ROCKSTAR GAMES AND TIMBALAND PRESENT

BEATERATOR

For safe use of this product, carefully read the following section of this manual and the Precautions section of the instruction manual supplied with the PSP® (PlayStation®Portable) system before use. Retain both this software manual and the instruction manual for future reference.

⚠ WARNING: PHOTOSENSITIVITY/EPILEPSY/SEIZURES

A very small percentage of individuals may experience epileptic seizures or blackouts when exposed to certain light patterns or flashing lights. Exposure to certain patterns or backgrounds on a screen or when playing video games may trigger epileptic seizures or blackouts in these individuals. These conditions may trigger previously undetected epileptic symptoms or seizures in persons who have no history of prior seizures or epilepsy. If you, or anyone in your family, has an epileptic condition or has had seizures of any kind, consult your physician before playing. IMMEDIATELY DISCONTINUE use and consult your physician before resuming gameplay if you or your child experience any of the following health problems or symptoms:

- dizziness
- altered vision
- eye or muscle twitches
- loss of awareness
- disorientation
- seizures
- any involuntary movement or convulsion

RESUME GAMEPLAY ONLY ON APPROVAL OF YOUR PHYSICIAN.

**Use and handling of video games to reduce the likelihood of a seizure**
- Use in a well-lit area and keep a safe distance from the screen.
- Avoid prolonged use of the PSP® system. Take a 15-minute break during each hour of play.
- Avoid playing when you are tired or need sleep.

Stop using the system immediately if you experience any of the following symptoms: lightheadedness, nausea, or a sensation similar to motion sickness; discomfort or pain in the eyes, ears, hands, arms, or any other part of the body. If the condition persists, consult a doctor.

Do not use while driving or walking. Do not use in airplanes or medical facilities where use is prohibited or restricted. Set the PSP® system's wireless network feature to off when using the PSP® system on trains or in other crowded locations. If used near persons with pacemakers, the signal from the PSP® system's wireless network feature could interfere with the proper operation of the pacemaker.

Use and handling of UMD®

- This disc is PSP® (PlayStation®Portable) format software and is intended for use with the PSP® system only. If the disc is used with other devices, damage to the disc or to the device may result. • This disc is compatible for use with the PSP® system marked with FOR SALE AND USE IN U.S. AND CANADA ONLY. • Depending on the software, a Memory Stick® Duo or Memory Stick® PRO Duo (both sold separately) may be required. Refer to the software manual for full details. • If paused images are displayed on the screen for an extended period of time, a faint image may be left permanently on the screen. • Do not leave the disc in direct sunlight, near a heat source, in a car or other places subject to high heat and humidity. • Do not touch the opening on the rear of the disc (recording surface of the disc; see drawing). Also, do not allow dust, sand, foreign objects or other types of dirt to get on the disc. • Do not block the opening with paper or tape. Also, do not write on the disc. • If the opening area does get dirty, wipe gently with a soft cloth. • To clean the disc, wipe the exterior surface gently with a soft cloth. • Do not use solvents such as benzine, commercially-available cleaners not intended for CDs, or anti-static spray intended for vinyl LPs as these may damage the disc. • Do not use cracked or deformed discs or discs that have been repaired with adhesives as these may cause console damage or malfunction. • SCE will not be held liable for damage resulting from the misuse of discs.

Recording surface
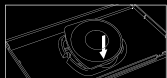
Ejecting the disc
Press the right side of the disc until it is in the position shown in the drawing and then remove it. If excess force is applied this may result in damage to the disc.
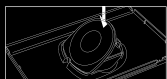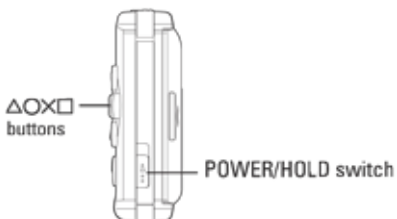

Storing the disc
Insert the bottom side of the disc and then press on the top side until it clicks into place. If the disc is not stored properly, this may result in damage to the disc. Store the disc in its case when not in use and keep in a place out of the reach of children. If the disc is left out this may result in warping or other damage to the disc.
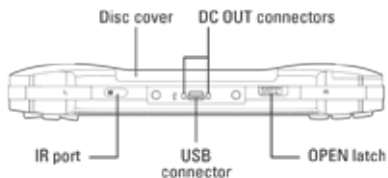
RIGHT SIDE VIEW

△○×□ buttons

POWER/HOLD switch

TOP VIEW

Disc cover   DC OUT connectors

IR port   USB connector   OPEN latch

FRONT VIEW

L button   LCD screen   R button

Directional buttons

△○×□ buttons

MEMORY STICK DUO™ access indicator

POWER indicator

WLAN access indicator   Volume

HOLD indicator

Analog stick
Strap holder   Right speaker
Left speaker   START button
HOME button   SELECT button
Sound button
Display button
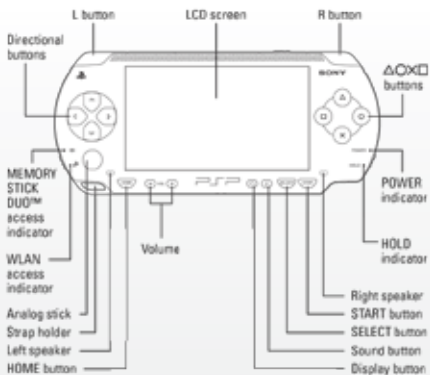
GETTING STARTED

Set up your PSP® (PlayStation®Portable) system according to the instructions in the manual supplied with the system. Turn the system on. The power indicator lights up in green and the home menu is displayed. Press the OPEN latch to open the disc cover. Insert the Beaterator disc with the label facing away from the system, slide until fully inserted and close the disc cover. From the PSP® system's home menu, select the Game icon and then the UMD icon. A thumbnail for the software is displayed. Select the thumbnail and press the X button of the PSP® system to start the software. Follow the on–screen instructions and refer to this manual and the online guide at www.beaterator.com for information on using the software.

