CONTROLLER EDITOR

MANUAL

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Document authored by: Native Instruments GmbH

NATIVE INSTRUMENTS GmbH
Schlesische Str. 29-30
D-10997 Berlin
Germany
www.native-instruments.de

NATIVE INSTRUMENTS North America, Inc.
6725 Sunset Boulevard
5th Floor
Los Angeles, CA 90028
USA
www.native-instruments.com

NATIVE INSTRUMENTS K.K.
YO Building 3F
Jingumae 6-7-15, Shibuya-ku,
Tokyo 150-0001
Japan
www.native-instruments.co.jp

NATIVE INSTRUMENTS UK Limited
18 Phipp Street
London EC2A 4NU
UK
www.native-instruments.co.uk

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Table of Contents

1   Welcome

Welcome to the MASCHINE JAM Bitwig Studio Template Manual. This document describes how to setup the Bitwig Studio Template and use a MASCHINE JAM controller to operate Bitwig Studio.

This template provides very detailed control over Bitwig Studio and doubles the functionality of your MASCHINE JAM controller.

On behalf of the entire NATIVE INSTRUMENTS team, we hope you find this template useful.

1.1   Document Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:

> The speech bubble icon indicates a useful tip that may often help you to solve a task more efficiently.

> The exclamation mark icon highlights important information that is essential for the given context.

> The red cross icon warns you of serious issues and potential risks that require your full attention.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open…*, *Save as…* etc.) in the software and paths to locations on your hard disk or other storage devices is printed in *italics*.

- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes etc.) in the software is printed in blue. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.

- Important names and concepts are printed in **bold**.

- References to keys on your computer's keyboard you'll find put in square brackets (e.g., "Press [Shift] + [Enter]").

►   Single instructions are introduced by this play button type arrow.

→   Results of actions are introduced by this smaller arrow.

2   Installation

The Bitwig Studio Template is integrated in both the Native Instruments Controller Editor as well as Bitwig Studio. Therefore, the installation procedure only requires a few steps before you can start using your MASCHINE JAM controller to operate Bitwig Studio.

2.1   Setup in Controller Editor

To load the Bitwig Studio Template in Controller Editor, follow the steps below. This is required before loading the Bitwig Template in Bitwig Studio.

> ⚠ Ensure that you have installed the latest version of Controller Editor. You can download the latest version with Native Access or from the Native Instruments website.

1.   Connect the MASCHINE JAM controller to your computer.

2.   Start Controller Editor. It automatically recognizes your controller.

3.   In Controller Editor, go to the Templates tab.

4. Click on the Factory Templates drop-down menu in the Templates tab and select *Bitwig Studio*.

→   The Bitwig Studio Template is added to the list of Templates and selected as the currently active Template. You can close Controller Editor.

2.2   Setup in Bitwig Studio

To load the Bitwig Studio Template in Bitwig Studio, follow the steps below.

> ⚠ Ensure that you have installed the latest version of Bitwig Studio. The Bitwig Studio Template for MASCHINE Jam is integrated in Bitwig Studio 1.3.15 or later versions.

1. Connect your MASCHINE JAM controller and ensure that the Bitwig Studio Template is selected in Controller Manager (see section ↑2.1, Setup in Controller Editor for details).
2. Start Bitwig Studio.

3. Open Bitwig Studio's Preferences and go to the Controllers tab.

4. Click on Detect available controllers to automatically add MASCHINE JAM as a controller in Bitwig Studio.

→   The Bitwig Studio Template is now set up and ready to use. You can close the Preferences.

> ⊗ If you are on Windows and use a different MASCHINE JAM controller than initially installed on your computer, you cannot use the function to Detect available controllers automatically. In this case, open the Add controller manually menu and select *Maschine Jam* from the *Native Instruments* sub-menu. Afterwards, assign MASCHINE JAM's MIDI ports to the new Maschine JAM entry in the list of controllers.

