### Pioneer DJM-850

### **TRAKTOR SCRATCH 2 Connection Guide**

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## Introduction

By connecting it to a computer with a single USB cable, the DJM-850 can be used in combination with TRAKTOR<sup>\*1</sup> to enjoy a wide range of DJ performances, including control of four decks (players) on TRAKTOR (the stereo signals of four sets of inputs and outputs can be input/output simultaneously) and input/output of sound using the DJM-850's internal USB sound card. The DJM-850 also supports music recording and production.

Furthermore, the DJM-850 is a certified mixer for TRAKTOR SCRATCH 2<sup>\*2</sup>, so with TRAKTOR SCRATCH 2 and a new timecode disc<sup>\*3</sup>, it can be used with conventional analog players (turntables) or a DVS (Digital Vinyl System) allowing digital music files to be operated with a CDJ.

If you do not own TRAKTOR, obtain the "TRAKTOR SCRATCH PRO 2 CERTIFIED UPGRADE" upgrade kit for TRAKTOR SCRATCH 2 certified mixers.

For details, see the Native Instruments's upgrade website. http://www.native-instruments.com/#/products/dj/traktor-scratch-pro-2/?page=2068

- \*1 A DJ software program by Native Instruments.
- \*2 A DJ mixer with a built-in high performance sound card that has qualified under the Native Instruments TRAKTOR SCRATCH 2 certification program. The TRAKTOR software programs with which the DJM-850 can be connected and used as a certified mixer are TRAKTOR SCRATCH PRO 2 and TRAKTOR SCRATCH DUO 2.
- \*3 A special CD/record on which the timecodes required for creating a DVS (Digital Vinyl System) are recorded.

This guide explains the procedures for creating a system for using the DJM-850 as a TRAKTOR SCRATCH 2 certified mixer in two cases; when using analog players and when using CDJs.

The supported computer operating systems are Windows and Mac OS. Some of the procedures differ for these two operating systems. The procedures for the respective operating systems are indicated **Windows** and **Mac OS** in this guide. Follow the procedure for your operating system.

The flow of procedures for creating the system is shown below.



# Using the scratch control function with analog players

### **Device connections**

Up to two analog players can be connected to the DJM-850. Here we describe the procedure based on the connection of two players.

1 Connect two analog players to the DJM-850.

Connect the PHONO output terminals of the analog players to the DJM-850's CH1 PHONO and CH4 PHONO terminals, respectively.



**2** Do not turn on the power of the respective devices yet. Also, do not connect the DJM-850 and computer until the DJM-850's driver software has been installed at Setting the "DJM-850 Settings Utility" (P. 4).



#### Materials to be prepared

- Computer on which TRAKTOR SCRATCH 2 is installed
- DJM-850
- Analog players (turntables) (x2)
- CONTROL VINYL MK2 (x2)

- USB cable (included with the DJM-850)
- Audio cables (with red and white pins)
- Driver software CD-ROM (included with the DJM-850)
- TRAKTOR manual (included with TRAKTOR SCRATCH 2)

### Switching the DJM-850's input

1 Switch the [CD/LINE, PHONO, LINE, USB \*/\*] selector switches for the CH1 and CH4 terminals connected at "Device connections" to [USB]. [CD/LINE, PHONO, LINE, USB \*/\*] selector switches



### Setting the "DJM-850 Settings Utility"

1 Turn on the computer's power.

Install TRAKTOR SCRATCH 2 before doing this. For the installation procedure, see the TRAKTOR manual.

#### 2 Install the DJM-850 driver software from the driver software CD-ROM included with the DJM-850.

The driver software for the DJM-850 and the settings utility software are installed. For the installation procedure, see "About the driver software and settings utility software" in the DJM-850's operating instructions.

**3** Use the included USB cable to connect the computer and DJM-850.

**4** Turn on the power of the DJM-850 and analog players. The settings utility starts up automatically on the computer.

If the settings utility does not start up automatically, launch it using the procedure below.

Windows

Click [DJM-850 Settings Utility] at [Start] menu > [All Programs] > [Pioneer] > [DJM-850].