Notice: Do not eject a UMD™ while it is playing.

Memory Stick™
Warning! Keep Memory Stick™ media out of reach of small children, as the media could be swallowed by accident.

To save game data and settings, insert a Memory Stick™ into the Memory Stick™ slot of the PSP® system. Saved game data can be loaded from the same Memory Stick™ or any Memory Stick™ containing previously saved game data.

INTRODUCTION

With Beaterator, anyone can make professional sounding music and exciting live performances.

The basic building block of Beaterator is the Loop. A Loop is a short clip of music — like a melody, a drum pattern or a bass-line — that is usually played over and over again.

Live Play (page 05) uses ready–made sets of Loops, allowing you to get up and playing quickly, and the Studio (page 07) allows you to work with more control.

Create Songs by arranging Loops along a musical timeline in the Song Crafter screen (see page 14) or improvise with sets of Loops using the Studio Session screen (page 12). You can even record your Studio Session performances straight into the Song Crafter timeline.

Beaterator also allows you to import WAV and MIDI files from your Memory Stick™ to help you build your Loops, and if you have a microphone connected you can record new Sounds straight into Beaterator. Beaterator can only import WAV and MIDI files that have less than 30 characters in their names.

Polish the sound of Beaterator using advanced audio effects units, where you can even add changes to the effect controls into the Song's arrangement.

You can also export your Songs to Memory Stick™ as uncompressed WAV files, or as MIDI files for use with other music software.

Beaterator on the Web
For a full tutorial walkthrough, an expanded manual, and more hints and tips on how to get the most out of Beaterator, visit www.beaterator.com, or select the Beaterator on the Web option from the Miscellaneous column of the Song Crafter or Studio Session menus.

LIVE PLAY

Live Play allows you to perform Songs in a live environment, mixing Loops from your own Songs or one of the Song Templates included in Beaterator.

The selected Track is shown bigger and with the four action buttons expanded outward. Pressing one of the action buttons — △, □, ○, or ✕ — will start the appropriate Loop playing on that Track.

Change the selected Track by using the directional buttons — this doesn't affect the playing Loops at all. If you navigate off one side of the screen the Tracks currently onscreen will move away and be replaced by the other four Tracks.

Pressing the START button will stop all Tracks playing instantly.

Pressing the R button will open the Live Play menu screen, where you can change the loaded Song Template to one of seven different musical styles. This is also where you can record your performance.

Leave Live Play and go into the studio by picking the Go to Studio option in the Live Play menu screen.

Recording & Playback
You can record your performance into the Beaterator Studio, and play that recording back at any time in Live Play. Open the Live Play menu by pressing the R button and navigate to Record, and press ✕.

When you are recording in Live Play, the Track names will flash red and a record icon will be displayed.

The behavior of Loops is slightly different whilst recording in Live Play. Instead of Loops instantly changing or stopping in time with your button presses they will change or stop at the beginning of the next Bar. This is so that your performance can be taken into the Song Crafter for further editing and saving as a Song file.

You can also play back your recording within Live Play by choosing the Playback option from the Live Play menu.

Changing the Live Play Loops
You can change which Loops are assigned to any button on any Track by pressing the L button and pressing the action button you wish to reassign. This will show the Loops browser over the top of the Live Play screen.

The Loops browser gives you access to all of the Timbaland, Drum, Melody and Audio Loops in the game.

Use the up and down directional buttons to highlight a list option, and press ⊗ or the right directional button to show another list. When you have found a Loop that you like, press ⊗ to load this into the indicated action button. Return to the previous list, or close the browser entirely by pressing ◎ or the left directional button. You can preview the highlighted Loop with the ⊘ button.

THE STUDIO

The Studio contains the rest of Beaterator.

The common controls are found below the screen area, and are grouped into two sections: the left hand side "Track" section, and the right hand side "Master" section. Pushing the analog stick down will jump the cursor into these common controls from nearly anywhere within the studio. Return to the main screen area by pushing up on the analog stick.

You can navigate between controls using the directional buttons. Alter the value of a highlighted knob by holding down $\otimes$ and using the directional buttons or the analog stick to change the value. The buttons are toggled on and off with a press of the $\otimes$ button when highlighted.

The Track Common Controls
These are beneath the screen area, on the left hand side.

Alter the per-Track settings for volume, mute, solo and pan using these controls. There is also a VU meter showing you the volume of the currently highlighted Track if you are in the Studio Session or Song Crafter screens, or of the Loop you are editing if you are in the Drum, Melody or Audio Loop Crafter screens.

The Master Common Controls
These are beneath the screen area, on the left hand side.

These controls alter settings for the whole Song. You can adjust the tempo (BPM), swing and master volume. This VU meter shows you the overall volume of the whole Song. If the top–most red light is lit, the Song is too loud and will distort unpleasantly, so turn the master volume down to compensate.

Tooltips
Tooltips are help messages that appear underneath the main editing area. Tooltips are context-sensitive, giving information based on what you're currently doing and what you currently have highlighted with the cursor.

