pixound App for iPhone & iPad

User Guide

version 2.0.3

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Up Front

Congratulations on choosing to play with the Pixound App for iPhone. We made earlier versions of Pixound that used a mouse to play pictures and videos, and that was fun, but nothing comes close to the freedom of playing directly with your fingers. This brings Pixound one step closer to being a full-blown musical instrument that we hope some day will lead to virtuosos of a new music where color, light and music intertwine in new ways to create rich, emotionally satisfying experiences that were physically impossible before.

Pixound is a tool and a deep toy. It's main purpose is simply to delight but it can be used for serious music as well. Pixound translates color into music. Think of it as a Red, Green and Blue “trio” (x2 when autoplay and finger play are combined) that you control by touching colors. In general, brighter shades produce higher notes and darker shades go lower. Because, there are millions of colors, there are millions of combinations of instruments and notes!

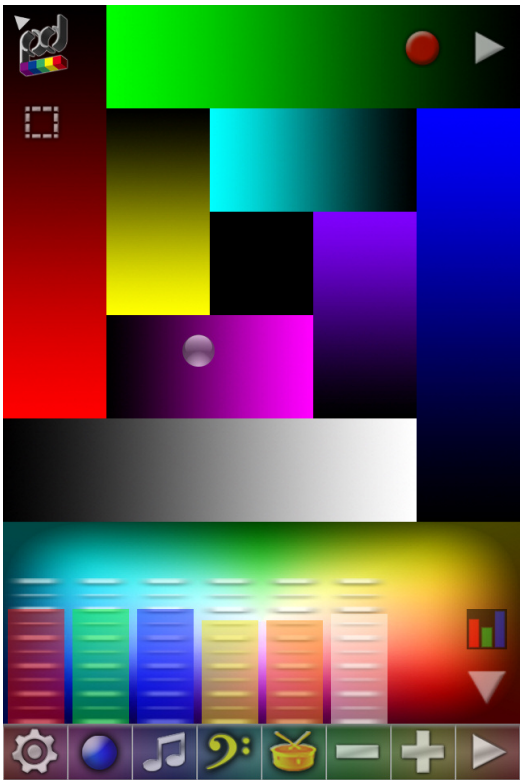
Black and white are reserved as "rest" colors and are thus silent.

Don’t be overwhelmed by all the settings of Pixound. These are there for you to eventually explore as you become more familiar. We strongly recommend that you start with the Presets nad listen to some of the possibilities. You can then mess with sounds, scales and all sorts of things and save your own presets.

PLEASE USE HEADPHONES OR STEREO SPEAKERS!
You will miss most of what Pixound does through the tiny iPhone or iPad speakers, especially the lower frequencies.

Free vs. Paid App

If you already purchased version 1 then the app is automatically unlocked. If you are just getting it, you can unlock full functionality for the old price plus buy some other stuff like new presets.



The Pixound Home Screen was designed so you can hear the three voices of Red, green and Blue independently as well as in pure combinations.

New to Version 2
Recording
Preset Sharing
Improved preset management
Play along mode (6 voices)
Ability to play autoplay and finger on separate beat values
Unlock new functions and presets
Groove controls
Magnifier
More songs and rhythms
Better timing

Playing Pixound

Pixound is played in two different ways which you can combine:

Move finger over picture in regular mode. You can leave your finger in contact or jump around to different areas to break up the music (add rests).

Using Autoplay which can be adjusted in the Pixound Settings panel and using your finger to change the area

Lift finger to stop playing in regular mode. While in Autoplay mode, use finger to adjust autoplay area. Quick touch moves the area or drag to readjust. You can also combine autoplay with finger play

by tapping the  icon and it changes to  .

The Bottom Tool Bar

Brings up the **Settings Controller**. Touch and slide up (see right) to toggle the Tempo Controller. To use **Tempo Controller**, touch tempo display and slide up or down to adjust. You can also tap on the tempo number in rhythm (quarter notes) to set the **Beats per Minute**.

Toggles **Autoplay** on/off

Toggles **Song Progression** on/off. Touch and slide up to toggle single-shot or song loop mode. When in single-shot mode, play will stop at end of song.

