## Ots CD Scratch 1200 Quick Start Manual



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### Introduction

Ots CD Scratch 1200 is a revolutionary CD player application that enables you to do the unthinkable, such as scratching a CD, playing a CD backwards, playing two tracks from a single CD at once, and playing two CDs at the same time!

CD Scratch's unique real-time turntables, coupled with the emulated turntable effects, will give you the closest feel yet, on a software level, to turntable DJing.

CD Scratch has a powerful Auto DJ feature that can mix your CD tracks just like a professional DJ, providing you with seamless mixed music.

This Quick Start Manual is dedicated to helping you get CD Scratch up and running in a fast and efficient manner. For any further details on the features and functions of CD Scratch please see the online Ots CD Scratch 1200 help documentation at <a href="http://www.cdscratch.com/doc/">http://www.cdscratch.com/doc/</a>

Setup

This section outlines the system requirements for CD Scratch and how to install CD Scratch.

### Minimum system requirements

CD Scratch has been programmed lean and mean. The CD Scratch installation requires minimal disk space, approximately 1.35MB, and will run efficiently on the following minimum specifications:

OS: Microsoft Windows 2000, XP or Vista.

**CPU:** Pentium II 233MHz or better (Pentium III 500MHz or higher recommended).

**RAM:** 64MB or more.

**Soundcard:** A soundcard with DirectSound or WDM drivers.

**Video:** A video card capable of at least 16-bit "hi-color" mode with a screen resolution of 800 x 600 or higher is required.

**CD-ROM:** To use the CD Digital Audio Direct capabilities, you will need a CD-ROM drive which can accurately read CD-DA streams (most name brands manufactured in the last few years are fine). A CD-ROM that uses constant angular velocity (CAV) technology is recommended. Click here for more details on the Ots Labs CD-DA subsystem requirements.

#### How to install CD Scratch

Double-click on the OtsCDScratch1200Setup.exe installation file.

In the OtsSetup - CD Scratch window click on Next --->.

Read the OTS CORPORATION SOFTWARE LICENSE AGREEMENT, and if you agree to the terms click on **I Accept --->**.

Click on the Begin Installing Files ---> button.

You will be prompted by the **Installation Successful** window, click on **Next --->**.

Your system may need to be restarted. Make sure that the **Restart** option is selected and click on **Finish**.

Please read the Important Audio Information window and click OK.

You will be prompted by the **Select "On-Air" output device dialog box**. Select your main soundcard driver and click on **OK**. For more details on configuring CD Scratch with your soundcard see below.

### How to make CD Scratch your default CD player

Click on the button.

Go to **Options** and select the **Run CD Scratch When New CD Inserted** option. This option will make CD Scratch your default CD player. In other words, whenever a CD is inserted into your CD-ROM, CD Scratch will automatically open to play the CD.

#### How to enable/disable auto play

When CD Scratch is running you can instruct it to automatically play a CD when inserted. To enable/disable this feature:

Click on the button.

Go to Options and check/uncheck the Auto Play When New CD Inserted option.

## **CD Scratch layout**

CD Scratch has an intuitive easy to use screen layout. Common features and functions are accessible by clicking on the buttons provided on the main window, or through the Program Menu.

**Program Menu:** The **CD Scratch Program Menu** can be found by clicking on the button in the left-hand side of the title bar.

**Program Buttons:** The buttons on the CD Scratch window provide quick access to commonly used features and functionality.

**Turntable Layout:** CD Scratch has two virtual turntables. These turntables provide powerful real-time control and manipulation of your CD tracks. A Turntable has **three states**:

**Idle state:** No track loaded in the turntable.

Cue state: Track is loaded into turntable and cued ready to play. Note: The track can be scratched in this state.

**Playing state:** The track is playing.

You are able to control both turntables using keyboard shortcuts, see below for details.

### **Using CD Scratch**

In this section you will find operating instructions for CD Scratch. For a more detailed explanation of the features and functions of CD Scratch please see the on-line CD Scratch 1200 help documentation.

### How to play a CD track in CD Scratch

Open CD Scratch.

**Insert an audio CD** into your **CD-ROM**. If it is the first time this CD has been played in CD Scratch the CD will need to be processed. Processing will take a few moments. The information retrieved will be stored in the CD Scratch cache system for fast future processing.

**Note:** By default CD Scratch will automatically begin playing the first track when a CD is inserted, unless it is already playing. This auto play feature can be enabled/disabled in the Options menu, see above for details.