Changing the Appearance of the Studio
The appearance of the Studio can be changed by loading themes. Select the Load Theme option of the Miscellaneous column in the Song Crafter or Studio Session menus to open the theme browser.

MENUS

All the studio screens have their own menu which can be opened by pressing the R button.

All of these menus work in the same way. Use the left and right directional buttons to change between different columns of options, and the up and down directional buttons to highlight different items in these columns. The ⓧ button selects the currently highlighted option, and ⓞ backs out of the menu.

There are several menu options that are common to all the menus; these are found in the Miscellaneous and Help columns.

Preferences: This opens the Preferences screen (see page 37) where you can adjust how Beaterator works for you.

Visualize your Song: This option will play your Song in the Visualizer (see page 39).

Metronome: When this option is ticked, the Metronome will sound in time with the music, allowing you to keep time by marking out the beats.

Beaterator on the Web: This will take you to the online Beaterator web-portal.

Delete File: Allows you to delete files to free space on your Memory Stick™.

Load Theme: Use this option to customize the look of the Beaterator studio by selecting a new theme.

THE LOOPS MENU

This is a special type of menu which you can open with the ⓐ button or selecting the Loops Menu… option from the Quick column of the Song Crafter menu. Navigate around the Loops menu with the directional buttons, and press ⓧ to select and ⓞ to back out as you would in any other menu.

There is one column per Song Track, a New Loop column, an Unused column and a Clear Unused option. The New Loop column lets you create new Loops or load them from disc or Memory Stick™.

You load or create new Loops by choosing one of the options under the New Loop column. Each option in this column lets you load or create a different type of Loop.
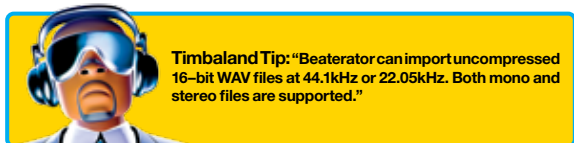
Timbaland Loops: These are audio Loops that have been provided exclusively for Beaterator by Timbaland. These can only be loaded from disc. These are edited in the Audio Loop Crafter screen.

Drum Loops: These Loops can play patterns of up to 8 different sampled Sounds. A set of 8 Sounds is called a Drumkit. You can load Drum Loops from the disc or Memory Stick™, or create a new Loop by loading a Drumkit, or start totally from scratch.

Melody Loops: Melody Loops play the notes in a Song using sampled Sounds or the internal synthesizer (see page XX). You can load these from disc or Memory Stick™, or create them from scratch by loading in a sampled Sound or Synth Patch.

Audio Loops: Audio Loops play a single sampled Sound "stretched" over the Loop, making sure that they always stay in time with the rest of the Song. These are loaded from disc or Memory Stick™, or created by loading in a sampled Sound.

In addition to loading a sampled Sound from disc or Memory Stick™, you can record your own Sounds using a microphone (see page 26), or by importing a WAV file from the MUSIC/ BEATERATOR directory on your Memory Stick™.

Timbaland Tip: "Beaterator can import uncompressed 16–bit WAV files at 44.1kHz or 22.05kHz. Both mono and stereo files are supported."

The Track columns contain a list of all the Loops that have been created on that Track. Pressing X on one of these Loops brings up a list of extra options:

Select: Make this Loop the currently selected Loop for this Track, allowing you to 'paint' with it.

Edit: Edit the Loop in the relevant Crafter. Use this when you want to make a global change to this Loop.

Clone & Edit: Make a new version of this Loop and edit it in the relevant Crafter. Use this when you want to make a variation on the Loop without affecting the original.

Remove from Track: Remove the Loop from everywhere it's been placed down on this Track. The Loop will then no longer appear under this Track column, it will instead appear in the Unused column.

The Unused column appears if you have loaded or created a Loop but you aren't using it in your Song. Think of this column like a waste paper basket — Loops get thrown away into here, but you can always retrieve them later if you wish.

If you are running out of memory or want to tidy up your Song, select the Clear Unused option to permanently delete all the Loops that aren't being used in your Song.

STUDIO SESSION

The Studio Session screen allows you to improvise with Loops, starting and stopping Loops playing in real time. Just like in Live Play mode, you can play one of four Loops on each of the eight Tracks. Swap between this screen and the Song Crafter at any time by pressing the SELECT button.

Swap between Tracks using the left and right directional buttons. The currently playing Loop is highlighted. To ensure that Loops all play in time with each other, Loops are cued before they start playing — in this state the Loop is paused, ready to start playing at the start of a Bar — which Bar is determined by the Play Mode setting. Loops that are cued up to play, or are about to stop playing have pulsing highlights.

You can perform one of three actions on a Loop by pressing the appropriate action button — ⊗ will act upon the bottom Loop, ▯ on the left hand side Loop, for example. The action that will be performed is indicated by the highlighted option in the carousel menu on the left hand side of screen. Change the selected action with the up and down directional buttons.

PLAY: This cues the Loop to start playing at the start of the next play interval.

EDIT: This option will open the appropriate Loop Crafter screen, allowing you to make changes to the Loop.

REMOVE: Clears the Loop from this button assignment on this Track.

If you press an action button which does not have a Loop associated with it, the action selected in the carousel menu is ignored, and the Loops menu is opened (see page 10), allowing the assignment of a Loop to that button.

The START button will stop playback of all Loops immediately.

