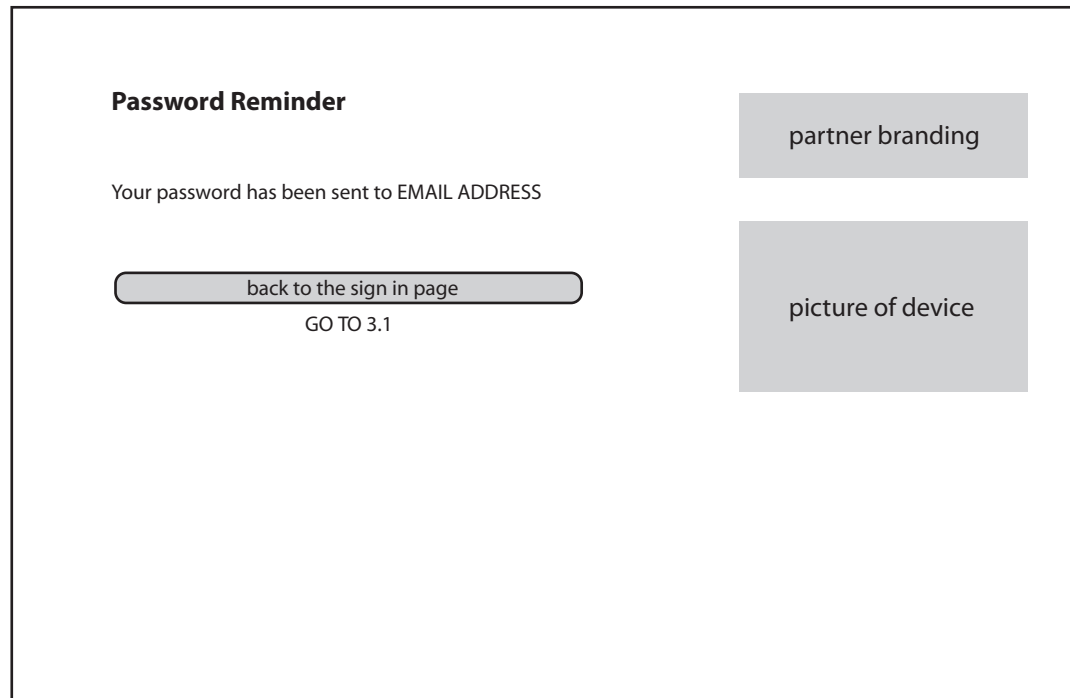
picture of device

Free-To-Devices

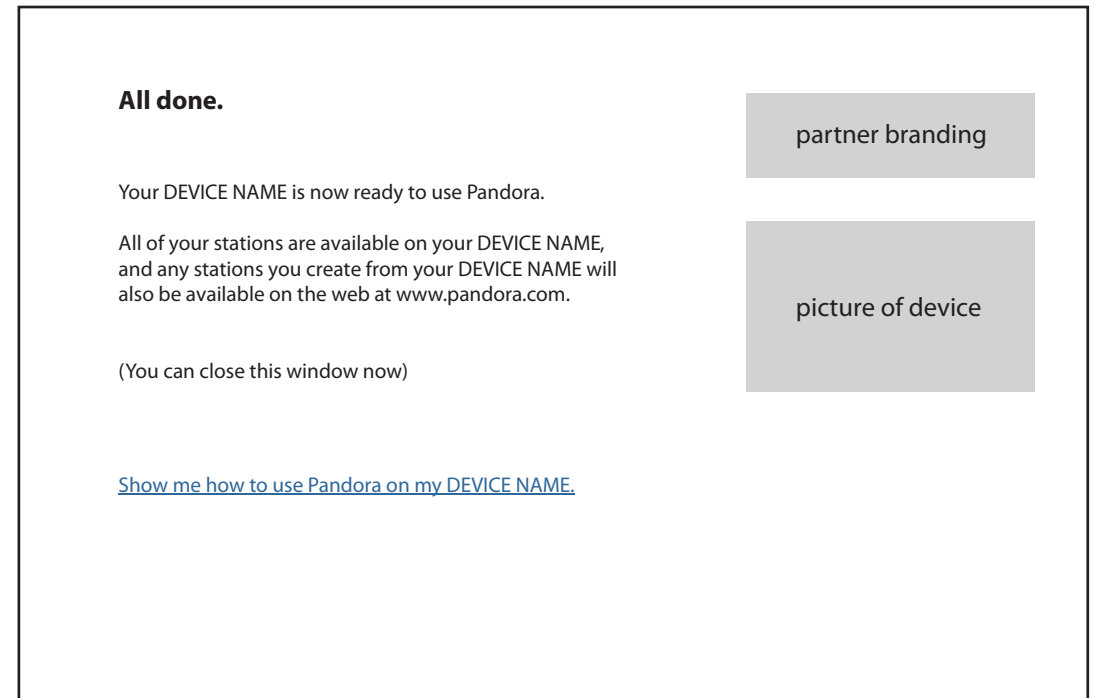
Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.1.2



3.1.3



Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.2

Set up your DEVICE NAME to use Pandora step 2 of 3

Please create a Pandora account. It's FREE:
Please enter all information

Email

Password

Confirm Password

US Zip Code

Birth Year

Gender

Opt-in language goes here.

