

Remote Control Devices

# NUENDO<sup>2.0</sup>

media production system



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**1**

**CM Automation Motor Mix**

# Specifications

The CM Motor Mix can control any number of channels in groups of 8.

- Press the “<” and “>” buttons (at the top of the View section) to select channels 1-8, 9-16 etc. Hold down Shift and press “<” or “>” to shift the fader assignment in steps of one channel.
- Press F1 to disable/enable the fader motors.
- Use the Select buttons (the row of buttons next to the display) to select a single track for detailed settings.
- The Mute and Solo buttons are used to mute or solo a track.
- The assignment of the buttons in the first row below the dials depends on the selected parameter group.
- In the View section, select Rec/Rdy to use the second row of buttons below the dials for arming a track for recording.
- In the View section, select Write or “fnc B” to control the Write or Read buttons in the Nuendo mixer. When Write/fnc B is selected, selecting the All button in the bottom left section of the CM Motor Mix controls the Write All/Read All buttons in the Nuendo mixer.
- The Auto Enbl button controls the Start/Stop function in Nuendo.
- The Suspend button controls the Record function in Nuendo.
- Press the DSP button to move the project cursor to the start of the project.  
Hold down Shift and press the DSP button to move the project cursor to the end of the project.
- Press the Window button to move the project cursor to the left locator.  
Hold down Shift and press the Window button to move the project cursor to the right locator.
- Press the Default button to switch automatic punch in on or off.  
Hold down Shift and press the Default button to switch automatic punch out on or off.
- Press the Undo button to undo the last action in Nuendo.  
Hold down Shift and press the Undo button to “undo the undo”.

- In the Rotary section, use the Rotary dial to change the assignment of the four buttons below the dial (indicated in the ROTARY display):

#### ROTARY: PA

- equaliz button: Fader Set mode Panning
- dynmics button: Fader Set mode Routing
- delay button: Selected Channel mode Panning
- special button: Selected Channel mode Routing

#### ROTARY: EQ

- equaliz button: Fader Set mode EQ Low (EQ1)
- dynmics button: Fader Set mode EQ Mid-Low (EQ2)
- delay button: Fader Set mode EQ Mid-High (EQ3)
- special button: Fader Set mode EQ High (EQ4)

#### ROTARY: S1

- equaliz button: Fader Set mode Send 1
- dynmics button: Fader Set mode Send 2
- delay button: Fader Set mode Send 3
- special button: Fader Set mode Send 4

#### ROTARY: S2

- equaliz button: Fader Set mode Send 5
- dynmics button: Fader Set mode Send 6
- delay button: Fader Set mode Send 7
- special button: Fader Set mode Send 8
- Use the Bank Up button in the View section for page up.  
Hold down Shift and press the Bank Up button to jump to the last page.
- Use the Bank Down button in the View section for page down.  
Hold down Shift and press the Bank Down button to jump to the first page.
- Press the Rotary dial to switch the display of names of the available parameters or the page name on or off.
- Fader Set mode Panning:
  - Page 1 - panning left/right
  - Page 2 - panning front/rear
  - Buttons below dials: monitor

- Fader Set mode Routing:
  - Page 1 - Output Bus
  - Page 2 - Monitor
  - Page 3 - Input Bus
  - Page 4 - Input Gain
  - Page 5 - Input Phase
  - Buttons below dials: monitor
- Selected Channel mode Panning:
  - Page 1 - panning left/right, panning front/rear
  - Buttons below dials: monitor
- Selected Channel mode Routing:
  - Page 1 - Output Bus, Monitor, Input Bus, Input Gain, Input Phase
  - Buttons below dials: monitor
- Fader Set mode EQ1 to EQ4 (e.g. EQ1):
  - Page 01 - EQ Low Gain
  - Page 02 - EQ Low Frequency
  - Page 03 - EQ Low Q
  - Page 04 - EQ Low Enable
  - Page 05 - Bypass EQs
  - Buttons below dials: bypass EQs
- Fader Set mode Send1 to Send8 (e.g. Send1):
  - Page 01 - Send1 Level
  - Page 02 - Send1 Enable
  - Page 03 - Send1 Pre/Post
  - Page 04 - Send1 Bus
  - Page 05 - Bypass Sends
  - Buttons below dials: bypass sends
- F2 button: Selected Channel mode EQ
  - Page 1 - Gain, Frequency, Q and Enable for the lo band, Gain, Frequency, Q and Enable for the lo mid band
  - Page 2 - Gain, Frequency, Q and Enable for the hi mid band, Gain, Frequency, Q and Enable for the hi band
  - Buttons below dials: bypass EQs