3   Transport and Global Functions

The Bitwig Studio Template offers full control over Bitwig Studio's transport as well as many other global functions.
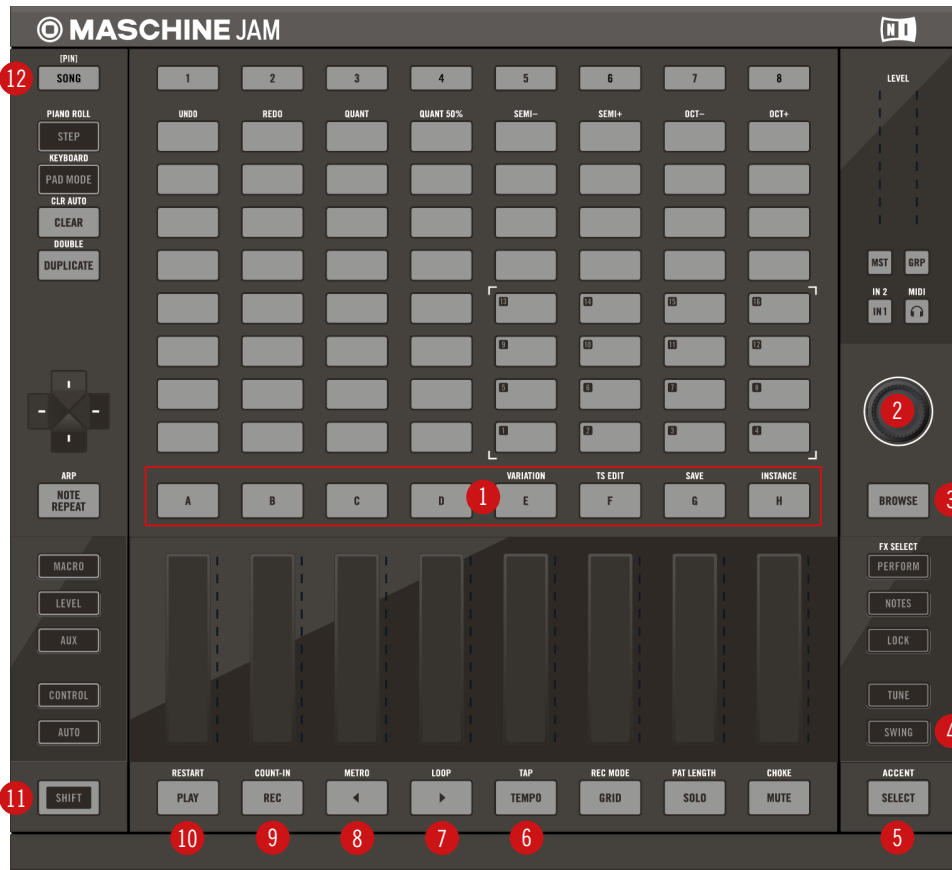
Global and transport controls on MASCHINE JAM

(**1**) **Group buttons**: These buttons select tracks, create new Instrument Tracks on empty channels, or control a number of different functions depending on the selected mode.

- Hold MUTE: The Group buttons mute tracks.
- Hold SOLO: The Group buttons solo tracks.
- REC MODE (SHIFT + GRID): The Group buttons arm tracks for recording.

Holding SHIFT and pressing the Group buttons controls the following functions:

- A: Show Note Editor Panel
- B: Activate audio engine
- D: Previous project tab
- E: Next project tab
- G: Save project
- H: Show Device Panel

(**2**) **Encoder**: The encoder is used to control a number of different parameters, depending on the selected mode. Holding SHIFT while turning the encoder allows for fine adjustments.

- MST: The encoder controls the master level.
- GRP: The encoder controls the level of selected track.
- TEMPO: The encoder controls the tempo of the project.
- PAT LENGTH (SHIFT + SOLO): The encoder controls the length of the selected clip.
- GRID: The encoder controls the grid size in STEP mode.

(**3**) BROWSE: Opens and closes the Browser window.

(**4**) SWING: Holding SWING while turning the encoder controls either the global shuffle amount or the global shuffle rate. You can toggle between the two parameters by holding SWING and pressing the encoder. Holding SWING and pressing the encoder while turning allows for fine adjustments of the global shuffle amount.

(**5**) SELECT: Holding SELECT and pressing the Group button of an empty track creates a new Audio Track.

(**6**) TEMPO / TAP: When TEMPO is selected, the encoder controls the tempo of the project. Holding SHIFT while turning the encoder allows for fine adjustments in increments of 0.1 BPM. Pressing the encoder while turning allows for coarse adjustments in increments of 10 BPM. TAP (SHIFT + TEMPO) lets you tap in a tempo with your finger.