I have read and agree to the [Terms of Use](#)

[Why do we need this information?](#) (POPS UP A MESSAGE BOX)

partner branding

picture of device

3.3 (initial condition)

Set up your DEVICE NAME to use Pandora step 3 of 3

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

1

2

3

4

5

[I don't want to do this now.](#) (POPS UP A MESSAGE BOX)

[Can I create stations on my DEVICE NAME?](#) (POPS UP A MESSAGE BOX)

partner branding

picture of device

Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.3.1 (auto-complete)

Set up your DEVICE NAME to use Pandora
step 3 of 3

partner branding

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

1 | blues|

- 2 | Chicago Blues
- 3 | Delta Blues
- 4 | Early Blues
- 5 | Electric Blues
- 6 | Texas Blues
- 7 | Blue by Joni Mitchell and the Unforgettable Joni Band
- 8 | Blue Man Group
- 9 | Nike Hot Blues (Sponsored)

[I don't want to do this now.](#)

[Can I create stations on my DEVICE NAME?](#)

picture of device

3.3.2 (disambiguation)

Set up your DEVICE NAME to use Pandora
step 3 of 3

partner branding

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

We found several results for **blues**:

- [Chicago Blues](#)
- [Delta Blues](#)
- [Early Blues](#)
- [Electric Blues](#)
- [Texas Blues](#)
- [Blue by Joni Mitchell and the Unforgettable Joni Band](#)
- [Blue Man Group](#)
- [Nike Hot Blues \(Sponsored\)](#)

<< 1 of 3 >>

picture of device

Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.3.3 (failed search)

Set up your DEVICE NAME to use Pandora
step 3 of 3

partner branding

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

I'm sorry, we couldn't find anything matching "blues"

try another artist, song, or composer

5

[I don't want to do this now.](#)

[Can I create stations on my DEVICE NAME?](#)

picture of device

3.3.4 (successfully created first station)

Set up your DEVICE NAME to use Pandora
step 3 of 3

partner branding

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

1 Chicago Blues Radio

2

3

4

5

I'm done creating stations

GO TO 3.3.6

[Can I come back and create more stations later?](#)

[Can I create stations on my DEVICE NAME?](#)

picture of device

Free-To-Devices

Activating Pandora on the device

This is an optional process. The device may simply have a username and password form for the user to enter an existing Pandora username and password.

3.3.5 (created 5 stations)

Set up your DEVICE NAME to use Pandora
step 3 of 3

Create some custom stations:

Type in the name of your favorite song, artist, or composer, and we'll create a radio station featuring that music and more like it.

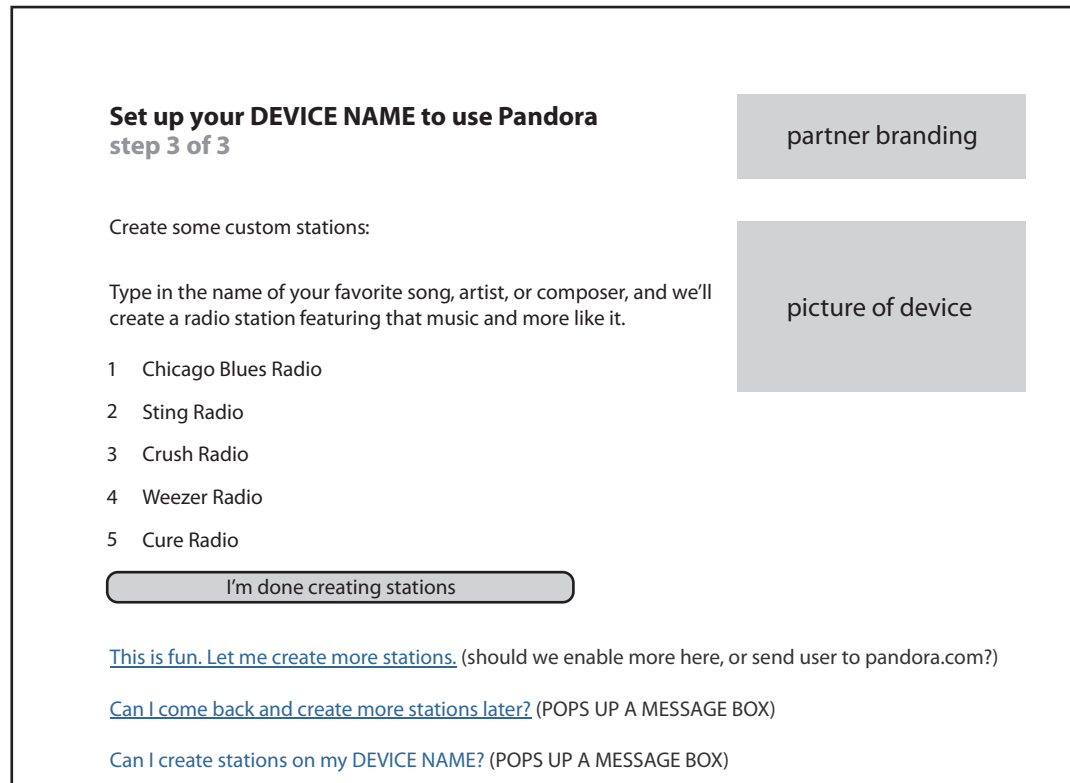
- 1 Chicago Blues Radio
- 2 Sting Radio
- 3 Crush Radio
- 4 Weezer Radio
- 5 Cure Radio