- Holding down Shift and pressing the F2 button gives you a variation of Selected Channel mode EQ:
  - Page 1 - Gain and Frequency for all bands
  - Page 2 - Q and Enable for all bands
  - Buttons below dials: bypass EQs
- F3 button: Selected Channel mode Sends
  - Page 1 - Level, Enable, Pre/Post and Bus for Send 1 and Send 2
  - Page 2 - Level, Enable, Pre/Post and Bus for Send 3 and Send 4
  - Page 3 - Level, Enable, Pre/Post and Bus for Send 5 and Send 6
  - Page 4 - Level, Enable, Pre/Post and Bus for Send 7 and Send 8
  - Buttons below dials: bypass sends
- Holding down Shift and pressing the F3 button gives you a variation of Selected Channel mode Sends:
  - Page 1 - Level for Send 1 to Send 8
  - Page 2 - Enable for Send 1 to Send 8
  - Page 3 - Pre/Post for Send 1 to Send 8
  - Page 4 - Bus for Send 1 to Send 8
  - Buttons below dials: bypass sends

For a description of the functionalities for the F4 button: Selected Channel mode Inserts, Next button: Global mode Send Effects, Last button: Global mode Master Effects, and Enter button: Global mode Instruments, see the separate pdf document “Mackie Control and Nuendo”.



**2**

**Steinberg Houston**

# About Houston

Houston is a MIDI/USB remote control device designed especially for use with VST audio applications such as Nuendo. With clearly laid out controls (including touch sensitive motorized faders, rotary knobs, transport controls and a jog/shuttle wheel) Houston allows you to control virtually every mixer parameter in Nuendo, without having to use the computer keyboard or mouse.

- For details about parameters and hands-on mixing techniques, please see the Houston documentation.

**3**

**JL Cooper CS-10**

# Specifications

The CS-10 can remote control 32 channels (in groups of 8). The following CS-10 controls will remote control the following parameters for each channel strip:

- Fader: volume
- Solo and Mute: solo and mute
- Sel: select channel for editing

The following parameters can be remote controlled for each *selected* channel using the six rotary knobs on the CS-10:

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<b>Dial</b>	<b>Parameter</b>
Send 1	Effect send 1
Send 2	Effect send 2
Pan	Pan
Boost/cut	EQ 1 Gain
Frequency	EQ 1 Frequency
Bandwidth	EQ 1 Q Factor

---

- The CS-10 function keys 1 - 4 are used to select channels 1 - 32 in groups of 8.  
Function key 1 selects channels 1 - 8, function key 2 selects channels 9 - 16, and so on.
  - If you hold down the function key “Shift” and then move a fader, the two indicators beside the fader will indicate whether the fader position is below or above the current fader level in Nuendo.  
If the upper indicator is lit, the fader position on the panel is above the fader level in Nuendo and vice versa. When both indicators are dark, the fader positions are matched for that channel.
  - The CS-10 Play, Stop, Record, Rewind and Fast Forward transport controls control the equivalent functions in Nuendo.
- 
- The CS-10 supports “MIDI Feedback”, allowing the mute, solo and selection status of the channels in Nuendo to be indicated on the panel. For this (and the fader position indication described above) to work, you need a two-way MIDI connection between the CS-10 and Nuendo.**
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**4**

**JL Cooper MCS-3000**

# Specifications

The MCS-3000 can control 32 mixer channels remotely (in groups of 8).