The Master Track
The master Track — labelled "M" and to the right of all the other Tracks — is slightly different. Pressing an action button on the master Track will cue every Loop assigned to that action button on every Track simultaneously.

The Play Interval
Loops will change from cued to playing (or playing to stopped) on the play interval. By default this is set to 2 Bars, which means that Loops always start or stop at the beginning of the 2nd (or 4th, or 6th, or 8th, and so on) Bar in the Song. You can change this using the menu and selecting one of the options in the Play Mode column.

Recording a Performance
Your Studio Session performance can be recorded into the Song Crafter, allowing for an improvisational approach to composing Songs. Press the R button to open the Studio Session menu and select Record Performance from the Quick column. This will delete the arrangement that's currently in the Song Crafter, and record the starting and stopping of each Loop instead.

Recording will automatically finish if you leave the Studio Session screen, or you can select the Stop Recording option from the Quick column of the Studio Session menu.

Returning to Live Play
You can take your Studio Session Songs straight into Live Play by selecting the Switch to Live Play option in the Quick column of the Studio Session menu. The assignment of Loops to Tracks is kept the same in both.

SONG CRAFTER

Work with the arrangement of Loops along a timeline in the Song using the Song Crafter screen.

You can swap between the Song Crafter and Studio Session screens at any time by pressing the SELECT button. Press the R button to display the Song Crafter Menu.

Once there are some Loops placed in the Song, you can press the START button to hear what they sound like. Press the START button again to stop playback. Fast-forward or rewind by pushing the analog stick left and right.

Use the directional buttons to move the cursor. The display at the left of the Track shows the Loop that will be placed down on that Track when you press the ⊗ button. You can delete a Loop from a Track by pressing □.

You can change the Loop that you will paint down on a particular Track by pressing △ to show the Loops Menu. You also use the Loops Menu to edit existing Loops and load new ones into your Song. The Loops Menu is described further on page 10.

Cut, Copy, Paste
You can use Copy/Paste mode to create repeating sections of your Song, or move parts around easily. Place the cursor at any point in the Song and press the L button to start making a selection. Next, use the directional buttons to grow or shrink the highlight to cover the area you want to copy and press ⊗. If you would rather cut the selected area, press △ instead.

Now you can move the highlight to the place in the Song where you want to paste the selected Loops and press ⊗ again. The highlight will be tinted red if you cannot paste at the current location, and green if you can. You can paste as many times as you like.

Use ◎ or the L button again to leave Copy/Paste mode.
To clear Loops from an entire region of the Song, use the L button to enter Copy/Paste mode and highlight that area of the Song as described above, and press ▢.

Repeating Regions
You can focus on one particular section of your Song by setting up a repeating region. The Create Repeating Region option of the Quick column of the menu will allow you to move left and right in the Song to set the start of this region. Pressing ⊗ will let you use the left and right directional buttons to select the end point and pressing ⊗ again will accept the region, and ◎ will return you to setting the start point. Notice that the repeating region is shown visually by the grid background being brighter.

You can cancel the repeating region by selecting Cancel Repeating Region from the Quick column of the menu.

Adding Effects or Vocals to a Track
To add some audio effects to a Track, make sure the cursor is on the Track you wish to work on and select Effects from the Song Tools column of the menu. This will take you to the Effects Editor (see page 24).

If you have a microphone connected you can also record your own vocals into the current Track by selecting the Vocal Recorder option from the Song Tools column of the menu (see page 28).

Loading, Saving & Exporting Songs
Load or save Songs by choosing the Load Song or Save Song options from the Song File column of the menu. You can start a new Song from scratch by choosing the New empty Song option, or start with a premade Song Template by choosing the Quick Song… option.

You can also export your Song to your Memory Stick™ as a WAV or as a basic MIDI file by picking one of the choices in the Import/Export option of the Song File column of the menu.

AUDIO LOOP CRAFTER

The Audio Loop Crafter allows you to 'stretch' a single Sound across a Loop. This stretching changes the speed of sample playback independently from the pitch so it will always match the Song tempo.

The name of the Sound used by this Loop is shown at the top of the main crafter area. Next to that is a display showing how much the Loop is being stretched by as a percentage. This is the "Stretch Amount". When this display shows 100% that means the Sound is not being stretched at all. Values less than 100% mean that the Sound is being shortened, and values greater than 100% mean that the Sound is being lengthened.

Time Stretching affects the quality of the Sound. The quality of the Sound will get worse the further the stretch amount is away from 100%.

Timbaland Tip: "Try really over-stretching Sounds for interesting effects. The "Vocals Beaterator 01" Audio Loop on the disc is an example of this."

The two onscreen selectors allow you to adjust the stretching of the sample, and the length of the Loop. Use the directional buttons to highlight the selector you wish to alter. Hold down X and use the left and right directional buttons to change the current selection.

You can adjust the position of the Sound within the Loop. Press the up directional button to highlight the Sound — it will be highlighted in yellow.

Then press the left and right directional buttons to move the Sound. This can be useful for fine-tuning the timings of Audio Loops. Press the down directional button to return to the selectors.

You can see the effects of your changes by looking at the waveform and the Loop block shown onscreen.

Pressing the START button will play the Loop according to the current settings. Press the START button again to stop playback.

The Ⓐ button will open the Sound Editor with the current Sound. See page 31 for more information on the Sound Editor.

The Ⓞ button will back out from the Audio Loop Crafter and return to the Studio Session or Song Crafter screen, depending on which screen you came from.