I'm done creating stations

[This is fun. Let me create more stations.](#) (should we enable more here, or send user to pandora.com?)

[Can I come back and create more stations later?](#) (POPS UP A MESSAGE BOX)

[Can I create stations on my DEVICE NAME?](#) (POPS UP A MESSAGE BOX)



3.3.6

All done.

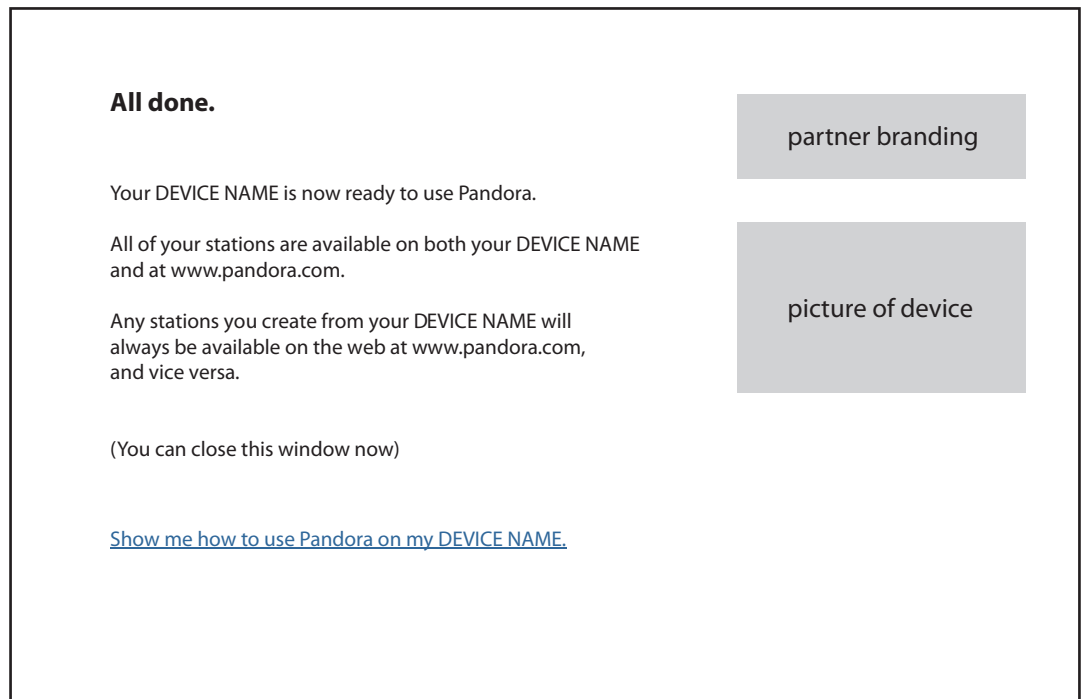
Your DEVICE NAME is now ready to use Pandora.

All of your stations are available on both your DEVICE NAME and at www.pandora.com.

Any stations you create from your DEVICE NAME will always be available on the web at www.pandora.com, and vice versa.