The following MCS-3000 controls will remote control the following mixer parameter for each channel strip:

- Fader: volume
- Solo and Mute: solo and mute
- Sel: Select channel for editing

These parameters can be remote controlled for each *selected* channel using the dials on the MCS-3000 and switching between Pages 1 - 4:

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<b>Page 1</b>		<b>Page 2</b>	
<b>Dial</b>	<b>Parameter</b>	<b>Dial</b>	<b>Parameter</b>
1	Pan	1	EQ 1 Gain
2	Effect send 1	2	EQ 1 Freq
3	Effect send 2	3	EQ 1 "Q"
4	Effect send 3	4	EQ 1 Low Limit
5	Effect send 4	5	EQ 1 High Limit

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<b>Page 3</b>		<b>Page 4</b>	
<b>Dial</b>	<b>Parameter</b>	<b>Dial</b>	<b>Parameter</b>
1	EQ 2 Gain	1	EQ 3 Gain
2	EQ 2 Freq	2	EQ 3 Freq
3	EQ 2 "Q"	3	EQ 3 "Q"
4	EQ 2 Low Limit	4	EQ 3 Low Limit
5	EQ 2 High Limit	5	EQ 3 High Limit

---



- The MCS-3000 bank keys 1 - 4 are used to select channels 1 - 32 in groups of 8.  
Bank key 1 selects channels 1 - 8, bank key 2 selects channels 9 - 16 and so on.
  - You can create markers by pressing the “Set Locate” key on the MCS-3000, typing in a marker ID and pressing [Return].
  - To locate to a marker, press “Locate”, type in a marker ID and press [Return].
  - The MCS-3000 Play, Stop, Record, Rewind and Fast Forward transport controls will have the equivalent functionality in Nuendo.
- 
- **The MCS-3000 supports “MIDI Feedback”, allowing fader settings and channel mute, solo and selection status to be indicated on the panel. For this to work, you need a two-way MIDI connection between the MCS-3000 and Nuendo.**
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**5**

**Mackie Control**

# About Mackie Control

Mackie Control is an automated touch-sensitive control surface. It is a nine-fader (eight channels and master) MIDI controller that provides in-depth mixing, editing, automation and navigational control for any supported digital audio workstation.

A special Lexan overlay that shows all Steinberg-specific key assignments for the Mackie Control device is available to customize the controller for Nuendo.

- For details about parameters and hands-on mixing techniques, please see the separate pdf documentation describing the use of Mackie Control with Nuendo.

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**Mackie HUI**

# Specifications

Mackie HUI can control any number of channels in groups of 8.

- Use the left and right Bank buttons to select channels 1-8, 9 -16 etc.
- Use the left and right Channel buttons to shift the fader assignment in steps of one channel.
- The Fader button in the Auto Enable section is used to disable/enable the motors.
- The Mute, Pan, Send, Plug In and Send Mute buttons in the Auto Enable section are currently not supported.
- Use the Rec/Rdy buttons to arm a track for recording.
- Use the Select buttons to select a single track for detailed settings.
- With the Mute and Solo buttons you can mute or solo a track.
- Use the Default button to un-solo all tracks.
- Use the Assign button to un-mute all tracks.
- To the right of the time display, you find an LED labeled “Rude Solo Light”. This LED lights up as soon as any channel is soloed.
- Use the Insert buttons to bypass all inserts of one track.
- Pan button in the Select Assign section:
- Fader Set: panning left/right or panning front/rear. Press button repeatedly to cycle through the assignments (the eight V-Pots control the pan parameters).
- V-Sel button in the Select Assign section: monitor track.
- Send A to Send E buttons in the Select Assign section:
- Fader Set: Send 1 level to Send 8 level (Send A to Send D assigns Send 1 to Send 4, Send E assigns Send 5 to Send 8: press button repeatedly to cycle through the assignments).
- V-Sel button in the Select Assign section: send on/off switch (depending on selected Send).
- V-Sel button with Shift in the Select Assign section selected: pre/post fader switch (depending on selected Send).