If CD Scratch does not automatically play, **select** a **CD-ROM drive** from the **Drive drop down menu** (located on the turntable).

Select a track from the Track drop down menu.

Click the button

You are now ready to scratch the track. For instructions on scratching see below.

For details on the Turntable effects see below.

**Tip:** With a good quality CD-ROM, that uses constant angular velocity (CAV) technology, you are able to play two tracks, from the same CD, at the same time. For details on the OtsLabs CD-DA requirements see the Ots CD Scratch 1200 on-line help.

**Note:** For instructions on how to remove the cache entry for a processed CD see the Ots CD Scratch 1200 on-line help.

#### How to party with two CD-ROMs

You can play the DJ, with CD Scratch professionally performing the mixes for you, if your computer has two CD-ROM drives installed.

Open CD Scratch.

Insert your CDs into your CD-ROMs. CD Scratch will process the CDs.

**Note:** By default CD Scratch will automatically begin playing the first track when a CD is inserted, unless it is already playing. This auto play feature can be enabled/disabled in the

#### Options menu, see above for details.

On turntable A select the CD-ROM from the Drive drop down menu, e.g. Drive 01. Select the track you wish to play in turntable A from the Track drop down menu.

On **turntable A** click the button.

On turntable B select the other CD-ROM from the Drive drop down menu, e.g. Drive 02.

Select the **track** you wish to have played in **turntable B** next from the **Track drop down menu**.

To play the track in **turntable B** either:

Wait for CD Scratch to automatically mix to the turntable B track.

to have CD Scratch fade out turntable A and begin playing the turntable B track Click on the Or play the track at the same time as turntable A and mix between the two tracks using the Mixer console. For details on the Mixer console see below.

**Hot Tip:** It is recommended that before any live gig or party you prepare by having CD Scratch process all of your CDs.

#### **Turntable effects**

CD Scratch has a number of turntable effects that can be applied to a CD track to give it that realistic vinyl sound. These effects include record surface noise, turntable platter flutter, turntable braking, and the ability to scratch a track like you would a record.

To access the **Turntable effects menu** click on the turntable's **FX** button.



Surface Noise: The Surface Noise effect contains three components of surface noise that you would expect to hear on a standard turntable - motor rumble, pops (static noise), and crackles.

**Brake Effect on Stop:** The Brake Effect on Stop effect emulates the sound that you would hear when you applied the brake to the turntable when playing a record.

**Platter Flutter:** The Platter Flutter effect emulates the flutter noise that all turntables exhibit, being mechanical devices. There are three Platter Flutter options:

**Direct-Drive (Pro):** Emulates the amount of platter flutter present on a typical pro-grade turntable. Most people will not be able to consciously discern the difference between this setting and the "None" setting, however it is there, and adds to the whole vinyl experience.

**Belt-Drive:** Emulates the platter flutter that you would expect to hear from a belt-drive turntable. **Belt-Drive** (Cheap!): Emulates the platter flutter that you would expect to hear from a poor quality, cheap, belt-drive turntable.

Progress Bar Scratching: The Progress Bar Scratching effect emulates what you would expect to hear if you dragged a turntable needle across a record. To hear the Progress Bar Scratching effect, simply **click** on the **progress bar** ahead of or behind the current playing position (try holding the mouse button down while dragging too).

Stuck-Needle effect: The Stuck-Needle effect emulates what you would hear when a turntable needle can't get past a scratch or defect on a record causing one groove of the record to be continuously repeated each revolution.

Below are the default turntable effects settings:

Brake Effect on Stop: Enabled. Surface Noise: Disabled.

Platter Flutter: Direct-Drive (Pro) Enabled.

Progress Bar Scratching: Enabled.

#### **Scratching effects**

CD Scratch has the amazing ability to allow you to scratch a CD track just like you would a vinyl record. CD Scratch has an incredibly low latency mechanism which provides realistic instant responses to scratch movements.

There are two turntable states that you can scratch a track in:

Cue state: Scratch movements can be applied to a loaded record in this stationary state.

Playing state: Scratch movements can be applied while the record is playing.

#### How to scratch a CD track

Select a track that you want to scratch on a turntable.

**Hover** over the **virtual record** with the mouse.

**Click** on the **virtual record** and move forwards and backwards (in a circular motion), at any speed, to hear exactly what you would hear if you applied those same movements to real vinyl.