(You can close this window now)

[Show me how to use Pandora on my DEVICE NAME.](#)

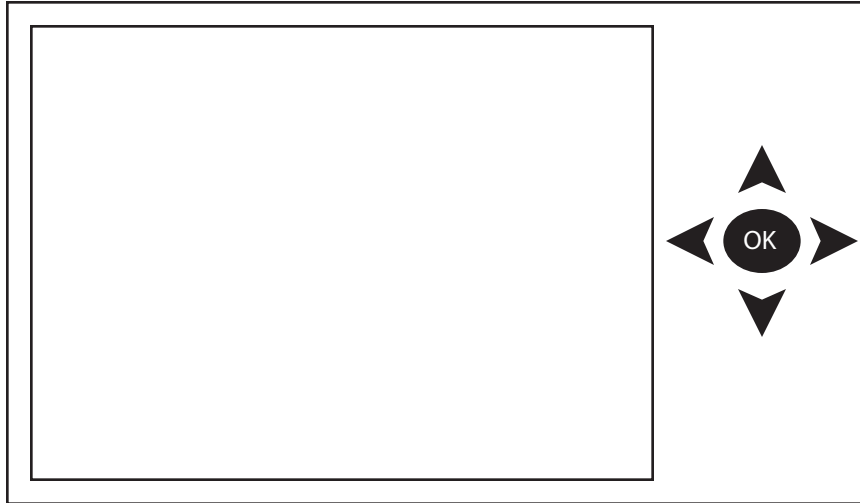


About the Interface Design Wireframes

About this document

This documents shows genericized wireframe layouts. Details of the implementation of the interface and interaction model must be worked out on a case-by-case basis.

The following wireframe layouts describe the basic information that should be present for each type of functionality. There is some room to expand or contract the layout, depending on the size and resolution of the display.



For the purpose of this document, we assume a display screen with an 5-way button control that can be used to scroll up or down or side to side and select within a screen. Navigation in these wireframes is assumed to happen using this type of input device.

This can be adapted for touch screen devices or devices with a keypad as needed.

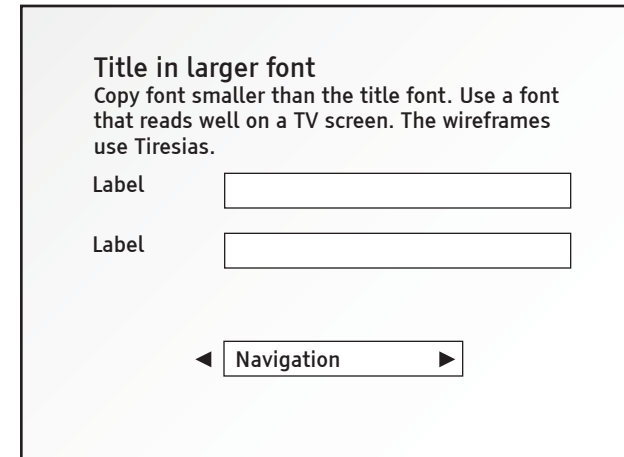
Additional inputs shown below the screen wireframe are hard buttons on an input device. These are used only in a very limited way.

Generic layout

Here are some basic principles to follow for the layout of content and controls.

Lists or fields should be centered and arranged vertically to allow for easy navigation using the up and down arrows on the 5-way control and to allow for easy reading on a small screen.

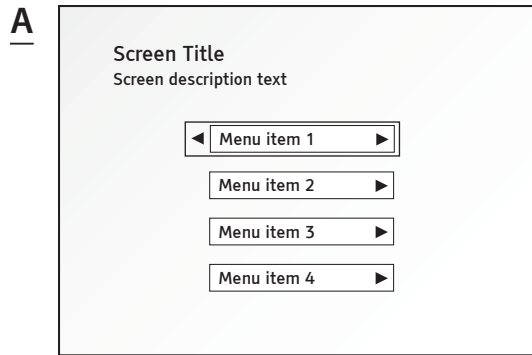
The buttons on screen should be arranged so that the most important button, or the button most likely to be used, is at the top of the hierarchy.



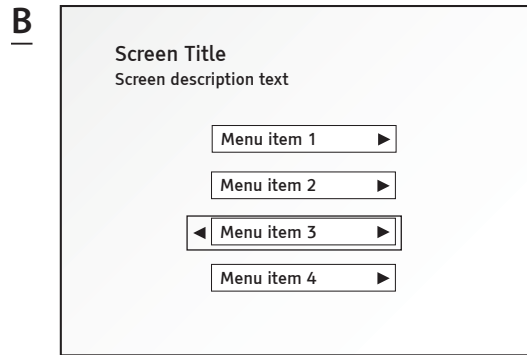
Exiting Pandora can be accomplished if there is a dedicated hardware button on the remote control, or by changing the channel, or by some other hardware button, if applicable.

Basic Navigation

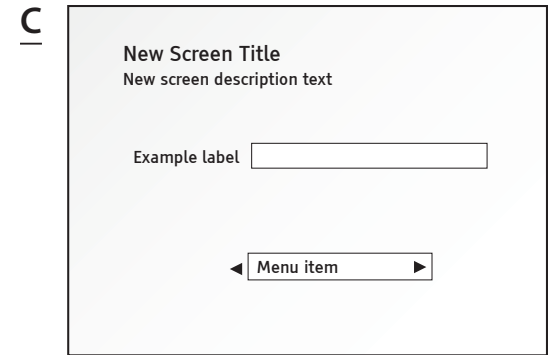
The 5-way control moves through a menu and selects an item.
 Use the up and down arrow buttons to move through the vertical list.
 Use the forward arrow button or the Select/OK button to select the menu item.
 Use the back arrow to return to the previous screen (when applicable).