The Loop Slicer
The Loop Slicer can be used to convert your Audio Loop into one or more Drum Loops. When you select it from the Audio Loop Tools column of the menu, Beaterator will turn each Bar of your Audio Loop into a Drum Loop, and will slice up the Sound for each Bar into eight pieces. The Audio Loop is replaced in your Song by the new Drum Loops, and you are returned back to the Studio Session or Song Crafter screen.

Slicing up a Loop can be a quick and useful way to allow you to rearrange pieces of audio, particularly pre-recorded drum-fills, allowing you to change rhythms and add some variety to your Song.

Changing the Sound in the Loop
You can load a new Sound into the Loop by selecting the Load Sound option from the Audio Loop Tools column of the menu.

The Sound Editor… option in the same column will take you to the Sound Editor screen where you can modify the Sound used by this Loop.

If you want to go back to how the Loop sounded when you entered this screen, choose the Revert Loop option from the Audio Loop Tools column of the menu, if available.

Loop Properties
You can change the name, length, color and other information to do with the Loop by selecting the options under the Loop Properties column of the menu. This column is common to all the Loop crafter screens.

DRUM CRAFTER

Drum Loops are created on a series of Drum Tracks, just like a Song is made up of Song Tracks. Each Track is dedicated to a single Sound, and a screen covers a single Bar, split into 16 individual steps, and the end of the Loop wraps right around to the beginning.

The ◎ button will back out from the Drum Crafter and return to the Studio Session or Song Crafter screen, depending on where you came from.

You can press the START button to hear what the Loop sounds like. Press the START button again to stop playback. Fast-forward or rewind by pushing the analog stick left and right.

Use the directional buttons to move the cursor and press ⊗ to place a Trigger. As you move up and down between Drum Tracks you will hear a preview of the Sound loaded into each Track. You can delete a Trigger by highlighting it with the cursor and pressing ⬜.

You can also change the volume (velocity) of any individual Trigger by highlighting it with the cursor, holding ⊗ and pressing the up and down directional buttons.

You can change the Sound that is used on a particular Track pressing the △ button to show the Load Sound menu. You can change all the Sounds in a Drum Loop at once by selecting the Drumkit... option from the Drum Tools column of the menu and picking a whole new Drumkit.

Like the Song Crafter, you can use Copy/Paste mode to adjust the Loop easily. Place the cursor at any point in the Loop and press the L button to start making a selection. Next, use the directional buttons to grow or shrink the highlight to cover the area you want to copy and press ⊗. If you would rather cut the selected area, press ⒶÐ instead.

Now you can move the highlight to the place in the Loop where you want to paste the selected Triggers and press ⊗ again. The highlight will be tinted red if you cannot paste at the current location, and green if you can. You can paste as many times as you like.

Use ◎ or the L button again to leave Copy/Paste mode.

To clear Triggers from an entire region of the Loop, use the L button to enter Copy/Paste mode and highlight that area of the Loop as described above, and press ▢.

Drum Pad Mode
Pressing the SELECT button will cycle the controls between the Loop Edit mode described above, Drum Pad (Rehearse) mode and Drum Pad (Record) mode. In the Drum Pad modes, the action and directional buttons are turned into a set of virtual drum pads.

In the Drum Pad Rehearse mode, pressing one of the action or directional buttons will play the corresponding drum alongside the pattern of hits already in the Loop.

The Drum Pad Record mode works in a very similar way, although when you press a directional or action button, a Trigger for the corresponding drum will be added to the Loop at the current position. Beaterator will automatically correct slight errors in your timing when you press a button, ensuring that your beats always sound in–time.

MELODY CRAFTER

Melody Loops are created in a similar way to Drum Loops. Each row in the Melody Crafter will play the loaded Sound at a different note, as shown by the keyboard on the left hand side. Some rows will have a slight hashing on them, which indicates that this note will not fit into the key of the Song. You can change the key of the Song by going into the Chord Picker screen (see page 22) by selecting the Chord Picker... suboption under the Chord Pad Mode...option in the Quick submenu of the Melody Crafter menu.

Exit out of this screen back to the Song Crafter or the Studio Session screen by pressing ⊙. As usual, pressing the START button will let you hear what the Loop sounds like. Pressing it again will stop playback. Fast-forward or rewind by pushing the analog stick left and right.

Use the directional buttons to move the cursor, and as you move up and down between notes you will hear a preview of the Sound being played at the appropriate pitch.

The ⊗ button will add a Trigger at the cursor position, and you can extend the length of a Trigger and if it rises or falls as it plays by keeping ⊗ held whilst using the directional buttons to drag out a "tail". As in the Drum Crafter, you can delete a Trigger by highlighting it with the cursor and pressing ▢.

You can also change the volume (velocity) of any individual Trigger by highlighting it with the cursor, holding ⊗ and pressing the up and down directional buttons.

You can change the Sound used by this Loop in the Load Sound menu, which is accessed by pressing the Ⓐ button.

You can also use Copy & Paste in the Melody Crafter in much the same way as the Song and Drum Crafters. Place the cursor at any point in the Loop and press the L button to start making a selection. Next, use the directional buttons to grow or shrink the highlight to cover the area you want to copy and press Ⓧ. If you would rather cut the selected area, press Ⓐ instead.

Now you can move the highlight to the place in the Loop where you want to paste the selected Triggers and press Ⓧ again. The highlight will be tinted red if you cannot paste at the current location, and green if you can. You can paste as many times as you like. Use Ⓞ or the L button again to leave Copy/Paste mode.