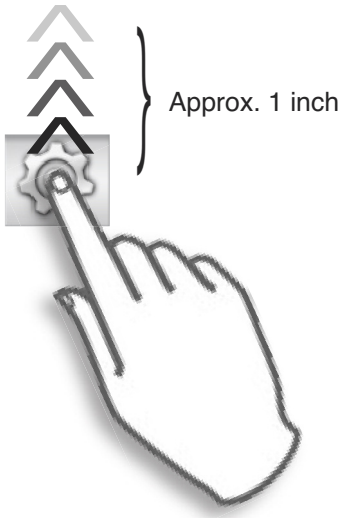
Toggles **Bass** on/off

Toggles **Drums** on/off

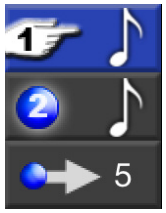
Slows down **Beat Value** (makes longer); or slide finger (see right) to reassign buttons to new function.

Speeds up **Beat Value** (makes shorter); or slide finger (see right) to reassign buttons to new function.

Toggles between **Pause** and **Play**



To save interface space, we have some buttons that do double duty. To access the secondary function, touch the button and swipe your finger approximately 1 inch in a quick flicking gesture.



Control Finger Beat Value

Control Autoplay Beat Value

Control Autoplay Jump Value

Sliding up on the + and – buttons brings up a small menu selector for what the buttons control

Other Home Screen Icons

Shows/Hides the Piano Keyboard or Mixer. Touch and slide upward to switch modes between transposer and mixer.

Shows/Hides Toolbar. This is useful to expose the full image for playing.

Brings up Preset Manager where you can save, share, replace, delete or select presets to use. Presets represent settings such as instruments, song progressions, reverb, etc.

Starts and stops recording. When recording is active the red dot will change to a flashing square. To play back your recording, tap the playback arrow.

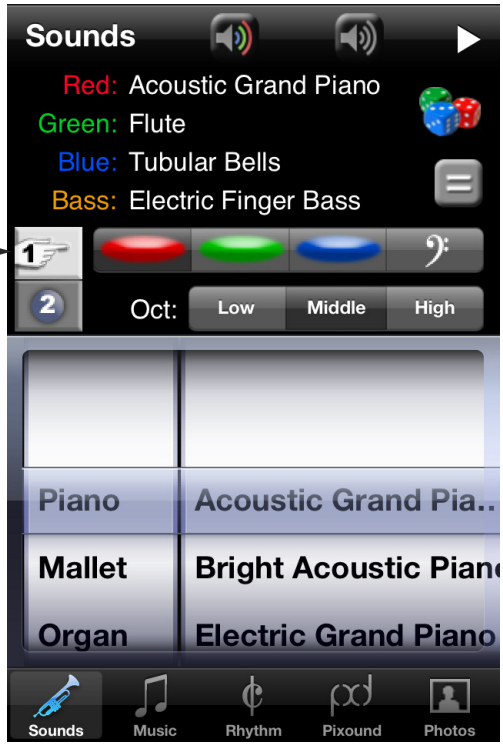
When autoplay is active one of these two icons will appear. When the square is visible you can change the autoplay area. When the note is visible, you can play along independently with the autoplay. Tap the icon to switch between modes.

Settings Controller

All of Pixound's settings for music, rhythm, autoplay, effects, etc. are controlled via the 5 tabs of the Setting Controller. If the controls are locked, they can be unlocked for the minimal price Apple allows.

To return to play at any time, touch the  icon in the upper right of the controller.

TIP: It is fun to get an autoplay and/or drums and bass going before adjusting settings. That way you can hear changes you make in real-time.



Sounds Settings Panel

Use this panel to select the main sounds for the four voices: Red, Green, Blue and Bass. Current sound choices are displayed up top.

Tap the  icon to affect the finger play voices and the  icon to affect the autoplay voices. Then select the color you want to change sound for: Red, Green, Blue or Bass.