Default - for most screens, the first item will be highlighted automatically. Exception - Song playing screen (see page 9)
 A back arrow (if applicable, indicating a previous screen in the flow) will be shown to the left of the menu item when it is highlighted.



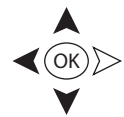
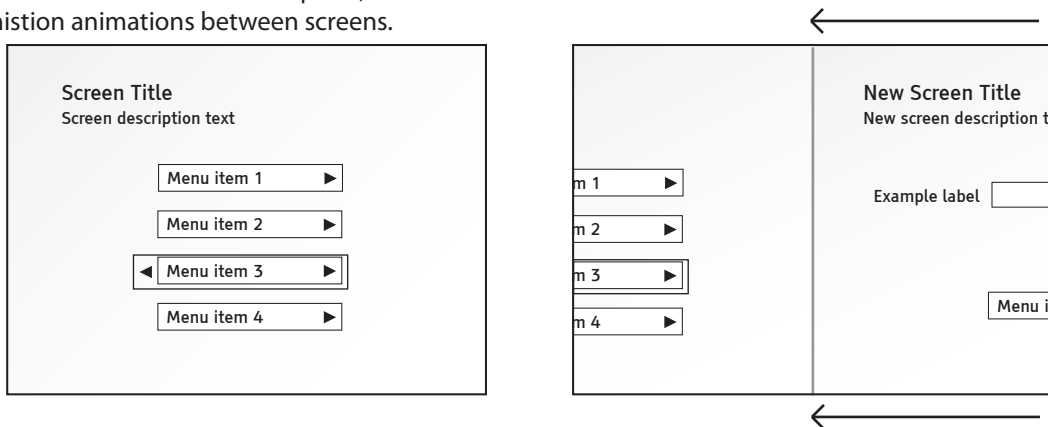
Use the down arrow button to move down through the list - the active menu item becomes highlighted.
 Pressing the Select/OK button or forward arrow button will select the menu item.



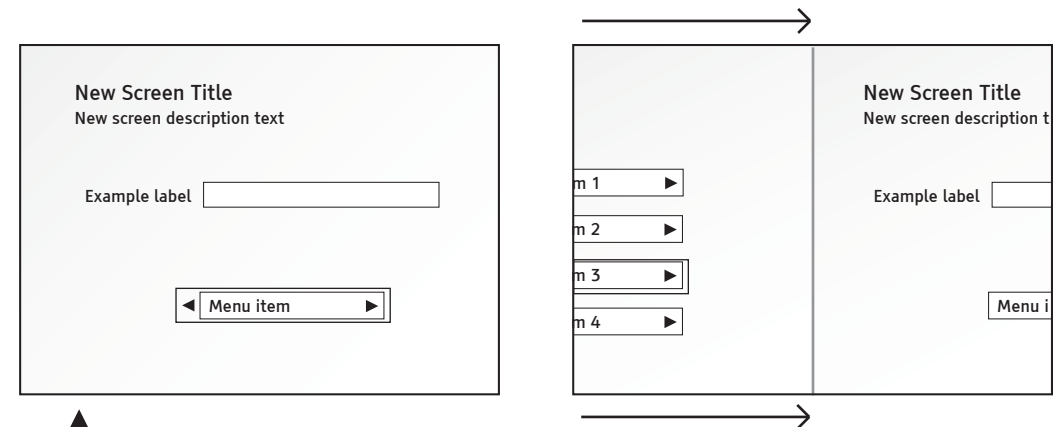
If a screen is opened that has a form field, pressing any of the 5-way buttons will place a cursor in the first (top) field and make it active for entry.
 For most forms there should be a persistent arrow on the primary button, even when it isn't highlighted. Pressing the back arrow when this item is highlighted will return to the previous screen.

Transition Animation

In order to maintain a sense of place, there are transition animations between screens.



Clicking on the Select/OK button or forward arrow button will select the menu item. In the transition animation, the next screen slides in from the right while the current screen slides out to the left.



Clicking on the back arrow button will return to the previous screen in the flow. In the transition animation, the previous screen slides in from the left while the current screen slides out to the right.

Required Functionality

Welcome Screen

The welcome screen should only be seen on a first-time visit or for conditions in which it appears to the system that it is a first-time visit.