Use the left mouse button for normal scratching.

Use the **right mouse** button for **catch-up scratching**. See below for details.

**Tip:** The closer you click to the center of the record, the greater the amount of momentum applied.

#### How to scratch and keep in time

Scratching with your right mouse button enables you to scratch and keep in time. Right-click scratching utilizes catch-up functionality, which means that once the scratching has completed the virtual record will catch up to the would-be playing position, had you not performed the scratch, therefore keeping you in perfect time with the music.

**Select** a **track** that you want to scratch on a turntable.

**Hover** over the **virtual record** with the mouse.

**Right-click** on the **virtual record**, scratch back and forth at any speed, and when you release the mouse button CD Scratch will catch up to the would-be playing position.

#### How to apply muting to a scratch

When scratching a record you can mute the sound in either direction by holding down the Ctrl or Shift keys.

Ctrl will mute back spins.

Shift will mute forward spins.

When you let go of the record the Ctrl muting will stop even if you have the button held down. However Shift will continue the muting until you let go of the button. (If you are playing a song in the

backwards direction mode the opposite is true).

#### **Scratch samples**

CD Scratch has five preset scratch samples for each turntable. Scratch samples are recorded scratch movements that can be applied to any track.

The first two scratch samples are generic and are not tempo dependant. The remaining three are best suited for music with a tempo of around the 120 beats per minute mark. The five preset scratch samples are best applied on the fourth beat of the bar.

Scratch sample keys

Turntable	Keys
Turntable A	1-5 keys
Turntable B	6-0 keys

#### How to apply a scratch sample to a track

Load a track into Turntable A.

Press a key between 1 and 5 to hear the scratch sample applied to Turntable A.

When applying a scratch sample to **Turntable B** press a key between **6** and **0**.

### **Ots Labs Dynamics Processor**

A dynamics processor allows you to control the level (volume) of your audio. When set up correctly, it does this in a transparent way, not making hugely noticeable alterations to the sound, but nevertheless giving you the control that you may need. Radio stations, television stations, pro club DJs, etc, use dynamics processors.

With CD Scratch you receive a fully fledged, pro-quality dynamics processor comprising AGC, compressor and limiter. Full control is given to each of the characteristics of each processor section. You can duplicate a squashy or punchy radio sound if you like, but you can also obtain smooth, consistent audio that is not noticeably altered from the original. Whatever your requirements are at anytime, you can quickly adjust the settings and your levels will be handled professionally.

To find the Dynamics Processor dialog box click on the Dynamics Processor meter.

## The Ots Labs Graphic Equalizer

The Ots Labs graphic equalizer is a unique zero latency, one octave stereo graphic equalizer. It is useful for general tonal corrections, to obtain the most desirable sound quality. It can also be used to reduce the effect of resonant peaks and dips in loudspeaker response, and in the acoustic environment, reducing the tendency for acoustic feedback.

To find the **Graphics Equalizer dialog box** click on the **EQ** button.

## **Mixing**

CD Scratch utilizes the unique Ots ACI mixing subsystem (Auto DJ). This subsystem will automatically mix your CD tracks providing intelligent and seamless mixes every time.

If from time to time you wish to hear the CD in its "raw" state, with gaps and without volume normalization, you will need to disable the Ots ACI mixing. See below for details.

If you wish you can totally manually mix with the CD Scratch instant response Software Mixer. To learn more about the Software Mixer see below.

#### Ots Labs Auto DJ mixing

The Auto DJ feature has extremely accurate automatic mixing point technology. You will hear intelligent automated mixing that you would expect to hear from a professional DJ.

The Auto DJ feature analyzes the way that a song starts and ends and works out an appropriate mix. It does not simply overlap the songs by a set number of seconds like many programs do as they crudely attempt to mix. With the Auto DJ feature you get perfect mixes every time.

For Auto DJ buttons see the above CD Scratch buttons table.

#### How to disable automatic mixing

If from time to time you wish to hear a CD in its "raw" state, with gaps and without volume normalization, you will need to disable the Ots ACI mixing.

Click on the **button**.

Select Options and uncheck the Use Ots ACI Mixing (Recommended) option. With the Auto DJ feature disabled CD Scratch will now play and mix the CD exactly as it was recorded.

#### **CD Scratch Mixer**

CD Scratch has an in-built instant response Software Mixer console. You can use the Mixer console just like you would use a standard hardware mixer.