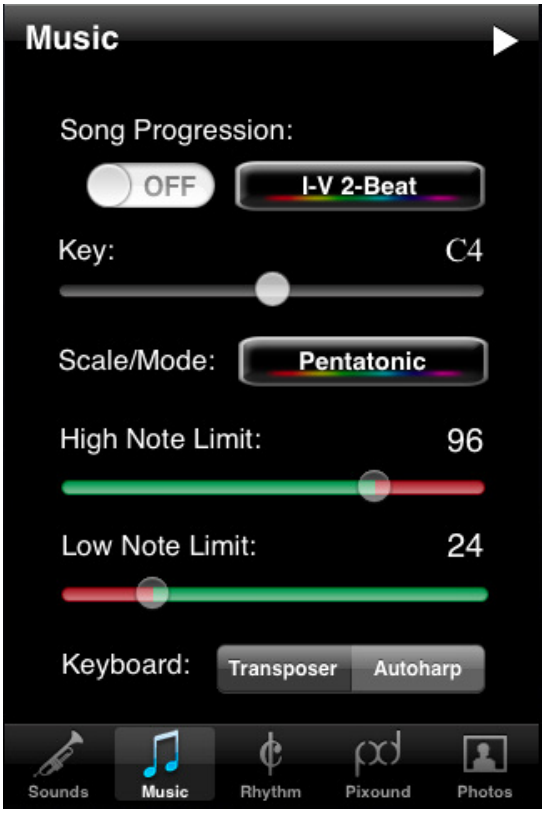
Then select the desired choice by scrolling and then touching a selection. Sound categories are on the left and the full list on the right. You know it is selected when it appears above in the list. Use Low, Middle and High to change the relative octave of a voice.

Tap to randomly choose instruments.

Use to set them all to the same instrument.

Tap these icons to hear the current sound or to hear all sounds together respectively.

Music Settings Panel

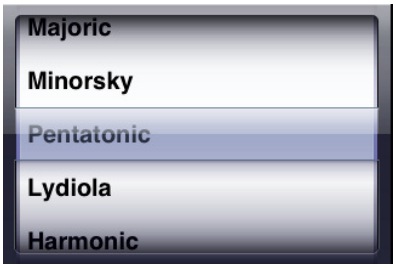


Use this panel to control various important musical settings including:

Song Progression: choose from available chord progressions.

Some of these progressions will cause the current scale or mode and key to change on a specific beat, others will keep the current scale or mode and just change key. Turn on or off with switch. Some song progressions are merely "transposers" that change the key of the scale you've selected. For example, I-V 2 Beat will change the key from the Root to the Fifth every 2 beats. Others have exact chords they want to play so your selected Mode will be changed to the current mode that is playing (though it won't update in this panel until you leave and come back).

Scale/Mode: choose from over 70 available tonal modalities from



Chromatic which has all 12 Western notes to Pentatonic for a more Eastern sound to everything in between. Modes can greatly effect the feel of the music from happy to sad to bizarre and all sorts of other things.

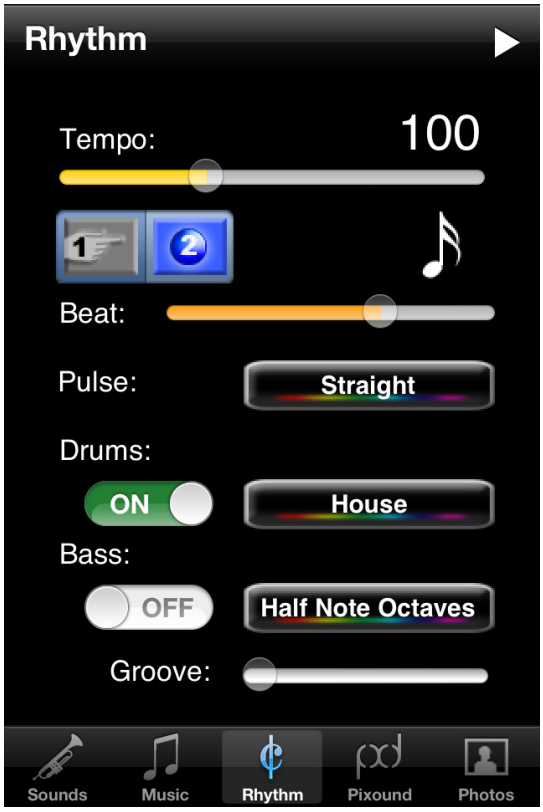
Key: use this slider to adjust the key and octave the music plays in. When in Song Play Mode, this transposes the whole song to another key but the internal chords of the song work as expected. This can also be done the transparent piano keyboard.

High and Low Note Limiters: use these sliders to limit how high or low you want pixound to play. Notes above the limit are adjusted by octaves until they are inside the limit. The Bass voice is not effected by this setting.

Keyboard: Normally, keep the keyboard on Transposer which simply changes the current key of what is playing. Using Autoharp mode cn produce some interesting effects but you really need to use autoplay and turn song mode off to appreciate it. If you are using this mode and you don't hear any sound it's because you have no piano keys depressed or locked on (slide to lock).

TIP: To dismiss a scrolling picker in Pixound, just touch somewhere outside the scroller.

