



**MELBOURNE
INSTRUMENTS**

ROTO-CONTROL SYSEX API

Version 1.4

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Revision History

Version	Date	Change
1.0	23/02/2025	First release.
1.1	07/04/2025	<p>Updates to support MACRO params:</p> <ul style="list-style-type: none"> • LEARN PARAM • PARAM LEARNED • SET MAPPED CONTROL NAME (new)
1.2	23/06/2025	<p>General updates and updates to support Bitwig Studio:</p> <ul style="list-style-type: none"> • DAW PING RESPONSE • ROTO-DAW CONNECTED (new) • REQUEST ROTO FW VERSION (new) • ROTO FW VERSION (new) • TRACK DETAILS • PLUGIN DETAILS • DAW SELECT PLUGIN • LEARN PARAM • CONTROL MAPPED (renamed, was PARAM LEARNED) • MACRO PLUGIN PAGE INDEX (new) • CONTROL LEARNED (new) • TOGGLE REMOTE PAGE (new) • TOGGLE TRACK GROUPING (new) • DAW SELECT TRACK • REQUEST SEND TRACK NAMES (new) • SEND TRACK NAMES (new) <p>Document formatting improvements.</p>
1.3	05/11/2025	<p>Increased number of tracks to two bytes:</p> <ul style="list-style-type: none"> • NUM TRACKS • FIRST TRACK • SET FIRST TRACK • TRACK DETAILS • ROTO SELECT TRACK • DAW SELECT TRACK • TOGGLE TRACK GROUPING <p>Added new commands:</p> <ul style="list-style-type: none"> • REQUEST ROTO SYSEX API VERSION • ROTO SYSEX API VERSION
1.4	26/11/2025	Added Appendix A: Colour Scheme Table

Compatibility

Version	Compatibility
1.0	<ul style="list-style-type: none">• ROTO-SETUP v1.0.0• ROTO-SETUP v1.1.1• ROTO-SETUP v1.1.2
1.1	<ul style="list-style-type: none">• ROTO-SETUP v1.1.3• ROTO-SETUP v1.1.4
1.2	<ul style="list-style-type: none">• ROTO-SETUP v2.0.0
1.3	<ul style="list-style-type: none">• ROTO-SETUP v2.1.0
1.4	

1. Introduction

The ROTO-CONTROL SYSEX API allows communication and configuration with an external DAW such as Ableton. The interface used is MIDI via USB.

The interface is bi-directional in that commands can be sent to ROTO-CONTROL and received from ROTO-CONTROL asynchronously.

Note 1: For conciseness ROTO-CONTROL is also referred to as ROTO throughout this document.

Note 2: All values are specified in hexadecimal.

1.2 Command Format

All ROTO-CONTROL SYSEX commands take the following format:

F0 00 22 03 02 <data> F7

Where:

- F0 = Start SYSEX message byte.
- 00 22 03 = Melbourne Instruments SYSEX ID.
- 02 = ROTO-CONTROL v1 device ID.
- <data> = The command payload.
- F7 = End SYSEX message byte.

1.3 Commands Overview

Type	Sub-type	Description	To ROTO	From ROTO
0A: GENERAL	01: DAW STARTED	The DAW has started a session with ROTO	Y	N
	02: PING DAW	Ping to check if the DAW is running	N	Y
	03: DAW PING RESPONSE	Ping response from the DAW	Y	N
	04: NUM TRACKS	Number of tracks	Y	N
	05: FIRST TRACK	First track page index	Y	N
	06: SET FIRST TRACK	Set the first track page index	N	Y
	07: TRACK DETAILS	Track details in the current track page	Y	N
	08: TRACK DETAILS END	Finished sending track details	Y	N
	09: ROTO SELECT TRACK	ROTO-Control has selected a track	N	Y
	0A: REQUEST TRANSPORT STATUS	Request the current transport status	N	Y

	OB: TRANSPORT STATUS	The current transport status	Y	N
	OC: ROTO-DAW CONNECTED	The ROTO has received the DAW PING RESPONSE, and the ROTO and DAW are now connected.	N	Y
	OD: REQUEST ROTO FW VERSION	The DAW has requested the ROTO firmware version	Y	N
	OE: ROTO FW VERSION	The ROTO firmware version	N	Y
	OF: REQUEST ROTO SYSEX API VERSION	The DAW has requested the ROTO SYSEX API version	Y	N
	10: ROTO SYSEX API VERSION	The ROTO SYSEX API version	N	Y
OB: PLUGIN	01: SET PLUGIN MODE	Set the DAW in PLUGIN mode	N	Y
	02: NUM PLUGINS	Returns the number of PLUGINS on the current track	Y	N
	03: FIRST PLUGIN	First PLUGIN page index	Y	Y
	04: SET FIRST PLUGIN	Set the first PLUGIN page index	N	Y
	05: PLUGIN DETAILS	Details of a PLUGIN	Y	N
	06: PLUGIN DETAILS END	Finished sending PLUGIN details	Y	N
	07: ROTO SELECT PLUGIN	The ROTO-CONTROL has selected a PLUGIN	Y	N
	08: DAW SELECT PLUGIN	The DAW has selected a PLUGIN	Y	N
	09: SET PLUGIN LEARN	Put the DAW in learn mode	Y	N
	0A: LEARN PARAM	A param has been learned	Y	N
	0B: CONTROL MAPPED	Mapped control details	N	Y
	0C: SET PLUGIN ENABLE	Enable/disable a PLUGIN	N	Y
	0D: SET PLUGIN LOCK	Lock/unlock PLUGINS	N	Y
	0E: UNMAP CONTROL	Un-map a learned control	Y	N