To clear Triggers from an entire region of the Song, use the L button to enter Copy/Paste mode and highlight that area of the Song as described above, and press Ⓠ.

Chord Pad Mode
Pressing the SELECT button will cycle the controls between the Loop Edit mode described above, Chord Pad Rehearse mode and Chord Pad Record mode. Both Chord Pad modes allow you to add several Triggers on different notes at once. Each set of different notes is called a chord. Which chords are used in Chord Pad mode can be set in the Chord Picker Screen (see page 22) which is entered by choosing the Chord Picker under the Chord Pad Mode option in the Quick submenu of the menu.

In Chord Pad Rehearse mode, pressing one of the action buttons — Ⓐ, Ⓠ, Ⓞ, or Ⓧ — will play the corresponding chord alongside the pattern of notes already in the Loop.

The Chord Pad Record mode works in a very similar way, although when you press an action button, Triggers for the corresponding chord will be added to the Loop at the current position.

In both Chord Pad modes you can use the up and down directional buttons to move up and down the keyboard, allowing you to change the exact set of notes a chord will use.

CHORD PICKER SCREEN

In the Chord Picker you can set the musical key of the Song and which four chords you will use when in Chord Pad mode. Get to this screen by choosing the Chord Picker under the Chord Pad Mode option in the Quick submenu of the Melody Crafter menu.

Use the directional buttons to navigate around the screen. To alter a selector, hold down ⊗ and use the left or right directional buttons to change the current setting. The ⊗ button will also toggle tick–boxes on and off.

At the top of the screen are the options for the current musical key being used. This is split into two parts — a note and a chord type. Altering these will automatically generate four different Quick Chords assigned to the four action buttons.

The key of the Song also determines which notes will have hashing upon them in the Melody Crafter. If the Lock Cursor tick–box is ticked, those notes which are not in the key of the Song will be jumped over when navigating the Melody Crafter. If it is not ticked, you can navigate all the notes freely.

You can also change the Quick Chords assigned to each of the action buttons individually. You can always highlight the Reset button and press ⊗ to reset these four Quick Chords to the defaults for the current key of the Song.

If a Quick Chord is shown with red selectors, the notes in that chord do not fit with the current musical key, and might not be the best option to use.

If the Auto Inversion tick–box is ticked, the Melody Crafter will automatically invert notes to ensure that any Triggers for the Quick Chords are visible in the currently viewed octave on the keyboard. If this option is switched off, the Quick Chords will always be added in root position.

Timbaland Tip: "Using different keys and chords can change the feeling of your Song. The key of D Minor is the saddest of all keys, for example."

EFFECTS

Each Track in a Song can have up to two custom effects applied to it in addition to a global reverb. There are ten different types of effect, which are selected and controlled from within the Effects Editor. You get to the Effects Editor using the Song Crafter menu (Song Tools > Effects). Pressing C will close the Effects Editor and take you back to the Song Crafter.

The Song Track you are working on is shown at the top of the screen, beneath that is the keyframe line. The left hand side shows the selectors and parameters that you are currently working with. You can move the highlight between these by using the up and down directional buttons.

Select *what* you are going to affect using the top selector, and *what* you are going to affect it with using the bottom selector. These work in the same way as those in the Audio Loop Crafter, where you hold down X and press the left or right directional buttons to change the current selection. This will also change the set of parameters that you are able to adjust.

If you have one of the effect parameters highlighted, you can change the value of it by using the attached knob control — this works like all the other knobs; hold X and use the directional buttons or analog stick to adjust it.

At any time you can use the START button to start and stop Song playback and hear how your effects sound.

Keyframing

Keyframing allows you to make the effect parameter values change automatically during the Song. The value of the currently selected parameter is shown as the line on the keyframe graph.

By default, changing the value of the parameter knob will move the entire graph up or down. However, press ⓐ to let you edit the keys to change the shape of the graph.

You can push the analog stick left or right, or use the left or right directional buttons to move the cursor through the Song. If you are editing keys and you adjust the value of the parameter knob, the graph will change to reflect the change at the position of the cursor. You can move the cursor somewhere else and set another value to create dynamic control over the effects in the Song. The ⓠ button will remove a keyframe point at the current cursor position.

Press ⓐ again to return to editing the effect parameter values across the entire Song.

You can clear out all the keys from a parameter by choosing the Delete all Keys option from the Effects column of the menu.

Timbaland Tip: "Add a filter effect to a channel and keyframe its frequency from fully open to fully closed and back again for a deep breakdown effect."

SOUND RECORDER SCREEN

Using the Sound Recorder and a microphone you can record new Sounds to use in your Song. If you have both peripherals connected, the USB microphone will be used.

The loudness of the sound being detected by the microphone is shown by the VU meter. The Record Button and Gain knob are to the left. The Gain knob can be adjusted to get the recording level correct — where the VU meter peaks just before the top red segment is lit. This knob is controlled in the normal way, holding down ⊗ and using the directional buttons or analog stick will adjust the amount of recording gain.

You can swap between the gain knob and the record button using the directional buttons. With the record button highlighted, pressing ⊗ will start recording, and pressing ⊗ again will stop it.

NOTE: When you press ⊗ to start recording with the USB microphone, the button state will change to show "Wait" for a moment, and then the recording will begin.

The progress bar at the bottom of the screen shows how long this recording is. Recording will automatically stop if this bar fills up completely.