- The SELECT ASSIGN four character display in the Select Assign section displays Send or Pan assignment for V-Pots and V-Sel buttons.
- The four character displays above the Select buttons display the assigned track names.
- The Bypass button in the Select Assign section is always selected to indicate the bypass function of the Insert buttons.
- The Mute, Rec/Rdy All, Input and Output buttons in the Select Assign section are currently not supported.
- Use the Auto buttons to control the status of the Read and Write buttons in the Mixer of Nuendo, depending on the Read/Write status in the Auto Mode section.
- Use the Off button in the Auto Mode section to control the Read All or Write All button in the mixer of Nuendo, depending on the Read/Write status in the Auto Mode section.
- The Touch, Latch and Trim buttons in the Auto Mode section are currently not supported.
- Use the Transport button in the Window section to open or close the Transport panel.
- Use the Edit button in the Window section to bring the current Project window to the front.
- Use the Status button in the Window section to open or close the VST Performance window.
- Use the Mix button in the Window section to open or close the Mixer window.
- Use the Mem-Loc button in the Window section to open the Marker window.
- The Alt button in the Window section is used for user-assigned functions.
- The Undo button in the Keyboard Shortcuts section undoes the last performed operation in Nuendo.  
Hold down the Shift button and press Undo to redo the last undone operation.

- Press the Save button in the Keyboard Shortcuts section to save the current project.  
Hold down the Shift button and press the Save button to save a backup copy of the current project.
- The Edit Mode, Edit Tool, Option/All, Ctrl/Clutch and Alt/Fine buttons in the Keyboard Shortcuts section are currently not supported.
- The Cut, Copy, Paste and Delete buttons in the Edit section control the equivalent Nuendo functions.
- The Capture and Separate buttons in the Edit section are currently not supported.
- The buttons in the Status/Group section are currently not supported.
- Use the In and Out buttons above the transport controls to set the project cursor to the positions of the left or right locators.  
Hold down the Shift button and press the In or Out button to move the left or right locator to the current project cursor position.
- Use the RTZ and END buttons to set the project cursor to the beginning or the end of the project.
- Press the Quick Punch button to switch automatic punch in on or off.  
Hold down the Shift button and press the Quick Punch button to switch automatic punch out on or off.
- Press the Loop button to switch Cycle mode on or off.
- Press the On Line button to switch Synchronisation on or off.
- The Audition, Pre and Post buttons are used for user assignable functions (see function keys F1 to F7).
- The Mackie HUI Play, Stop, Record, Rewind and Fast Forward transport controls control the equivalent functions in Nuendo.
- The jog wheel is used for moving the project cursor position in Nuendo.
- The Scrub and Shuttle buttons are currently not supported.



- Pressing the cursor keys located to the left of the jog wheel is the same as pressing the arrow keys on your computer keyboard. When the Mode button is selected, pressing the cursor keys will control zooming in the Project window.
- Use the Scroll control in the DSP Edit/Assign section to scroll through the pages of one parameter group.
- Use the Compare button in the DSP Edit/Assign section for page up. Hold down the Shift button in the Keyboard Shortcuts section and press the Compare button to jump to the last page.
- Use the Bypass button in the DSP Edit/Assign section for page down. Hold down the Shift button in the Keyboard Shortcuts section and press the Bypass button to jump to the first page.
- Use the Insert/Param button in the DSP Edit/Assign section to switch the display of names of the available parameters in the lower row on or off.
- F1 button: Selected Channel: EQ
  - Page 1 - Gain, Frequency, Q and Enable for the lo band
  - Page 2 - Gain, Frequency, Q and Enable for the lo mid band
  - Page 3 - Gain, Frequency, Q and Enable for the hi mid band
  - Page 4 - Gain, Frequency, Q and Enable for the hi band
  - Buttons above dials: bypass EQs
- F2 button: Selected Channel: Sends
  - Pages 1 to 8 - Level, Enable, Pre/Post and Bus for Sends 1 to 8
  - Buttons above dials: bypass sends
- F3 button: Selected Channel: Routing
  - Page 1 - Output Bus, Monitor, Input Bus, Input Gain
  - Page 2 - Input Phase
  - Buttons above dials: monitor
- For a description of the functionalities for the F4 button: Selected Channel: Inserts, F5 button: Global mode Send Effects, F6 button: Global mode Master Effects, F7 button: Global mode Instruments, see the separate pdf document “Mackie Control and Nuendo”.