Rhythm Settings Panel



Use this panel to control Tempo, Beat Values, Pulse, Bass and Drums. Rhythm Settings include:

Tempo: Set the Beats Per Minute (BPM) using this slider or type it into the number field by touching the number.

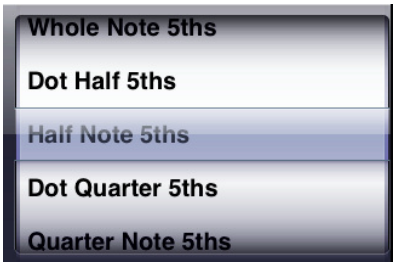
Part Selectors: Use this to select whether you are controlling Beat and Pulse for the Finger-play voices or the Auto-play voices.

Beat: This determines how long each note is held before pixound tries to play another note (beat value). This is independent of the Tempo.

Pulse: This takes the current beat value and divides it different ways to create straight, swing (triplet feel in pairs), shuffle (dotted) and pure triplet timing. Mystery Presets (unlock Preset Pack 2) also use all sorts of other pulse templates that can make playing more melodic.

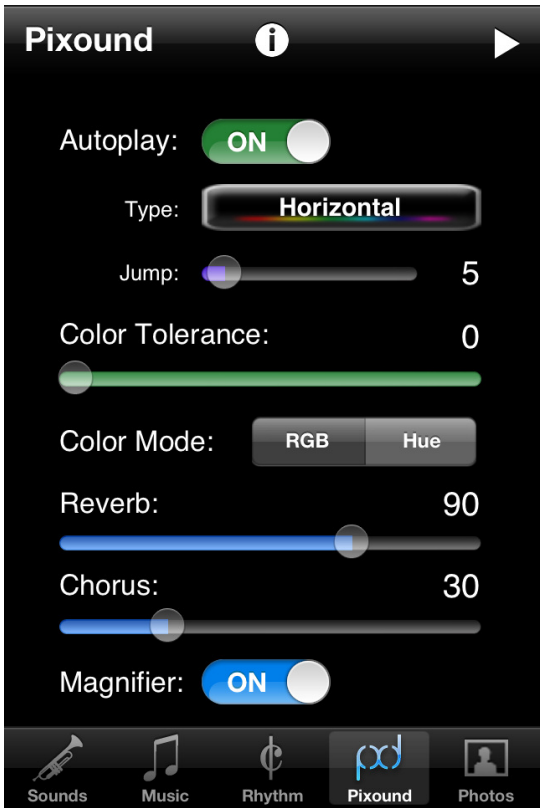
Drums: Select from numerous stock drum patterns. Since you may already have music playing when you select a new drum beat, you may need to stop play and restart to synchronize bass and progression. Note that some drum beats may not work on some progressions due to differing time signatures but the results can also be interesting so experiment.

Bass: Select from numerous stock bass patterns. These patterns may behave differently depending on if certain songs are playing. Some progressions have their own bass notes (relative to the current key) and in that case, Pixound will try to use the rhythm of the bass pattern with the song's chosen note.



Groove: Adjust this slider further to the right to increase the "swing" factor of your eighth and sixteenth notes. This is a multiplier that lets you create tons of new feels from existing drum and bass patterns.

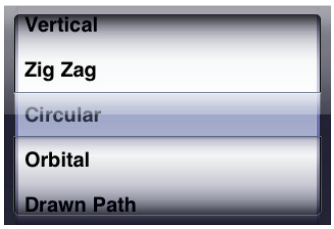
Pixound Settings Panel



Use this panel to control Autoplay settings, Color Tolerance and Effects or to access Credits and Instructions. These settings include:

Autoplay: When autoplay is on, a small transparent "ball" will move around and play instead of your finger. When autoplay is on, your finger is used to drag and change the area or path or to move an autoplay area.

Autoplay Type:



Horizontal: moves from left to right and back to left in current rectangle (drag select in image)
Vertical: moves from top to bottom and back to top
Zigzag: moves from left to right back and forth
Circular: moves in an oval shape around current selected area
Orbital: moves in circular orbit around finger
Drawn path: follows any path that you draw with your finger, no matter how long you make it.
Tilt: uses the accelerometer to measure the iPhone or iPad tilt.
Bounce: Use your finger to bounce the autoplay off the sides like a ball, slowly or quickly
Random: selects random points in the current rectangle
Figure 8: moves in a figure 8 (infinity lemniscate)

Autoplay Jump: Use this to control how far the autoplay stylus moves on each beat value. In circular mode, it jumps further around the oval the higher the numbers. Use + and - to adjust jump while playing.