CD Scratch Mixer console:

**Cross-fader slider:** This control is used to fade between turntables.

**Turntable A level slider (left vertical slider):** This slider is the Turntable A volume level control. **Turntable B level slider (right vertical slider):** This slider is the Turntable B volume level control.

**Note:** It is normally not necessary to use the Turntable A and B level controls at all, since the Ots Labs Dynamics Processor elegantly handles the audio level control.

The Mixer console has a range of automated cross-fader sweeps that can be fired off using the numeric keypad. See below for Keyboard shortcuts.

#### Pitch/Tempo Bending feature

You are able to apply Pitch or Tempo bends to playing tracks. This feature is great for synchronizing tracks when manual beat mixing.

To select either the Pitch or Tempo Bending options go to *Main Menu -> Options -> Pitch/Tempo Bending* and select either the Pitch or Tempo option.

See the Keyboard shortcut table below for Pitch/Tempo Bending keys.

## Configuring your soundcard

CD Scratch will automatically detect available soundcards and provide you with a selection of your soundcard drivers. If you need to manually configure your systems soundcard read on.

**Windows 2000/XP/Vista** users should select the **WDM** type drivers, unless you have soundcard problems, in which case you would be best to select the **Compat** type drivers.

### How to configure you soundcard

Click the button in the CD Scratch window. This will open the Output Configuration dialog

Click the Set button, for the "ON-AIR" output device.

In the **Select "ON AIR" Output Device dialog box** you will notice a listing of your soundcard drivers.

**Select** the **drivers** that suit your operating system.

Click the OK button.

Close the Output Configuration dialog box.

To test, play a CD track.

**Tip:** If you notice any warbles and/or pops when using the WDM type drivers you may need to calibrate the Audio Output Device. See below

Note: For all other audio output related problems please see The Audio FAQ section below.

#### How to calibrate the soundcard output device

If you ever experience warbles and/or pops when CD Scratch is playing you may need to re-calibrate the soundcard.

Note: The audio output device calibration settings only applies to true WDM drivers.

Click the button in the **CD Scratch window**. This will open the **Output Configuration dialog** box.

Click the Cal button for the "ON AIR" output device.

In the **Optimize Buffering section** you will need to adjust the **Optimize buffering slider** to suit your system.

The idea is to lower latency, but without getting any cracks and pops. Position the slider after (to the right of) the region that causes the cracks and pops. Since this function is circular in how it works internally, the optimum position may actually be near the left of the slider (if the region of cracks and pops is to the far right).

Be sure to test your chosen setting under heavy system load, as some positions may seem fine until your system is loaded. Leaving a space of about 20 percentage points between the end of the region of cracks and pops and the position of the slider is usually optimum.

If your soundcard appears in the Output device list as a Legacy type, then you will normally be better off using it via the Legacy means, rather than the WDM.

## **Troubleshooting**

For troubleshooting help please see the topics listed below.

#### Audio output FAQ

Question: CD Scratch reports "Error initialising audio sub-system!". What does this mean?

**Answer:** You must have Direct X 5.0 or above installed on your system, and be running Direct Sound (VXD) or WDM drivers for your sound card. If your computer does not have both of these requirements, you should download the latest drivers for your soundcard, and or go to <a href="http://www.microsoft.com">http://www.microsoft.com</a> to download the latest Direct X version. If you are not sure if your computer meets these requirements, seek some advice from your computer supplier.

Question: The audio output sound warbles and/or pops. What can I do?

**Answer:** First thing to try is calibrating your sound if you are using the WDM driver type (does not apply to legacy mode). See section above on How to calibrate the audio output device.

Question: I still can not get it to sound right, no matter where I put the calibration slider. What next?

**Answer:** You may have the choice of using the "legacy", "WDM", or "Compat" driver types. Try changing to the other available driver types. See section above on How to configure your audio output device.

**Question:** I have tried calibrating the WDM driver type, and accessing the other driver types, and neither have given me stable sound. What now?

**Answer:** Some hardware is designed poorly and will not function well with CD Scratch. Sometimes this is simply due to the drivers installed, and by downloading the latest drivers for your soundcard, you can often alleviate any problems. To do this, go to your soundcard manufacturer's website, download and install the up-to-date drivers. This may take some trial-and-error to find out the best drivers for your system. If you do not feel comfortable with this, seek the assistance of your computer supplier.