When you have finished recording you will be taken to a screen asking if you would like to keep your recording or not. You can listen to your recording by pressing the START button. The options are:

Keep this recording: Select this option to keep your recording, name it and proceed on to the Sound Editor screen (see page 31).

Discard and try again: Select this option if you don't want to keep the recording and you'd like to try again.

Discard and exit: Select this option if you don't want to keep the recording and you don't want to try again. You will be taken back to the last screen.

VOCAL RECORDER

Using the Vocal Recorder and a microphone you can record new Sounds to use in your Song.

The vocal recorder works slightly differently to the Sound Recorder (see page 26). The recording VU meter, gain knob and record button all work in the same way. The difference comes during the recording process.

Unlike the Sound Recorder, the Vocal Recorder is designed for the recording of vocals or other Sounds alongside the rest of the Song. The microphone is constantly being monitored during recording. Whenever Beaterator detects a loud enough sound is being made, it will automatically record the Sound into a new Audio Loop, and place that Loop straight into the Song.

The progress bar at the bottom of the screen shows how much memory is being used up by the Vocal Recorder Audio Loops. The pulsing section of this bar indicates the active area of memory during the recording process. Recording will automatically stop if this bar fills up completely.

The Vocal Recorder will overwrite any Loops that are already on the Track when it places the recorded Loops into the Song.

Exit out of this screen with the ◎ button. This will automatically stop the recording, and discard anything recorded during the current take.

SYNTH EDITOR

Beaterator has a monophonic subtractive synthesizer that can play Melody Loops, rather than using a sampled Sound. You can use the Synth Editor screen to change the kind of sounds this synth will produce.

You can navigate around the synth controls with the directional buttons, and you can return to the Melody Crafter at any time by pressing the ◎ button. You can also control playback of the Melody Loop you are working on using the START button.

Adjusting the controls works just like any other knob or selector; hold down ⊗ whilst using the directional buttons to alter its value. All the knobs can also be adjusted by holding down ⊗and using the analog stick.

Some of the knobs are grayed out — this means that they will not change the sound if you adjust them — and this usually indicates that something else will need to be altered before they become active and will affect the sound.

In short, each of the three columns on the left independently controls a sound generator — called an oscillator — and the signal from all three of these, plus a noise source is fed into the filter.

The filter — controlled by the fourth column of knobs — then alters the sound allowing it to be made brighter, duller, and so on by removing — or "filtering" — certain frequency content from the oscillator signal.

After the filter, the overall volume of the resulting sound can be adjusted to create percussive sounds, long swells, and so forth using the Amplitude envelope controls in the fifth column of knobs.

The rest of the controls are used to make the sound of the synth change over time.

SOUND EDITOR

The Sound Editor can be used to alter any sampled Sound in Beaterator and make it sound completely different. You can enter the Sound Editor from any of the Loop Crafter screens by using the menu and choosing the Sound Editor…option. As normal, ◎ will back out of this screen.

The waveform of the selected sampled Sound covers most of the screen, with the carousel menu on the left hand side offering several editing tools. The part of the wave that you want to work on is between two vertical bars and has a lighter background color — this is the selected region.

The START button will play the selected region over and over until you press the START button again to stop playback.

The left and right directional buttons will change the position of the start or the end of the selected region — shown at the top–right of the screen — and you can swap between the start and the end by pressing the ▢ button. You can even change the position of the start and end points of the selected region whilst the Sound is playing.

Although the Sound Editor screen automatically zooms to give you the best view of the waveform, you can zoom in on the end of the region you are adjusting by pushing the analog stick right. Pushing the analog stick left will zoom out.

Use the up and down directional buttons to select the tool you wish to use on the selected region of the waveform, and press ⊗ to apply it. The name of the selected tool is shown at the top–left of the screen.

THE TOOLS

The effects of each tool in the carousel menu are listed briefly below. Look in the internal reference guide for more detailed explanations.

TRIM: This cuts the start and the end off the sampled Sound, leaving just the selected region.

REMOVE: Cuts the selected region out of the sampled Sound.

NORMALIZE: Makes the selected region as loud as possible before causing distortion.

INCREASE VOLUME: Increases the volume in the selected region.

DECREASE VOLUME: Decreases the volume in the selected region.

FADE IN: Makes the sampled Sound fade in from silence at the start of the selected region to full volume at the end.

FADE OUT: The opposite of Fade in; makes the sampled Sound fade out from full volume to silence.

SILENCE: Silences the selected region.

INSERT SILENCE: Inserts an amount of silence into the sampled Sound.

SET SUSTAIN: Marks the current region as a looping sustain region.

CLEAR SUSTAIN: Removes the Sustain region.

PITCH SHIFT: Alters the pitch of the selected region, making it play back faster or slower.

TIME STRETCH: Stretches or squashes the length of the Sound without affecting its pitch.

REVERSE: Makes the selected region play backwards.

Mono & Stereo Sounds

Beaterator can work with mono or stereo sampled Sounds. You can convert a stereo Sound to mono by opening the menu with the R button and selecting Make Mono from the Quick column.

Timbaland Tip: "Use mono Sounds wherever you can, as they use half as much memory as stereo Sounds."
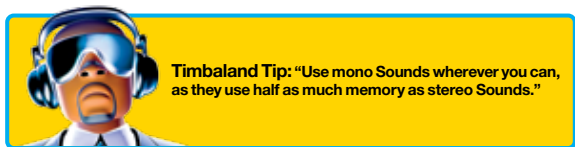
Reverting Sounds

If you don't like what you have done to a Sound, you can always restore it back to how it was when you went into the screen by opening the menu with the R button, and selecting the Quick column and the Revert Edits to Sound option.