Color Tolerance: This controls how pixound reacts to "new " colors. When tolerance is high, it takes a more drastic color change to cause new musical notes to trigger so it has the effect of sustaining notes more often. Presets may change the tolerance in ways that can't be adjusted manually.

Color Mode: This controls how pixound interprets color information. When in RGB Mode, Red, Green and Blue voices interact according to relative brightness of these components. In Hue Mode pixound uses the Hue to control the notes so it interprets the color spectrum in a pure way where Red is low and Violet is high. The music produced in Hue Mode tends to be simpler and RGB is best in most situations but it really depends on the image.

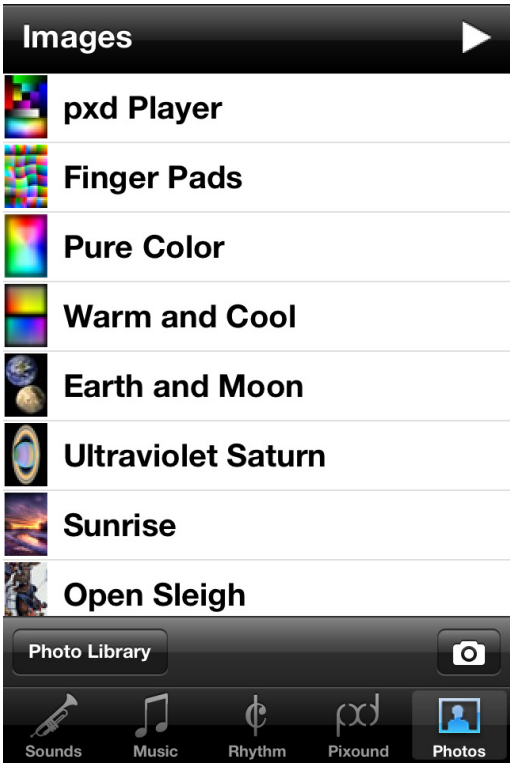
Reverb and Chorus: Use these sliders to add standard effects to the RGB and Bass voices (drums too for Reverb).

Magnifier: Switches on and off the Magnifier function which will show you what's under your finger on the main screen.

Touching this icon in the top nav bar brings up the "About" panel where you can see credits or in-app instructions. Touch outside the scrolling area to dismiss.

Image Selection Panel

Use this panel to select one of the stock gallery images or select a photo from your **Photo Library** or Take a Picture and play it immediately by tapping the Camera Icon (which appears if you have a camera). You can also go to your normal camera and take pictures that can be played in pixound by using the Photo Library option. Pictures taken inside of Pixound are not stored in your Photo Library but you can save it and share it in the Presets Panel.

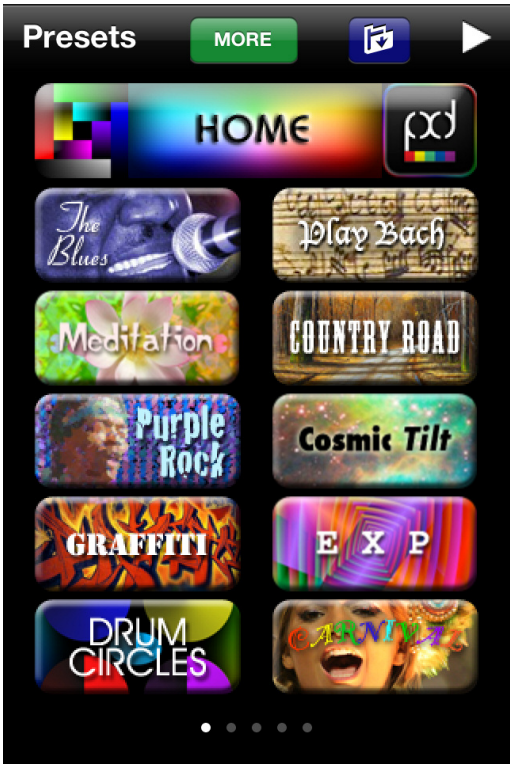


Using Presets

Tapping the Presets icon on the home screen will take you to the Presets Panel. Here you can select from the stock presets provided, save, replace and delete other presets you have made or select additional Presets you've unlocked with an In App Purchase. Stock and Purchased Presets offer unique settings that can't always be controlled via normal Settings Controls, including alternate sounds, songs, drums, pulses, effects and many other interesting parameters. Pixound has far more parameters than what is visible and we didn't want to overwhelm users with more settings so presets made sense! Feel free to alter preset settings and make your own presets from ours.