**Note:** Some on-board soundcards are low quality products and have badly written drivers. You may find you have no success even after installing the latest drivers. If this is the case, then you may want to look at PCI or USB soundcard. It is highly recommended that this avenue is explored through a computer dealer so that testing with the CD Scratch can be attempted before making a financial commitment.

Question: I'm experiencing skipping when I run CD Scratch. How do I avoid this?

**Answer:** There are many potential causes. Here are a few:

Virus checkers running constantly in background. You could try turning them off.

Poorly written printer/scanner drivers. Update them or change configuration settings.

Running other memory intensive applications at the same time as CD Scratch. Don't run these type of applications at the same time.

Being infected by a virus. Use a virus scanner to check your whole system.

Windows 2000: Having the "menu effects" turned on will cause glitches. Switch them off under Display Properties in Control Panel.

Question: I'm experiencing skipping when I open or close a window (Windows 2000). How do I stop

this?

**Answer:** If you are using Windows 2000 you will need to disable the Use Transition effects for menus and tooltips feature. This feature will cause skipping when you open or close a window.

How to disable Use transition effects for menus and tooltips (Windows 2000 only):

Right-click on the Desktop.

Click on Properties.

Click on the Effects tab.

Uncheck/Disable the Use transition effects for menus and tooltips option.

#### **CD-DA subsystem FAQ**

Question: My CD skips when playing a track. Why is this?

**Answer:** One of the main causes of a track skipping is substance (dust or dirt) on the CD surface. In many cases this problem can be rectified by cleaning the surface of the CD. We recommend you seek advice on the best cleaning method.

Scratches on both the readable and label surface of the CD can cause skipping. This can be a permanent unrectifiable problem. We recommend you contact your audio CD supplier for advice on how to address this problem.

**Question:** I experience pauses or glitches in audio when playing two tracks from the same CD. Why is this?

**Answer:** If you are experiencing glitches in the audio output when trying to play two distant tracks from the one CD, for example track 1 and track 18, it is most probably because your CD-ROM does not have CAV (Constant Angular Velocity) technology. For details on the Ots Labs CD-DA subsystem requirements see the CD Scratch 1200 on-line help.

To find out if your CD-ROM uses CAV technology, please refer to your CD-ROM technical documentation or contact your computer supplier. If your CD-ROM does not use the CAV technology then you will need to make sure you don't play two distant tracks at the same time, for example you should still be able to play track 1 and 3 at the same time.

Question: CD Scratch freezes when attempting to play a CD. What can be done?

**Answer:** Freezing is most probably caused by a poor quality CD-ROM and or drivers. Over time, we have discovered that some CD-ROMs, and CD writers, do not respond correctly to the industry standard MMC command set causing locking up. Your solution could be to install the latest drivers for your CD-ROM, see your CD-ROM manufacturer's website or contact your computer supplier.

# **Hercules DJ Controller MK1 Mappings with CD Scratch**

Below is a table outlining the Hercules DJ Controller MK1 Mappings with CD Scratch.

**Note:** The left and right mouse buttons on the controller are used as "shift" keys. In most cases, using either the left or right button will have the same effect, however some functions work differently depending on whether you use the left or right shift key (mouse button). In the following, if the word 'shift' is used, it means you can use either key, whereas 'left shift' and 'right shift' obviously refers to a specific key.

Control	Function
Play/Pause	As expected, industry standard.
Cue	As expected, industry standard.
Next Track	As expected, grabs the next from the playlist and loads it into turntable.
Shift + Next Track	Fades the current track and automatically begins playing the next.
Previous Track	Ejects turntable.
Crossfader	As expected.
Left Shift + Crossfader	Centres the crossfader.
Right Shift + Crossfader	Shifts crossfader to hard left or hard right, depending on which direction you
	moved the crossfader.
Pitch Bend	As expected. Note that Ots supports "tempo bend" (default) and "pitch bend".
Autobeat	Enables/disables "on-air" channel for that turntable.
Monitor	As expected, enables/disables "cue" channel for that deck.
FX/Cue/Loop	Toggles between "pitch, "tempo" & "direction" modes.
Pitch Slider	Adjusts the pitch, tempo or direction, based on current mode.
Left/Right Shift + Pitch	Sets pitch, tempo or direction to the centre position, or to 100% forwards or
Slider	backwards (if in direction mode and using the right shift button).
Jog	Skips +/- one frame at a time when in frame-seek cueing mode.
Shift + Jog	Skips +/- ten frames at a time when in frame-seek cueing mode, or scratches
	currently playing track (left shift is normal scratching mode, right shift is
	"catch-up" scratching mode).
Master Tempo (left)	Toggles AutoDJ mode.
Master Tempo (right)	Toggles Live Input mode.
Volume	As expected, adjusts volume for turntable.
Volume	As expected, adjusts volume for turntable.
Bass	Reserved, adjusts Bass for turntable.
Mid	Reserved, adjusts Mid Range for turntable.
Effect 1	Displays scratch record for that turntable in screen centre panel.
Effect 2 (left)	Displays mixer console in screen centre panel.
Effect 3	Displays album cover in screen centre panel.
Shift + Effect 1/2/3	Fires off built-in scratch effect for that turntable.