(**7**) LOOP: LOOP (SHIFT + Page Right button) toggles the loop switch on or off.

(**8**) METRO (SHIFT + Page Left button): Toggles the metronome on or off.

(**9**) REC: Starts the recording for the selected clip on the active track. If no clip is selected in the active track, a new clip is recorded to the first empty slot. SHIFT + REC toggles the over-dub mode on or off.

(**10**) PLAY: Starts or stops the playback of the project. SHIFT + PLAY stops the playback and resets the transport to the start position.

(**11**) SHIFT: Allows you to access secondary functions for buttons. You can also hold SHIFT while using the encoder and the Touch Strips for fine adjustments.

(**12**) SONG: Toggles between Arrange Panel View and Mix Panel View. Pressing SHIFT + SONG changes the representation of the Clip Launcher on MASCHINE JAM's 8x8 click-pad matrix between vertical (default) and horizontal views. The horizontal view matches the Clip Launcher in Bitwig Studio's Arrange Panel View.

4 Matrix and Note Input

The 8x8 click-pad matrix is where you play Bitwig Studio's Clip Launcher as well as the instruments in your project by using various modes for entering notes into clips.
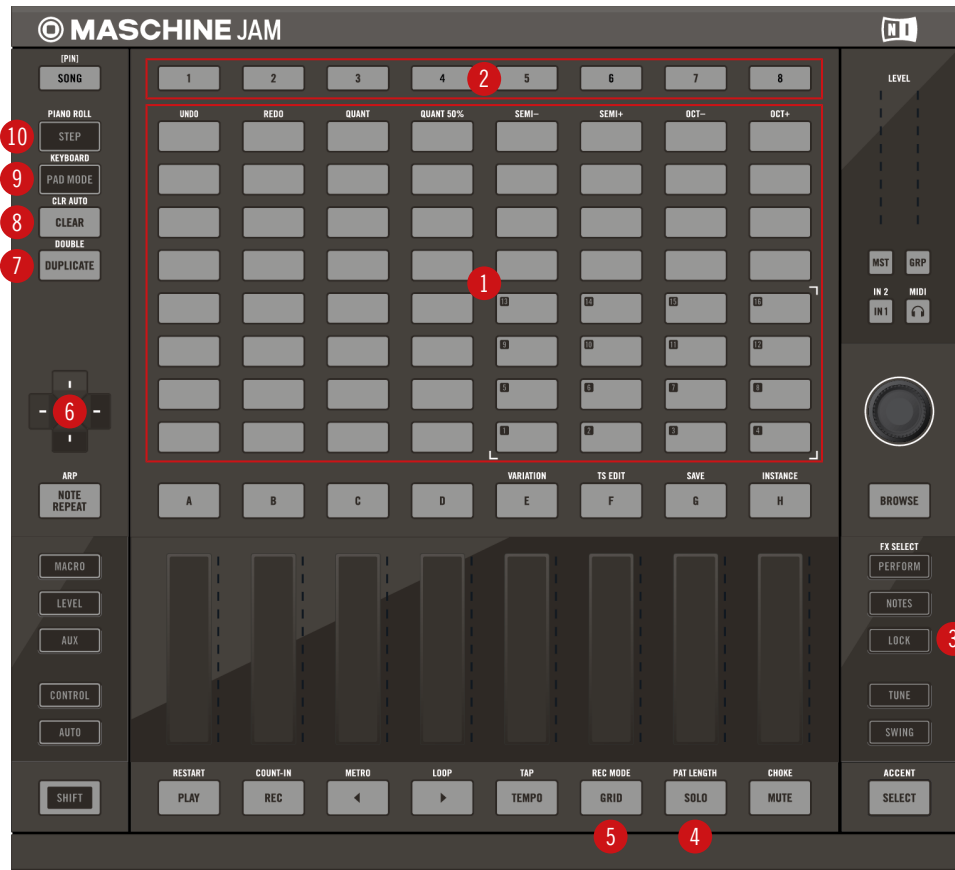
Matrix and note input controls on MASCHINE JAM

(**1**) **8x8 click-pad matrix**: Controls the Clip Launcher and lets you enter notes into clips when the STEP / PIANO ROLL or PAD MODE / KEYBOARD modes are selected. Additional functions are available in the top row of the grid when pressing the SHIFT button.