- Use the Locate/Numerics buttons to set the project cursor position.
- Immediately after you enter a numeric character, the Mackie HUI time display will no longer show the project cursor position, but the new value.
- You don't have to enter decimal points, colons, or semicolons for a new value.
- Use the CLR button to delete the last character. Holding down Shift (in the Keyboard Shortcuts section) and pressing the CLR button will delete the new value.
- Press the Enter button to set the project cursor to the position according to the new value.
- Use the "+" and "-" buttons to shift the project cursor position forward or backward by the amount of time set with the new value.
- The three LEDs left of the time display indicate whether Bars+Beats (BEATS), a frame based timecode (TIME CODE), Feet+Frames (FEET) or Samples (all LEDs off) is selected.

**7**

**Radikal Technologies SAC-2K**

# Specifications

The SAC-2K can control 32 channels (8 channels at a time).

- Press the "17-24" and "25-32" buttons to switch from one set of eight channels to the next.
- Use the "1-8" and "9-16" buttons to shift the fader assignment in steps of one channel.
- Use the Select button above the master fader to disable/enable the motors.
- Press the Mute/Solo button (the button on the far left) repeatedly to cycle through the assignments for the Mute/Solo and Select buttons of every channel:
- LED off: Mute/Solo buttons: mute track, Select buttons: select a single track for detailed settings.
- LED on: Mute/Solo buttons: solo track, Select buttons: select a single track.
- LED blinking: Mute/Solo buttons: control the status of the Write buttons in the mixer of Nuendo, Select buttons: control the status of the Read buttons.
- Use the From and To buttons to set the project cursor to the position of the left or right locator.  
Hold down Shift and press the From or To button to move the left or right locator to the current project cursor position. If you hold down Shift and press the "<<<" or ">>>" buttons, the project cursor is set to the beginning or the end of the project
- Press the Store Marker button to create a marker at the project cursor position.  
Hold down Shift and press the Store Marker button to open the Marker window.
- Use the Recall Marker button to move the project cursor to the closest marker to the right.  
Hold down Shift and press the Recall Marker button to move the project cursor to the closest marker to the left.
- The Play, Stop, Record, "<<<" and ">>>" transport controls control the equivalent functions in Nuendo.
- The jog wheel is used to move the project cursor position in Nuendo.
- The Scrub button is currently not supported.

- The status of the Num button (in the Software Navigation section) determines the assignment of the "1" to "0" and Enter buttons:

With Num-LED on, use the buttons to set the project cursor position:

- Immediately after you enter a numeric character, the SAC-2k time display will no longer show the project cursor position but the new value.
- You don't have to enter decimal points, colons, or semicolons for a new value.
- Num button: delete the new value and deactivate locate functionality.
- Enter button: set the project cursor to the position according to the new value.
- Store Marker button: set the project cursor to the position according to the new value, and create a marker at the new project cursor position.

With the Num-LED off:

- Use the "1" button for page up (step through pages of one parameter group).
- Hold down Shift and press the "1" button to jump to the last page.
- Use the "6" button for page down.
- Hold down Shift and press the "6" button to jump to the first page.
- Press the Enter button to switch the display of names of the available parameters in the lower row on or off.
- The function keys "2" to "5", "7" to "0" and function key combinations with the Shift button can be used to access functions in Nuendo. Refer to the Nuendo operation manual for information about how to assign program functions to remote controller function keys.

Some of the keys are already pre-assigned (and/but can be modified):

"5" button: undo the last operation in Nuendo. Hold down Shift and press the "5" button to "undo the undo".

"7" button: copy; hold down Shift and press the "7" button to cut.

"9" button: paste.

"0" button: save the current project; hold down Shift and press the "0" button to save a backup copy of the current project.

Hold down Shift and press the "2", "3", "4" or "8" buttons to control zooming in the Project window.

- Pan button in the Mixer-Mode section: Fader Set mode Panning
- Page 1 - Pan left/right
- Page 2 - Pan front/rear
- Pressing a V-Pot will toggle Monitor for that channel.