For subsequent visits, the system should return the listener to one of the following areas

- 1) The last station played (start song playing on that station)
- 2) The station list (if no information about the last station played is available)
- 3) Create a station (if there are no stations in the station list)



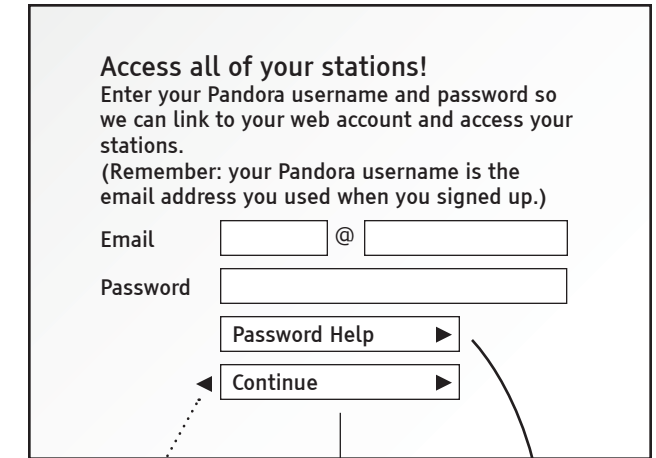
Create an account



Go to Welcome Screen

Create account, automatically sign-in user and go to station creation

Sign - In



Go to Welcome Screen

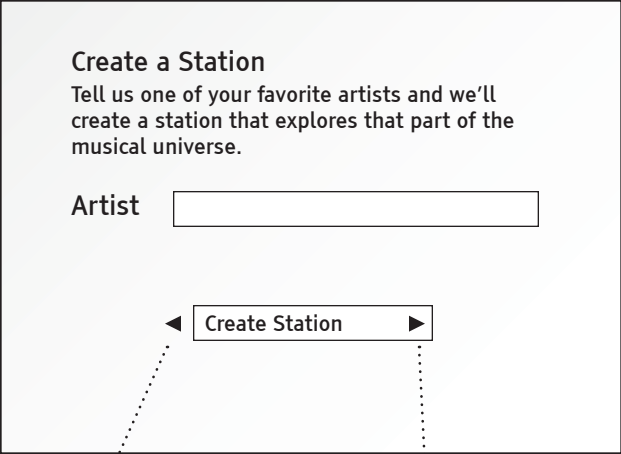
Submit the information entered



Note: The system should remember the sign-in information so the sign-in process will not be repeated on subsequent visits.

Required Functionality

Create a new station

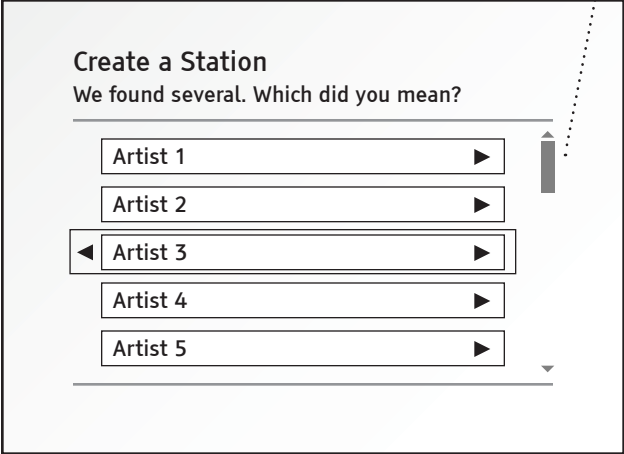


Return to:
song playing if song was playing
when create station was invoked
or
station list if no song was playing
when create station was invoked

Create station and go to
"song playing" if there is an
exact match. Otherwise go
to disambiguation.