#### Mac OS

Click the [DJM-850 Settings Utility] icon at [Macintosh HD] icon > [Application] > [Pioneer] > [DJM-850].

- **5** Set the signals to be sent to the computer from the DJM-850's respective channels.
  - ① Click the [MIXER OUTPUT] tab.



② At the [Mixer Audio Output] setting, select [CH1 Timecode PHONO] for USB1/2, [CH4 Timecode PHONO] for USB7/8.

Analog players cannot be connected to the CH2 and CH3 terminals on the DJM-850.



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If a screen like the one at the right pops up when making the selection, switch the DJM-850's [CD/LINE, PHONO, LINE, USB \*/\*] selector switches to [USB].





### **TRAKTOR SCRATCH 2 settings**

**1** Use the Setup Wizard to make the settings.

- ① Launch TRAKTOR SCRATCH 2, then click the [Preference] icon shown on the diagram at the right.
- ② Click [Setup Wizard] at the bottom left of the Preferences screen to open the Setup Wizard.

③ Click [Next] at the bottom right of the screen.

④ The HARDWARE CONTROLLER SETUP screen appears. For now, select [No] from the pull-down menu, then click [Next].









(5) The DECK LAYOUT SELECTION screen appears. Select an item ending in "(Scratch)" from the pull-down menu, then click [Next].

6 This completes the Setup Wizard. Click [Finish].





- **2** Make the Audio Device setting.

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Click [Audio Setup], then select the following from the "Audio Device" pull-down menu.

Windows Select [PIONEER DJM-850 ASIO]. Mac OS Select [PIONEER DJM-850].

Set "Sample Rate" and "Latency" to appropriate values.

Audio Setup	Audio Setup				
Output Routing	Audio Device	PIONEER DJN	A-850	-	)
Input Routing	Sample Rate	96000 Hz	•		
MIDI Clock	Latency			256	
<ul> <li>Timecode Setup</li> </ul>					
<ul> <li>Loading</li> </ul>				4.2 ms	
<ul> <li>Transport</li> </ul>					
<ul> <li>Decks Layout</li> </ul>					
<ul> <li>Decks</li> </ul>	Phono / Line				
• Mixer	la put Channel	_	not even and a	_	
<ul> <li>Global Settings</li> </ul>	Input Channel		not supported		
Effects					
<ul> <li>Mix Recorder</li> </ul>	Routing				
<ul> <li>Loop Recorder</li> </ul>	Swap Channels		- 49		
<ul> <li>Broadcasting</li> </ul>		÷	Restore	÷	
<ul> <li>Browser Details</li> </ul>					
<ul> <li>Layout Manager</li> </ul>			_		
File Management					
<ul> <li>Controller Manager</li> </ul>					
	Multi-Core				
		Enable M	utti-Core Proces	sor Support	
		Linking		io. pupport	
Colup Winned Import	Errort				Class
Strup wicard import	export				Close

- **3** Set the output routes for the respective channels.
  - ① Click [Output Routing], then check that [External] is set at [Mixing Mode].
  - ② From the pull-down menus, select the channels outputting sound from the respective decks.

#### Output Deck A

Windows Select [DJM-850 OUT1] for the left channel, [DJM-850 OUT2] for the right channel.

Mac OS Select [DJM-850 OUT0] for the left channel, [DJM-850 OUT1] for the right channel.

#### Output Deck B

(Windows) Select [DJM-850 OUT7] for the left channel, [DJM-850 OUT8] for the right channel.

Mac OS Select [DJM-850 OUT6] for the left channel, [DJM-850 OUT7] for the right channel.



#### To use scratch control with tracks on other TRAKTOR decks:

Make the settings in ② above for Output Deck C and Output Deck D. In this case, select [not connected] for Output Deck A and Output Deck B.

For the input channels of the respective decks (IN x/y) set in the following step, select the same output channels (OUT x/y) as set here.

For example, if Output Deck C was set to [DJM-850 OUT 1/2], set Input Deck C to [DJM-850 IN 1/2].