Access any additional presets by swiping to page over to the presets you want. The page indicator at the bottom lets you know where you are. Any preset that has a red circle on it includes a recording.

The large Home button at the top of Presets has 3 areas that will allow you to change scale quickly. The left square puts you in Chromatic, the middle section in Ionian (Do re mi) and the right Square Pentatonic. If you are in Song Mode, these scales will usually not apply.



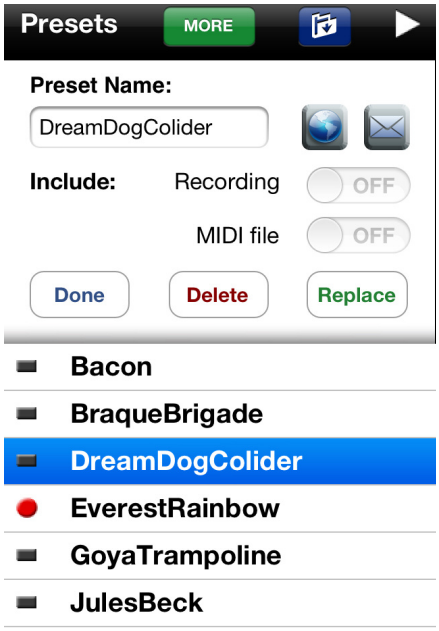
Custom User Presets

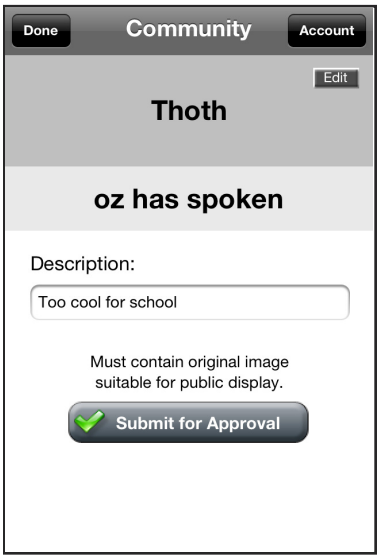
Managing and Sharing Presets

To Manage new or old Presets, tap on the Folder icon on the top bar. You can replace a Preset with your current settings by tapping on an existing Preset in the list. Once a Preset is selected you can also Delete it. Stock and Paid presets can't be deleted.

To Share a preset with a friend or back it up to yourself, first select a preset or name the one you have going and tap the Mail icon. The preset will be attached to an email you can edit. Pixound users can then tap the link in their email to get it.

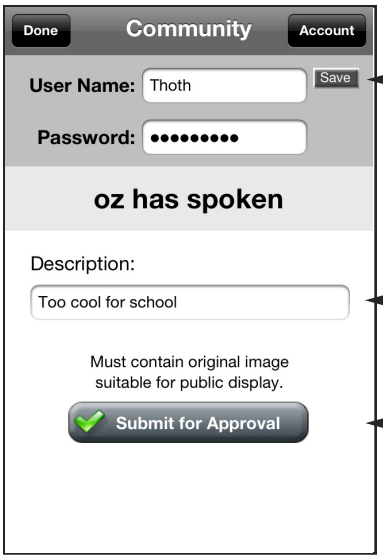
To Share a preset with the Pixound Community, you first need to create an account. Do this by first going to the Share Screen:





1. Tap Account

2. Fill in the infro-mation and tap Go. Then go back to “Share”

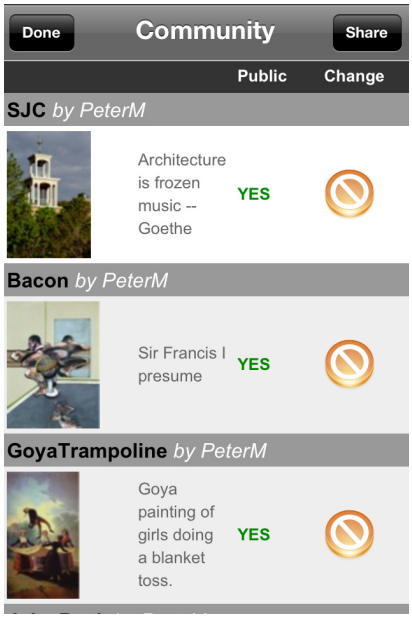


3. Tap Edit and enter your user name and password and tap Save. After this you don’t need to repeat 1, 2 and 3.

4. Fill in brief description

5. Submit for Approval

You will be approved when your preset is deemed not to have offensive materials (not suitable for public display). Vlagrant violation of this will result in banning.