- UNDO: Lets you undo the last edit in the project.
- REDO: Lets you redo the last edit in the project.
- QUANT: Quantizes the selected clip by 100%.
- QUANT 50%: Quantizes the selected clip by 50%.
- SEMI- / SEMI+: If no note is selected in the current MIDI clip, these buttons shift all notes up or down by one semitone. Otherwise, only selected notes are shifted.
- OCT- / OCT+: If no note is selected in the current MIDI clip, these buttons shift all notes up or down by one octave. Otherwise, only selected notes are shifted.

(**2**) **Scene Buttons**: These buttons launch all clips in the corresponding scene.

(**3**) LOCK: Restricts PIANO ROLL mode to monophonic input.

(**4**) PAT LENGTH (SHIFT + SOLO): When enabled, the encoder controls the length of the selected clip. Holding SHIFT while turning the encoder allows for fine adjustments. Holding SHIFT and pressing the encoder while turning allows for extra fine adjustments.

(**5**) GRID: When enabled, the encoder controls the grid size in STEP mode.

(**6**) **D-Pad**: Steps through the Clip Launcher in groups of eight clips in all directions. Press SHIFT to step through one clip at a time.

(**7**) DUPLICATE / DOUBLE: Duplicates a track (DUPLICATE + Group button) or a clip (DUPLICATE + clip button). It also selects and launches the new clip. DOUBLE (SHIFT + DUPLICATE) + clip button doubles the length of the clip including its content. In STEP / PIANO ROLL or PAD MODE / KEYBOARD modes, pressing DUPLICATE duplicates the selected clip. DOUBLE (SHIFT + DUPLICATE) doubles the length of the clip including its content.

(**8**) CLEAR: Deletes a clip (CLEAR + Clip button). In STEP / PIANO ROLL or PAD MODE / KEYBOARD modes, the pressing CLEAR deletes the content of the selected clip.

(**9**) PAD MODE / KEYBOARD: Enables PAD MODE if the selected track is hosting a Drum Machine. Enables KEYBOARD mode if the selected track is hosting an Instrument.

In KEYBOARD mode, the scale can be set with the D-Pad. Press left and right for setting the scale type. Pressing up and down sets the root key's octave. Pressing SHIFT + D-Pad up / down shifts the root key by one semitone.

(**10**) STEP / PIANO ROLL: Enables STEP mode if the selected track is hosting a Drum Machine. Enables PIANO ROLL mode if the selected track is hosting an Instrument. In both modes, the clips are organized in pages that can be accessed by pressing the Scene buttons.

In PIANO ROLL mode, the root note is highlighted. The position in the clip and the scale can be set with the D-Pad. Pressing left and right adjusts the position in the clip. Pressing SHIFT + D-Pad left / right sets the scale type. Pressing up and down shifts the piano roll up and down in octaves. Pressing SHIFT + up / down shifts the piano roll up and down in semitones. Pressing SELECT + left / right sets the root note. Pressing SELECT + up / down selects another clip in the selected track. Pressing SHIFT + SELECT shifts the piano roll to show the lowest note in the clip.

In STEP mode, the D-Pad is used to navigate in the clip and select the base note for the current set of drum chains. Pressing left and right adjusts the position in the clip. Pressing up and down shifts the base note up and down in octaves. Pressing SHIFT + D-Pad up / down shifts the base note up and down in semitones. The lower left quadrant of the 8x8 click-pad matrix controls velocity for entered notes (lowest value in the lower left corner, highest value in the upper right corner).