- High button: Fader Set mode EQ High
- Page 1 - Gain
- Page 2 - Frequency
- Page 3 - Q
- Page 4 - Enable
- Pressing a V-Pot will bypass EQs for that channel.
- HiMid, LowMid, Low button: Fader Set mode EQ Mid-High, Mid-Low, Low
- Snd/Ins 1 button: Fader Set mode Send 1
- Page 1 - Level
- Page 2 - Enable
- Page 3 - Pre/Post
- Page 4 - Bus
- Pressing a V-Pot will bypass sends for that channel.
- Snd/Ins 2 to 4 buttons: Fader Set mode Send 2 to Send 4
- Depending on the Snd/Ins button status (above Snd/Ins 1 button) Snd/Ins 1 to Snd/Ins 4 buttons are assigned to Send 1 to Send 4 or Send 5 to Send 8.
- EQs button (Channel-Strips section): Selected Channel mode EQ
- Page 1 - Gain, Frequency, Q and Enable for the lo band, Gain, Frequency, Q and Enable for the lo mid band
- Page 2 - Gain, Frequency, Q and Enable for the hi mid band, Gain, Frequency, Q and Enable for the hi band
- Pressing a V-Pot will bypass EQs.
- Inserts/Sends button: Selected Channel mode Sends
- Page 1 - Level for Send 1 to Send 8
- Page 2 - Enable for Send 1 to Send 8
- Page 3 - Pre/Post for Send 1 to Send 8
- Page 4 - Bus for Send 1 to Send 8
- Pressing a V-Pot will bypass sends.
- Dynamics button: Selected Channel mode Routing
- Page 1 - Output Bus, Monitor, Input Bus, Input Gain, Input Phase
- Pressing a V-Pot will toggle Monitor.

For a description of the functionalities for the MIDI button: Selected Channel mode Inserts, Shift+Inserts/Sends button: Global mode Send Effects, Shift+Dynamics button: Global mode Master Effects, Shift+MIDI button: Global mode Instruments, see the separate pdf document “Mackie Control and Nuendo”.





**8**

**Roland MCR-8**

# Specifications

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- ❑ **Before you can initiate remote control operation, the MCR-8 “Mode” switch must be set to “4”.**
- 

The Roland MCR-8 can control 16 mixer channels, plus transport control. The “A/B switch” is used to switch between controlling channels 1 - 8 and 9 - 16. The following MCR-8 parameters control the equivalent parameters for each channel strip:

- Fader level, mute, solo and pan.

The following MCR-8 transport controls control the equivalent Nuendo functions:

- Play, Stop, Record, Rewind, Fast Forward.

- 
- ❑ **The MCR-8 does not support “MIDI feedback”, that is, the current status of parameters in Nuendo is not indicated on the MCR-8. Therefore, you only need a one-way MIDI connection between the MCR-8 and Nuendo.**
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**9**

**Tascam US-428**

# Specifications

The US-428 can remote control up to 64 mixer channels and 1 or 2 DSP Factory cards, if installed (Windows version only).

- When the Tascam US-428 device is added in the Device Setup dialog, you can open the Remote Status window by selecting “Tascam US-428” from the Devices menu.

This indicates which bank (group of eight channels in Nuendo) is currently being controlled by the remote device. To select another bank, use the pop-up menu in the window or use the Bank Left/Right buttons on the remote device.

- The US-428 transport keys will have the equivalent functionality in Nuendo.
- To set markers, hold down “Set” while pressing a locator key.
- If you hold down the function key [Null] and then move a fader, the Select and Rec indicators above the fader will indicate whether the fader position is below or above the current fader level in Nuendo. If the upper indicator is lit, the fader position on the panel is above the fader level in Nuendo and vice versa. When both indicators are dark, fader positions are matched for that channel.

- 
- ❑ **The US-428 supports “MIDI Feedback”, allowing for mute/solo, channel selection, EQ band, Aux 1 to 4 and transport status to be indicated on the panel. For this (and the fader position indication described above) to work, you need to select the “US-428 Control” port as input and output.**
-

## Nuendo mixer

The following US-428 controls will remote control the following mixer parameter for each channel strip:

- Fader: volume
- Mute/Solo: mute and solo (selected via the Solo switch)
- Select: selects channel for editing
- Pan-Dial: pan
- EQ-Gain  
Controls the EQ gain for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Nuendo, starting from the leftmost band.
- EQ-Freq  
Controls the EQ frequency for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Nuendo, starting from the leftmost band.
- EQ-“Q”  
Controls the EQ “Q” for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Nuendo, starting from the leftmost band.
- Aux 1 to Aux 4 and shuttle wheel:  
The effect send levels for sends 1 to 4.
- The shuttle wheel will act as position shuttle if no Aux send button is selected.  
Press the activated button to deselect it.
- Holding down the “Asgn” button and pressing the Low, LoMid, HiMid and High EQ buttons switches the corresponding EQ band “On” button status.
- Holding down the “Asgn” button and pressing the Aux1 to Aux4 buttons switches the corresponding Effect Send 1-4 “On” button status.