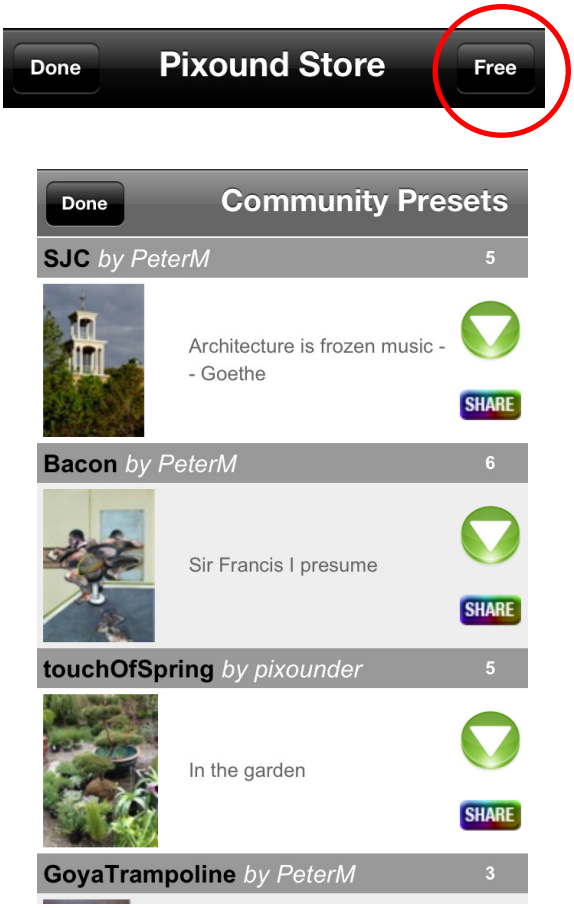
Once you have an account you can manage the status of your approved uploads by tapping the orange “halt” button or the blue “release” button. If it says Public = YES, that means everyone in the world can see your preset!

Community Presets

By tapping the “Free” button in the Store, you enter into the Community Presets panel. Here you will see a list of current presets showing the Name, the Author, the Download Count and an Icon of the preset. Tap the green arrow to download the preset to your preset list.

NOTE: Currently, this will replace any preset you have with the same name so be careful.

Tap the Share button to post a link to the preset you like to your favorite social network. Other people who have pixound will be able to play the preset, right from the link you post.



Piano Keyboard

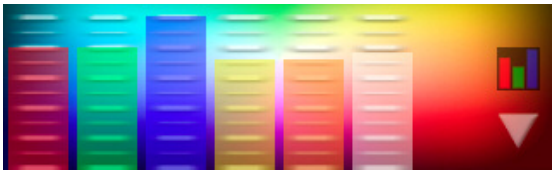
The slide-out transparent Piano is primarily used for transposing the current key. You can change the active Octave of this keyboard by touching the Arrows on either end. If you touch them without sliding your finger, the keyboard octave changes and you will see the current octave on the lower left where Middle C is 4. However, the actual key change won't take place until you touch a key on the piano. To instantly change octaves in the same key, Slide your finger up after you touch the arrow as with other touch-and-slide buttons.

The number in the lower left represents the current octave. When it is dim, that means you haven't actually switched yet but will on the next key you touch.

Autoharp Mode: When you are in this mode, the piano is multi-touch and controls the actual notes pixound is allowed to play. If no note is selected, nothing will play. If you have a C and a G selected, pixound will play various octaves of those two notes. You can toggle a note on by touching and sliding your finger on a piano key. This mode is best used with autoplay.

Volume Mixer

The slide-out transparent Mixer is primarily used for setting the relative volumes of the 5 main voices as well as a Master Mix. The mixer sliders are color coded Red, Green and Blue for the main voices and Yellow for Bass and Orange for Drums and White for Master. To turn a voice off touch it's color and slide down to bottom.



Shake It Up

When Drums are playing, you can shake your phone to create little drum accents. Not very exciting, but it adds a little something to keep it fresh.