Sustain Regions

If a short sampled Sound is assigned to a Melody Loop where some Triggers are extended over several steps, the Sound might end before the Trigger does. If you want to make sure that these Triggers continue to make sound all the way to the end, it's a good idea to set up a sustain region for the Sound.

If the Sound has a sustain region set, Melody Loops using that Sound will start playing the sampled Sound from the beginning, and will continue playing only the sustain region in a loop until the Trigger ends, at which point the Sound is allowed to play to the end.

It is possible for glitches or pops to occur when a note is sustained due to any discontinuities in the sustain region's loop points. Beaterator tries to minimize this as much as possible automatically by ensuring that the start and end of a sustain region are at "zero-crossing points".

Sound Tuner

The Sound Tuner screen lets you ensure that your sampled Sounds will always sound in tune when they are used to play different notes by a Melody Loop. Use the R button to open the menu and select the Quick column and the Set Unity Note option to enter the Sound Tuner screen for this Sound.

SOUND TUNER SCREEN

The Sound Tuner Screen lets you tell Beaterator what pitch a sampled Sound is at, so that it can automatically be played at the correct pitch in Melody Loops.

You can enter this screen by using the Set Unity Note option in the Quick column of the Sound Editor Menu, and you can cancel and return to the Sound Editor screen by pressing the ◎ button.

When you enter this screen you will see that one of the notes is highlighted — this is the note that the Sound is currently mapped to. Use the left and right directional buttons to move up and down the keyboard. For each note, Beaterator will play your Sound alongside a simple tone at the pitch of the current note. Look for a note which sounds the same pitch as your Sound.

When you are happy that you have found a suitable note for the sample, press ⊗ to accept the setting and return to the Sound Editor.

SONG PROPERTIES SCREEN

This screen gives you an overview of the resources being used by the Song. Get to it from the Song Crafter menu, selecting Song Info from the Song Properties column.

The statistics page shows the name, genre(s), length and tempo of the Song. The memory bar is colored green to show the memory used by the Loops and Sounds that are used within the Song and orange for Loops and Sounds which are still kept in memory but not used in the Song at all. The rest of the bar shows the amount of memory you have remaining.

If you have saved your Song to a Memory Stick™, the folder it was saved to is also shown here.

The ⊗ button swaps to the Loops page of this screen, and the ◎ button backs out of this screen, returning you to the Studio Session or Song Crafter screen.

The Loops page shows the details of what's used on what Track — the effects used on a Track are shown in the middle column, and the Loops and Sounds are shown in the right hand column.

Scroll through this list using the up and down directional buttons. The ⊗ button swaps to the statistics page, and the ◎ button backs out of this screen, returning you to the Studio Session or Song Crafter screen.

PREFERENCES

You can access the Preferences screen from most menus in the game by choosing the Miscellaneous column and selecting the Preferences option.

There are eleven customizable preference tick–boxes on this screen. Navigate between them using the directional buttons and toggle the tick–box on or off using $\otimes$.

Start in Song Crafter: If you turn this preference on, you will be taken directly to the Song Crafter Screen (instead of Studio Session) when you enter the Studio from the main menu.

Press $\otimes$ to edit Loops: When turned off, Beaterator will paste Loops when you press $\otimes$. If you turn this preference on, when you press $\otimes$ while the cursor is over a Loop that has already been placed down you will perform either an Edit (if there is only one copy of the Loop in the Song) or a Clone & Edit (if more than one copy of the Loop exists in the Song) on that Loop and be taken to the relevant Crafter.

Beat Clock: Turn this on to change how the clock displays time. When turned off (the default setting) the clock will display minutes, seconds and fractions of a second. When turned on the clock will display Bars, beats and steps.

Solo Loops: Turn this on to silence the rest of the Song when you are editing a Loop.

Follow Mode: When this preference is on, the screen will scroll to follow the playhead of the Song in the Song Crafter, always keeping it in view. Turn this off if you prefer full manual control over how the screen scrolls when your Song is playing.

Play UI Sounds: If ticked, you will hear clicks and other UI sounds when controlling Beaterator. If off, these sounds are silenced.

Show Help Popups: Context sensitive tutorial videos and help text pop-ups will automatically be shown when this preference is on.

Show Video Subtitles: Turn this on to have text subtitles appear in the tutorial videos.

Save Reminder: Turn this on to be reminded to save your Song every five minutes.

Preview Drum Crafter Hits: If ticked, the Drum Crafter screen will preview the Sound assigned to each Drum Track as you move the cursor up and down between Drum Tracks.

Preview Melody Crafter Notes: If ticked, the Melody Crafter screen will play a preview of the note the cursor is on as you move up and down across the keyboard.

Once you have finished customizing your preferences, use the "Save & Exit" button to save your choices to your Memory Stick™ and return to the previous screen. Your new preferences take immediate effect and will also be automatically loaded the next time you start Beaterator.

Pressing the ◎ button will exit this screen without saving.

THE VISUALIZER

This screen lets you listen to your Song whilst watching and interacting with computer generated visuals.

Press the ⊗, ⊙ or the START button to exit the visualizer and return to the previous screen. The SELECT button will show some on–screen help.

The L and R buttons will change the mode of the visualizer, and the ▢ and △ buttons will change the colors the visualizer uses.

Moving the analog stick will adjust the camera.