Create a new station: Disambiguation

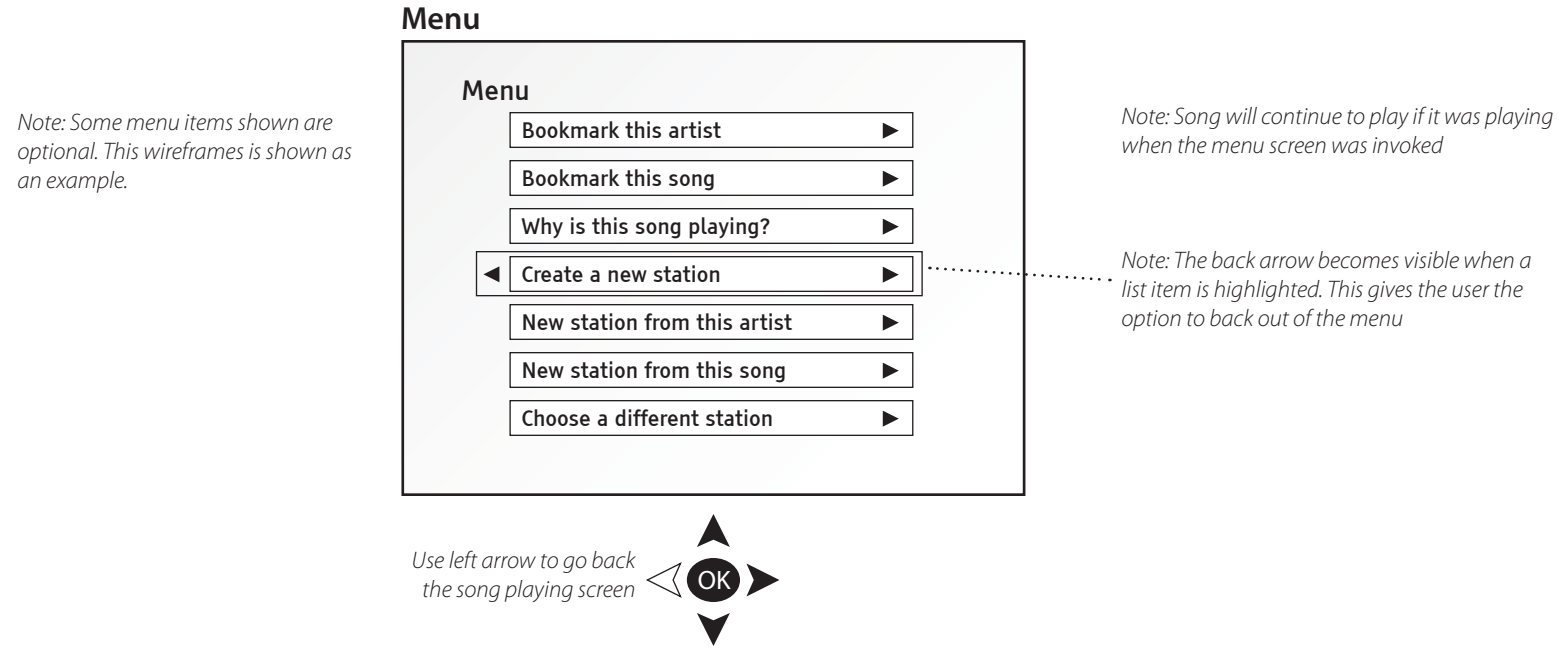
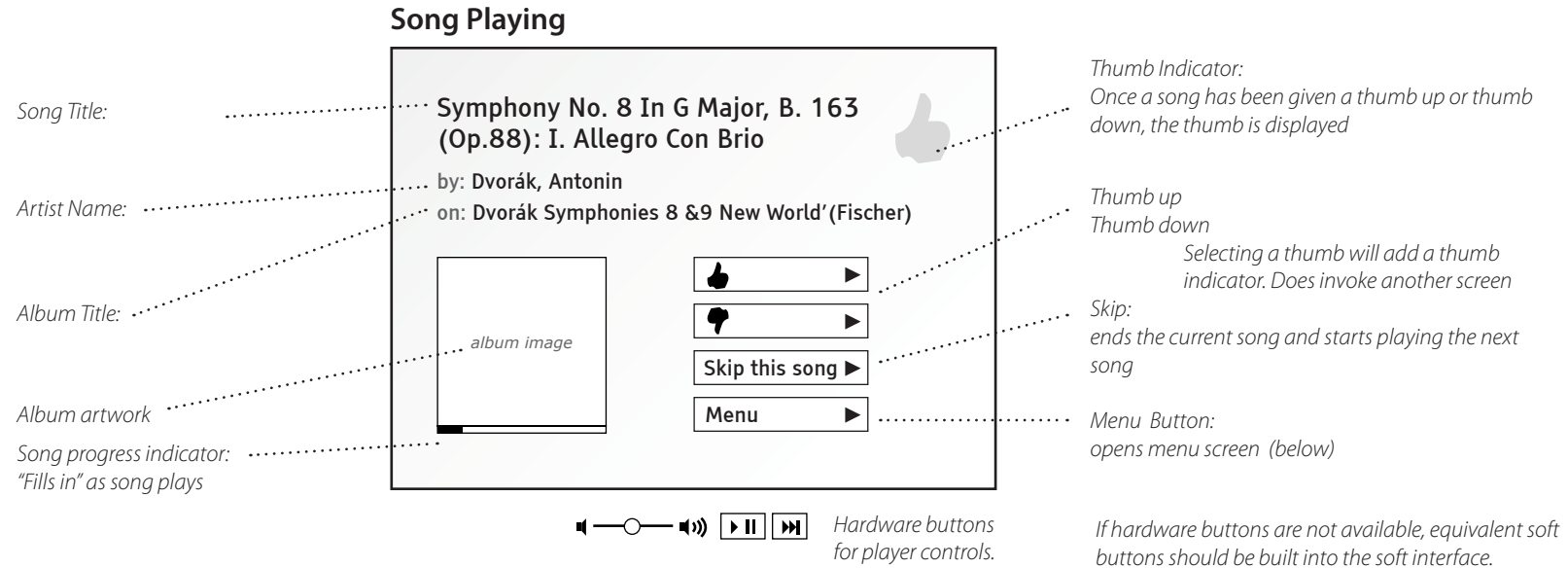
list scroll indicator