## DSP Factory (Nuendo for Windows only)

The following US-428 controls will remote control the following DSP Factory parameter for each channel strip:

- **Fader:** volume
- **Mute/Solo:** mute and solo (selected via the Solo switch)
- **Select:** selects channel for editing
- **Pan-Dial:** pan
- **EQ-Gain**  
Controls the corresponding EQ gain for each band selected with the Low, LoMid, HiMid and High buttons.
- **EQ-Freq**  
Controls the corresponding EQ frequency for each band selected with the Low, LoMid, HiMid and High buttons.
- **EQ-“Q”**  
Controls the corresponding EQ “Q” for each band selected with the Low, LoMid, HiMid and High buttons.
- **Aux 1 to Aux 4 and shuttle wheel:**  
Control the effect send levels for sends 1/2 and 5/6.
- **Holding down the “Asgn” button and pressing the Low, LoMid, HiMid and High EQ buttons** switches the corresponding EQ band “Bypass” button status.
- **Holding down the “Asgn” button and pressing the Aux1 to Aux4 buttons** switches the effect sends 1/2 and 5/6 “On” button status.

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**Yamaha 01V**

# Specifications

The Yamaha 01V can remote control either the Nuendo mixer or the Yamaha DSP Factory if installed (Windows only; see the separate “Using Nuendo with DSP Factory” document for details). Before you can initiate remote control operation, the 01V must be set up in the following way:

- MIDI Parameter Change and Receive must be enabled.
- MIDI Control Change and Receive must be disabled.
- Device ID / MIDI Channel Receive must be set to “1”.
- Local Control should be set to “Off”.

As soon as Local Control is set to “Off”, remote control of the mixer is enabled.

The 01V remote operation of the Nuendo mixer is very straightforward, with (almost) every parameter having the equivalent parameter controller in the 01V mixer. The current status of all controllable parameters is fed back to the 01V and indicated on the panel, using the motorized faders, indicators, etc. (for this to work, you need a two-way MIDI connection between the 01V and Nuendo).

To facilitate 32 channel remote control, two separate control “Layouts” are used, each controlling 16 mixer channels. The “Memory” button on the 01V is used to switch between VST layout 1 and 2 (when using Nuendo for Windows there are also two layouts for the DSP Factory – see the “Using Nuendo with DSP Factory” document). Page 1 displays VST Layout 1, page 2 VST Layout 2, page 3 DSP Factory Layout 1 and page 4 DSP Factory Layout 2.



The following parameters are remote controllable for channels 1-32 in the mixer:

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❑ **The value ranges for the parameters in the 01V may not match the ranges for the corresponding parameters in all cases.**

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- **Fader level, mute and pan.**  
01V controls for these parameters control the equivalent Nuendo parameters.
- **Effect sends 1 - 6.**  
01V Aux 1 - 4 control effect send 1 - 4, 01V effect 1 and 2 control effect send 5 and 6.
- **EQ Frequency, Gain and Q (4 bands).**  
01V controls for these parameters control the equivalent Nuendo parameters.
- **Stereo Master Volume.**  
The 01V control for this parameter controls the equivalent Nuendo parameter.
- **Send effects master volume 1 - 4 are controlled by 01V Aux Master 1 - 4. Send effects master 5 and 6 are controlled by 01V effect master 1 and 2.**

With Layout 1 the 01V controls the following channels:

- Channel 1 - 12, 13/14 and 15/16 will control channels 1 - 14.
- 01V Return 1 and 2 will control channels 15 and 16.

With Layout 2 the 01V controls the following channels:

- Channel 1 - 12, 13/14 and 15/16 will control channels 17 - 30.
- 01V Return 1 and 2 will control channels 31 and 32.



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**Yamaha DM2000**

## About Yamaha DM2000

The Yamaha DM2000 is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Nuendo.

- For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha DM2000.