#### **4** Set the respective input channels.

Click [Input Routing], then from the pull-down menus select the channels input to the respective decks.

#### Input Deck A

Windows Select [DJM-850 IN1] for the left channel, [DJM-850 IN2] for the right channel.

Mac os Select [DJM-850 IN0] for the left channel, [DJM-850 IN1] for the right channel.

#### Input Deck B

(Windows) Select [DJM-850 IN7] for the left channel, [DJM-850 IN8] for the right channel.

Mac os Select [DJM-850 IN6] for the left channel, [DJM-850 IN7] for the right channel.

This completes the settings for the DJM-850 and TRAKTOR SCRATCH 2. Use the procedure below to check operation.



- **5** Check that the Timecode signals are being properly detected.
  - (1) On the main menu, select [Scratch Control] from the drop-down menus for the respective decks.



- ② Play the CONTROL VINYL MK2 on the analog player.
- ③ At the Scope and Platter screens for the respective decks, check that TRAKTOR SCRATCH 2 properly identifies the Timecode signals.

Play the CONTROL VINYL MK2 and check that the Scope and Platter screens are as shown in the red frames.

Scope screen		Platter screen	
•		•	
SYNC MASTER I III 41 IF		SYNC MASTER I I 41	
N,	CD MK2	н	
• 1/16 1/8 1/4 1/2 1 2 4 8 16 32 •		V1/16 1/8 1/4 1/2 1 2 4 8	
		The	/

A blue circle is displayed.

The indicator line turns.

For instructions on switching between the Scope and Platter screens, see the TRAKTOR manual.

Scratch control is now possible on TRAKTOR SCRATCH 2.

For details on using the scratch control function, see the TRAKTOR manual included with TRAKTOR SCRATCH 2.

# Using the scratch control function with CDJs

### **Device connections**

Up to four CDJs can be connected to the DJM-850, but here we describe the procedure based on the connection of two players to the DJM-850's CH1 CD/LINE and CH2 CD/LINE terminals.



Connect the two CDJs to the DJM-850.

Use audio (pin) cables to connect the audio output terminals on the respective CDJs to the CH1 and CH2 CD/ LINE terminals on the DJM-850.



To use scratch control with tracks on three or more TRAKTOR decks:

Up to two more CDJs can be added. Connect them to the CH3 and CH4 terminals in one of the following ways:

- Use audio cables to connect the CDJs' audio output terminals to the CH3 or CH4 CD/LINE terminals or the CH3 LINE terminals on the DJM-850.
- **2** Do not turn on the power of the respective devices yet. Also, do not connect the DJM-850 and computer until the DJM-850's driver software has been installed at Setting the "DJM-850 Settings Utility" (P. 11).



#### Materials to be prepared

- Computer on which TRAKTOR SCRATCH 2 is installed
- DJM-850
- CDJ players (x2)
- CONTROL CD MK2 (x2)

- USB cable (included with the DJM-850)
- Audio cables (red and white pins)
- Driver software CD-ROM (included with the DJM-850)
- TRAKTOR manual (included with TRAKTOR SCRATCH 2)

### Switching the DJM-850's input

1 Switch the [CD/LINE, PHONO, LINE, USB \*/\*] selector switches for the CH1 and CH2 terminals connected at "Device connections" to [USB]. [CD/LINE, PHONO, LINE, USB \*/\*] selector switches



To use scratch control with tracks on three or more TRAKTOR decks: Up to four decks (A, B, C and D) can be controlled on TRAKTOR. When four CDJs are connected, switch the [CD/LINE, PHONO, LINE, USB \*/\*] selector switches for all four channels (CH1 to CH4) to [USB].

### Setting the "DJM-850 Settings Utility"

**1** Turn on the computer's power.

Install TRAKTOR SCRATCH 2 before doing this. For the installation procedure, see the TRAKTOR manual.

2 Install the DJM-850 driver software from the driver software CD-ROM included with the DJM-850. The driver software for the DJM-850 and the settings utility software are installed. For the installation procedure, see "About the driver

software and settings utility software" in the DJM-850's operating instructions.