Making In App Purchases

If you buy something in our In App Store, even if your phone gets lost, your purchases are not so feel confident what you unlock will stay unlocked. Preset Pack 2 has a cool "Mystery Preset" that's worth the price alone, but also you get tons of new songs, including advanced Bach and Beethoven, and images. The MIDI Save feature is great for professional musicians or those that would like to hear their recordings with serious synthesizers or use them in GarageBand and other MIDI programs. **Tap the Free button to go to the Community Presets panel.**

Prompts

When you first start using pixound, it will give you some guidance at the top of the screen. Just tap on the prompt to make it disappear. It will stop prompting you as you gain more experience.

Make Regular Back-ups

Make sure to back up your iPhone or iPad and its data regularly, especially when you do software updates. This way any settings you have saved as presets will be preserved. With this version, you can also email presets to yourself or others which works as another backup.

Troubleshooting

No sound: Make sure phone volume is up and switched into non-silent mode if not using headphones (not recommended). Make sure you are not in Autoharp mode with no piano keys highlited. Make sure Master Mix is not down all the way.

Restart pixound: Go to home screen and double click home button. Scroll to pixound icon in bar that appears and hold finger on icon until  appears to Close the App.

email: pixound [at] technemedia.com

Pixound Updates and Other Versions

Keep an eye on your app updates as we anticipate making regular improvements to pixound. We will also be releasing a series of related apps which you might enjoy as well as additional content for pixound such as new songs, presets, drums and sounds. The plan is to make a Pro Version which will include: multi-touch, video and recording/sharing. Techné Media has plans for several other mind-expanding Apps so keep checking on occasion. Thanks!

Pixound History

Pixound was invented to answer a simple question: I wonder what my painting will sound like? Developed in earlier versions since the late 1980's, the technology was always ahead of it's time. We have developed all sorts of variations on the Pixound Technology including Video Pixound and the Pixound Maker for creating interactive Applets. With the advent of high quality touch devices, Pixound has found its home since the human hand is the better for playing music in a more natural way than using a mouse.

Pixound has been used and enjoyed by some of the greatest musicians in the world including: Herbie Hancock, Mark Mothersbaugh (Devo and Simpsons), David Byrne (Talking Heads), Michael Shrieve (Santana Drummer). Pixound has also been used in many events and raves to create cool experiential installations.

Pixound Glossary

Autoplay: A method of playing Pixound where the pointer (stylus) moves automatically in a given pattern

Bass: A low note that serves as a tonal foundation to build music on top of.

Beat: One Quarter note

Beat Value: The length of a Pixound note within the current tempo. An eighth note is a quarter note divided by 2. A dotted note is the value plus 1/2 the value.

Chord: A set of three or more notes (generally less than 6 notes) that can be played simultaneously to give a musical feel. Common chords are M (Major) and m (Minor).

Chromatic: The 12 tones of Western music as seen in a single piano octave (ie. the white plus the black keys)

Diatonic: A set of 7 notes based on the Do Re Mi scale.

Drum: A percussion sound that plays in a distinct rhythm

Fifth: A harmonious interval that is common in music that is the 5th note in a Do Re Mi type scale.

Groove: Some programs refer to this as “Shuffle”. It’s a way to add more of a swing feel to otherwise straight rhythm patterns.

Hue: Color based on the rainbow from red to violet.

Interval: A set of two notes.

Meta Scale: An ascending set of notes on a given fixed interval that can span more than one Octave. For example a Meta 5th is 12 Fifth intervals in a row.

Mode: A set of notes that represents a more complex yet distinct musical feel

Octave: A higher or lower version of the same note (one of the mysteries of music where different is same). Octaves represent a doubling or halving of a given pitch.

Pentatonic: A harmonious set of 5 notes common in Eastern music.

RGB: Red, Green and Blue, the color components that create all the colors we see on computer screens and in real life since our eyes have RGB receptors (rods and cones).

Scale: An ordered set of notes that is used to effect the musical feel. The most commonly known scale is: Do Re Mi Fa So La Ti Do

Shuffle: A rhythmic feel based on a note followed by a note of half the beat value.

Song Progression: A series of chord changes that take place on specific beats.

Swing: A rhythmic feel based on a 2 notes played as the first and last beats of a Triplet.

Stylus: The name of the point(s) on the screen that is (are) being analyzed for color interpretation.

Tempo: Number of quarter notes per minute (BPM)

Timbre: Numbe

Tolerance: The mount that color value needs to change before it is considered a new value.

Two Step: A simple 2 beat Rhythm that is common in country and polka music.

Transpose: To change the relative pitch of a note, chord, scale or song

Triplet: When three notes are played in the same time as a regular beat such as quarter or eighth.