# **Keyboard shortcuts**

Below is a comprehensive list of the keyboard shortcuts available in CD Scratch.

### Menu Keys

Key	Action
Alt + F	Provides access to the program menu.
Alt + Z	Provides access to Turntable A menu.
Alt + X	Provides access to Turntable B menu.

### Global Transport Keys

Key	Action
Ctrl + P	Global Play.
Ctrl + Q	Toggles Pause on and off.
Ctrl + S	Global Stop.

#### Turntable A keys

Key combinations	F1	F2	F3	F4
	Stop/Jump To Cue Point	Play	Bend Down (Tempo/Pitch)	Bend Up (Tempo/Pitch)
Shift	Fade	Stuck Needle mode	Direction 100% Reverse	Direction 100% Forward
Ctrl	Seek Start	Set Cue Point	Seek Back (1 frame)	Seek Forward (1 frame)
Ctrl + Shift	Eject	Next	Seek Back (10 frames)	Seek Forward (10 frame)
Alt	Pitch Down (0.5%)	Pitch Up (0.5%)	Tempo Down (0.5%)	Tempo Up (0.5%)
Alt + Shift	Pitch Down (0.1%)	Pitch Up (0.1%)		

#### Turntable B keys

Key combinations	F5	F6	F7	F8
	Stop/Jump To Cue Point	Play	Bend Down (Tempo/Pitch)	Bend Up (Tempo/Pitch)
Shift	Fade	Stuck Needle mode	Direction 100%	Direction 100%
			Reverse	Forward
Ctrl	Seek Start	Set Cue Point	Seek Back	Seek Forward
			(1 frame)	(1 frame)
Ctrl + Shift	Eject	Next	Seek Back	Seek Forward
			(10 frames)	(10 frame)
Alt	Pitch Down	Pitch Up	Tempo Down	Tempo Up
	(0.5%)	(0.5%)	(0.5%)	(0.5%)
Alt + Shift	Pitch Down	Pitch Up		
	(0.1%)	(0.1%)		

## Auto DJ Keys

Key	Action
Ctrl + A	Toggles Auto DJ on or off.

### Pitch/Tempo bending keys

Turntable A	
Key	Action
F3	Bend Down (Tempo/Pitch)
F4	Bend Up (Tempo/Pitch)
Turntable B	
Key	Action
F7	Bend Down (Tempo/Pitch)
F8	Bend Up (Tempo/Pitch)

### Scratch Sample Keys

Turntable A	
Key	Action
1	Applies the number 1 scratch sample to turntable A
2	Applies the number 2 scratch sample to turntable A
3	Applies the number 3 scratch sample to turntable A
4	Applies the number 4 scratch sample to turntable A
5	Applies the number 5 scratch sample to turntable A
Turntable B	
6	Applies the number 1 scratch sample to turntable B
7	Applies the number 2 scratch sample to turntable B
8	Applies the number 3 scratch sample to turntable B
9	Applies the number 4 scratch sample to turntable B
0	Applies the number 5 scratch sample to turntable B

### X-Fader Numeric Keys

Key	Action
7	Instantly fade to Turntable A
8	Instantly fade to centre position
9	Instantly fade to Turntable B
4	Quickly fade to Turntable A
5	Quickly fade to centre position
6	Quickly fade to Turntable B
1	Slowly fade to Turntable A
2	Slowly fade to centre position
3	Slowly fade to Turntable B
0	Steps fader in the left direction
Del	Steps fader in the right direction

Note: The Num Lock keyboard option must be enabled for the X-Fader feature.

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