**3** Use the included USB cable to connect the computer and DJM-850.

**4** Turn on the power of the DJM-850 and the CDJs. The settings utility starts up automatically on the computer.

If the settings utility does not start up automatically, launch it using the procedure below.

Windows

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Click [DJM-850 Settings Utility] at [Start] menu > [All Programs] > [Pioneer] > [DJM-850].

Mac OS

Click the [DJM-850 Settings Utility] icon at [Macintosh HD] icon > [Application] > [Pioneer] > [DJM-850].

- **5** Set the signals to be sent to the computer from the DJM-850's respective channels.
  - ① Click the [MIXER OUTPUT] tab.



② At the [Mixer Audio Output] setting, select [CH1 Timecode CD/LINE] for USB1/2, [CH2 Timecode CD/LINE] for USB3/4.

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#### When a CDJ is connected to the CH1 CD/LINE terminals



#### To use scratch control with tracks on three or more TRAKTOR decks:

Up to two more CDJs can be added. Make the USB5/6 and USB7/8 settings in one of the following ways:

- USB5/6 When the CDJ is connected to the DJM-850's CH3 CD/LINE terminals:
  - When the CDJ is connected to the DJM-850's CH3 LINE terminals:

Select [CH3 Timecode CD/LINE]. Select [CH3 Timecode LINE]. Select [CH4 Timecode CD/LINE].

USB7/8  $\,$  • When the CDJ is connected to the DJM-850's CH4 CD/LINE terminals:

If a screen like the one at the right pops up when making the selection, switch the DJM-850's [CD/LINE, PHONO, LINE, USB \*/\*] selector switches to [USB].



[CD/LINE, PHONO, LINE, USB \*/\*] selector switches





### **TRAKTOR SCRATCH 2 settings**

**1** Use the Setup Wizard to make the settings.

- ① Launch TRAKTOR SCRATCH 2, then click the [Preference] icon shown on the diagram at the right.
- ② Click [Setup Wizard] at the bottom left of the Preferences screen to open the Setup Wizard.





* TRAKTOR		Setup Wizard
HARDWARE CONTRO	DLLER SETUP	
Please choose if you wor external controller you w	rk with keyboard and mouse ant to use with TRAKTOR.	only or if you have an
Are you using an externa	al controller ?	
No		
No Yes		
Cancel	✓ Back	Next ►

3 Click [Next] at the bottom right of the screen.

④ The HARDWARE CONTROLLER SETUP screen appears. For now, select [No] from the pull-down menu, then click [Next]. (5) The DECK LAYOUT SELECTION screen appears. Select an item ending in "(Scratch)" from the pull-down menu, then click [Next].

6 This completes the Setup Wizard. Click [Finish].





**2** Make the Audio Device setting.

Ø

Click [Audio Setup], then select the following from the "Audio Device" pull-down menu.

Windows Select [PIONEER DJM-850 ASIO]. Mac os Select [PIONEER DJM-850].

Set "Sample Rate" and "Latency" to appropriate values.

Audio Setup	Audio Setup				
<ul> <li>Output Routing</li> </ul>	Audio Device	PIONEER DJN	A-850		
Input Routing	Sample Rate	96000 Hz			
<ul> <li>MIDI Clock</li> </ul>	Latency	•		256	
<ul> <li>Timecode Setup</li> </ul>					
<ul> <li>Loading</li> </ul>				4.2 ms	
<ul> <li>Transport</li> </ul>					
<ul> <li>Decks Layout</li> </ul>					
<ul> <li>Decks</li> </ul>	Phono / Line				
o Mixer	Inout Channel		not supported	_	
<ul> <li>Global Settings</li> </ul>	ingut Gilanner		not supported		
Effects					
Mix Recorder	Routing				
<ul> <li>Loop Recorder</li> </ul>	Swap Channels		••		
<ul> <li>Broadcasting</li> </ul>		÷	Restore	÷	
<ul> <li>Browser Details</li> </ul>					
Layout Manager					
File Management					
<ul> <li>Controller Manager</li> </ul>					
	Multi-Core				
		Enable Mu	Iti-Core Proces	sor Support	
Setup Wizard Import	Export				Close

- **3** Set the output routes for the respective channels.
  - ① Click [Output Routing], then check that [External] is set at [Mixing Mode].
  - ② From the pull-down menus, select the channels outputting sound from the respective decks.