Note: The back arrow becomes visible when a list item is highlighted. This gives the user the option to back out of disambiguation

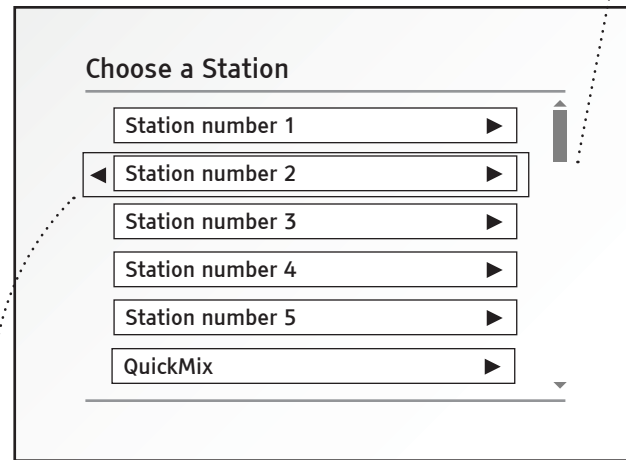
If multiple artists match the query entered by the user, a list of the artists must be presented and the user must be able to select an item in the list.

Example Screen for Song Playing

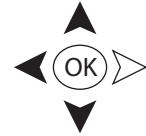


Station List

Basic station list screen



list scroll indicator



For basic station list functionality that does not support functions such as deleting or renaming a station, both the Select/OK and the forward arrow will select the station. The up and down arrows will always be used to move the highlight up and down through the list

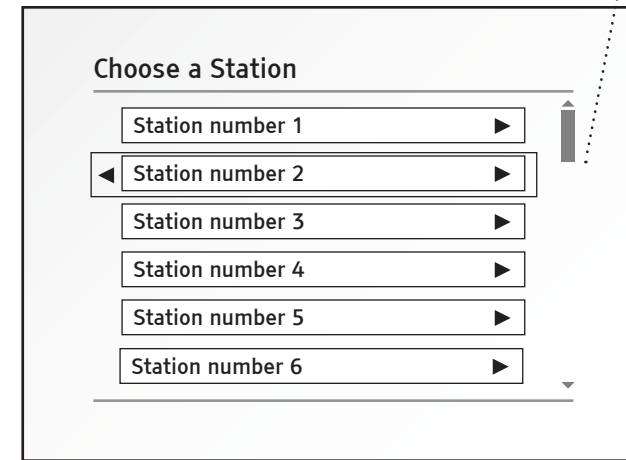
The back arrow becomes visible when a list item is highlighted. This gives the user the option to back out of disambiguation

Only show the scroll indicator if there more stations than can be shown on the screen.

If the first station in the list is highlighted and the user clicks the up arrow button, the list should jump to the end and highlight the last station in the list.

QuickMix is always the last station in the list. Quickmix can be edited from the Pandora Web site.

Optional station list screen functions



list scroll indicator

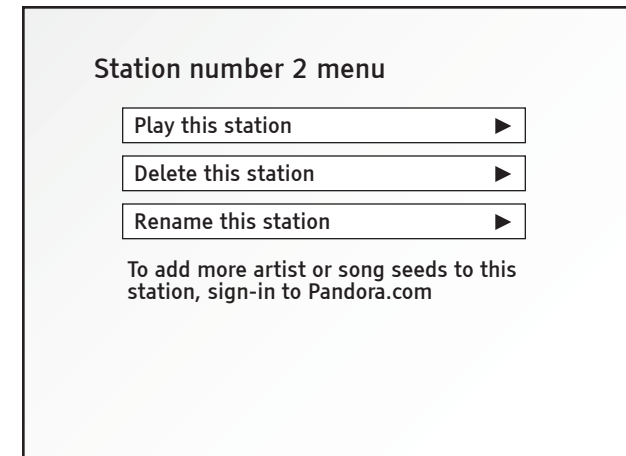


For systems that support editing individual stations, the Select/OK button will select the highlighted station for play and go to the song playing screen.



For systems that support editing individual stations, the forward arrow will open the menu for the highlighted station. The menu may include (but is not limited to) items for deleting the station, or renaming the station.

Optional individual station menu



Examples of Additional Screens

Why is this song playing?

Why is this song playing?

Based on what you've told us so far, we're playing this track because it features romantic stylings, piano, tonal harmony a walking pace tempo and well-known composer.

Read more online at Pandora.com

◀ I'm done here

Return to song playing screen. Music will continue playing on this screen if it was opened while a song was playing.

About Pandora

About Pandora

{ display a shorter version of the copy found at Pandora.com }

◀ I'm done here

Return to song playing screen or Welcome screen. Music will continue playing on this screen if it was opened while a song was playing.