5   Smart Strip and Mixing

The Smart Strips give you full control over the Bitwig mixer as well as your instruments and effects.
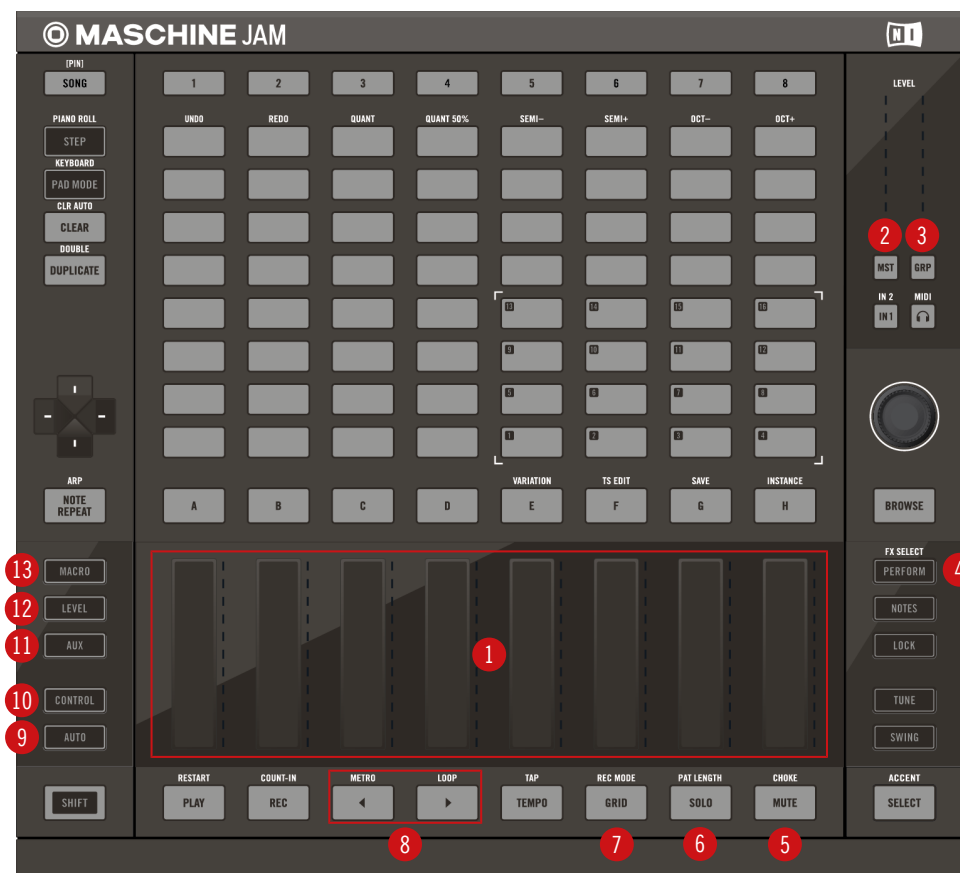
Smart Strip and mixing controls on MASCHINE JAM

(**1**) **Touch Strips**: The Touch Strips are used to control the mixer as well as device parameters, depending on the selected mode. Holding SHIFT and using the Touch Strips allows for fine adjustments.

- LEVEL: The Touch Strips control the levels for each track.

- AUX: The Touch Strips control the sends for each track.

- CONTROL: The Touch Strips control device parameters for the selected track.

- PERFORM: The Touch Strips and the Group buttons control the Effect Tracks and the master track.

(**2**) MST: When enabled, the encoder controls the master level.

(**3**) GRP: When enabled, the encoder controls the level of selected track.

(**4**) PERFORM: When enabled, the Touch Strips and the Group buttons control the Effect Tracks and the master track.

(**5**) MUTE: When held, the Group buttons mute tracks.

(**6**) SOLO: When held, the Group buttons solo tracks.

(**7**) REC MODE (SHIFT + GRID): When enabled, the Group buttons arm tracks for recording.

(**8**) **Page buttons**: Used for parameter bank navigation in CONTROL mode by switching between banks of parameters of the selected device.

(**9**) AUTO: Writes modulation to the clip envelopes of the selected clip.

(**10**) CONTROL: When enabled, the Touch Strips control device parameters for the selected track. Pressing CONTROL + Page left / right navigates between devices. Pressing SHIFT + CONTROL + Page right selects the first device in a Chain. Pressing SHIFT + CONTROL + Page left selects the parent device of the current Chain.

(**11**) AUX: When enabled, the Touch Strips control the sends for each track. Pressing AUX again toggles between all available sends.

(**12**) LEVEL: When enabled, the Touch Strips control the levels for each track. To control the panorama for each track, press SHIFT + LEVEL.

(**13**) MACRO: When enabled, the Touch Strips control the 8 device macros.