#### Output Deck A

Windows Select [DJM-850 OUT1] for the left channel, [DJM-850 OUT2] for the right channel.

Mac OS Select [DJM-850 OUT0] for the left channel, [DJM-850 OUT1] for the right channel.

#### Output Deck B

(Windows) Select [DJM-850 OUT3] for the left channel, [DJM-850 OUT4] for the right channel.

Mac OS Select [DJM-850 OUT2] for the left channel, [DJM-850 OUT3] for the right channel.



#### To use scratch control with tracks on more than three TRAKTOR decks:

Output Deck C and Output Deck D can be set additionally for the required number of decks. (Also make the settings for the required number of decks in the DJM-850's settings utility and prepare additional CONTROL CD MK2s.)

#### **Output Deck C**

(Windows) Select [DJM-850 OUT5] for the left channel, [DJM-850 OUT6] for the right channel.(Mac OS) Select [DJM-850 OUT4] for the left channel, [DJM-850 OUT5] for the right channel.

#### **Output Deck D**

Windows Select [DJM-850 OUT7] for the left channel, [DJM-850 OUT8] for the right channel.Mac OS Select [DJM-850 OUT6] for the left channel, [DJM-850 OUT7] for the right channel.

For the input channels of the respective decks (IN x/y) set in the following step, select the same output channels (OUT x/y) as set here.

For example, if Output Deck A was set to [DJM-850 OUT 1/2], set Input Deck A to [DJM-850 IN 1/2].

#### **4** Set the respective input channels.

Click [Input Routing], then from the pull-down menus select the channels input to the respective decks.

#### Input Deck A

(Windows) Select [DJM-850 IN1] for the left channel, [DJM-850 IN2] for the right channel.

Mac os Select [DJM-850 IN0] for the left channel, [DJM-850 IN1] for the right channel.



#### Input Deck B

Windows Select [DJM-850 IN3] for the left channel, [DJM-850 IN4] for the right channel. Mac os Select [DJM-850 IN2] for the left channel, [DJM-850 IN3] for the right channel.

#### To use scratch control with tracks on more than three TRAKTOR decks:

Input Deck C and Input Deck D can be set additionally for the required number of decks.

#### Input Deck C

(Windows) Select [DJM-850 IN5] for the left channel, [DJM-850 IN6] for the right channel. (Mac os) Select [DJM-850 IN4] for the left channel, [DJM-850 IN5] for the right channel.

#### Input Deck D

(Windows) Select [DJM-850 IN7] for the left channel, [DJM-850 IN8] for the right channel. (Mac OS) Select [DJM-850 IN6] for the left channel, [DJM-850 IN7] for the right channel.

This completes the settings for the DJM-850 and TRAKTOR SCRATCH 2. Use the procedure below to check operation.

- **5** Check that the Timecode signals are being properly detected.
  - ① On the main menu, select [Scratch Control] from the drop-down menus for the respective decks.



- 2 Play the CONTROL CD MK2 on the CDJ.
- ③ At the Scope and Platter screens for the respective decks, check that TRAKTOR SCRATCH 2 properly identifies the Timecode signals.

Play the CONTROL CD MK2 and check that the Scope and Platter screens are as shown in the red frames.

Scope screen		Platter screen	
•		•	
SYNC MASTER I 🔲 I 📲		SYNC MASTER I I 41	
			FX
н		IN L	
• 1/16 1/8 1/4 1/2 1 2 4 8 16 32 •		• 1/16 1/8 1/4 1/2 1 2 4 8	
			/
A blue circle is	displayed.	The in	dicator line turns.

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For instructions on switching between the Scope and Platter screens, see the TRAKTOR manual.

Scratch control is now possible on TRAKTOR SCRATCH 2.

For details on using the scratch control function, see the TRAKTOR manual included with TRAKTOR SCRATCH 2.

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