	0F: SET MAPPED CONTROL NAME	Set the name of a mapped control	Y	N
	10: MACRO PLUGIN PAGE INDEX	Current MACRO PLUGIN page index	N	Y
	11: CONTROL LEARNED	A param has been learned and assigned to a control	N	Y
	12: TOGGLE REMOTE PAGE	Request the DAW to toggle the remote page in a PLUGIN	N	Y
0C: MIX	01: SET MIX ALL TRACKS MODE	Set MIX into “all tracks” mode	N	Y
	02: SET MIX TRACK MODE	Set MIX into “single track” mode	N	Y
	03: NUM SEND TRACKS	The number of available send tracks	Y	N
	04: DAW SELECT TRACK	The DAW has selected a track	Y	N
	05: SET ALL TRACKS MODE	Set the “all tracks” mode	N	Y
	06: TOGGLE TRACK GROUPING	Toggle track grouping on the currently selected track	N	Y
	07: REQUEST SEND TRACK NAMES	Request a set of 8 send track names	N	Y
	08: SEND TRACK NAMES	A set of 8 send track names	Y	N

2. GENERAL Commands: 0A

2.1 DAW STARTED: 01

Command
F0 00 22 03 02 0A 01 F7

This is sent by the DAW when it first starts (or a new session is started). The DAW should not send any further commands until it receives PING DAW from ROTO.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.2 PING DAW: 02

Command
F0 00 22 03 02 0A 02 F7

This is sent by ROTO to check if a DAW is connected – it will be sent by ROTO after receiving DAW STARTED or when ROTO is plugged into a PC. The DAW should respond with DAW PING RESPONSE when this is received. The DAW should not send any further commands until it receives ROTO-DAW CONNECTED from ROTO.

Note: ROTO will send this command every second for 1 minute to poll for a connected DAW.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

2.3 DAW PING RESPONSE: 03

Command
F0 00 22 03 02 0A 03 <DT> F7

DT = DAW Type: Ableton Live (01), Bitwig Studio (02)

This command should be sent by the DAW when it receives the PING DAW command from ROTO.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.4 NUM TRACKS: 04

Command
F0 00 22 03 02 0A 04 <NT:2> F7

NT = Number of tracks, formatted as two 7-bit values

Description

This command is sent from the DAW to indicate the number of tracks – either the number of audio or master-return tracks depending on the mixer mode.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.5 FIRST TRACK: 05

Command

F0 00 22 03 02 0A 05 <FT:2> F7

FT = First track index in multiples of 8 (0000 = Track page 1, 0008 = Track page 2, etc.), formatted as two 7-bit values

Description

This command is sent from the DAW to indicate the current tracks page.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.6 SET FIRST TRACK: 06

Command

F0 00 22 03 02 0A 06 <FT:2> F7

FT = First track index in multiples of 8 (0000 = Track page 1, 0008 = Track page 2, etc.), formatted as two 7-bit values

Description

This command is sent from ROTO to indicate when the page of tracks has been changed.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

2.7 TRACK DETAILS: 07

Command

F0 00 22 03 02 0A 07 <TI:2 TN:0D CS GT> F7

TI = Track index, formatted as two 7-bit values

TN = Track name: 0D-byte NULL terminated ASCII string, padded with 00s if needed

CS = Colour scheme: 00 – 52 (see Appendix A)

GT = Grouped track: NO (00), YES (01)

Description	
This command is sent from the DAW for each track on the current tracks page.	

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.8 TRACK DETAILS END: 08

Command	
F0 00 22 03 02 0A 08 F7	

Description	
This command is sent from the DAW once all TRACK DETAILS commands have been sent.	

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

2.9 ROTO SELECT TRACK: 09

Command	
F0 00 22 03 02 0A 09 <TI:2> F7 TI = Index of the track to select, formatted as two 7-bit values	

Description	
This command is sent when a track is selected via ROTO.	

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

2.10 REQUEST TRANSPORT STATUS: 0A

Command	
F0 00 22 03 02 0A 0A F7	

Description	
This command is sent from ROTO to request the current transport controls status.	

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

2.11 TRANSPORT STATUS: 0B

Command	

F0 00 22 03 02 0A 0B <PS SS RS SR LS PI PO AS> F7
PS = Play status: Off (00), On (01)
SS = Stop status: Off (00), always this value
RS = Record status: Off (00), On (01)
SR = Session Record status: Off (00), On (01)
LS = Loop status: Off (00), On (01)
PI = Punch-in status: Off (00), On (01)
PO = Punch-out status: Off (00), On (01)
AS = Re-enable automation status: Off (00), On (01)

Description

This command is sent from the DAW in response to the REQUEST TRANSPORT STATUS command.

Direction	DAW Compatibility		
TO ROTO	Y	Ableton Live	Y
FROM ROTO	N	Bitwig Studio	Y

2.12 ROTO-DAW CONNECTED: 0C

Command

F0 00 22 03 02 0A 0C F7

Description

This is sent by ROTO once it has received and finished processing DAW PING RESPONSE from a DAW. Once the DAW has received this command it can send other commands to ROTO as needed.

Direction	DAW Compatibility		
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

2.13 REQUEST ROTO FW VERSION: 0D

Command

F0 00 22 03 02 0A 0D F7

Description

This command is sent from the DAW to request the ROTO firmware version.

Direction	DAW Compatibility		
TO ROTO	Y	Ableton Live	Y
FROM ROTO	N	Bitwig Studio	Y

2.14 ROTO FW VERSION: 0E

Command

F0 00 22 03 02 0A 0E <VX VY VZ GC:7> F7
--

VX = ROTO-CONTROL major version

VY = ROTO-CONTROL minor version

VZ = ROTO-CONTROL patch version

GC = Short GIT commit in ASCII bytes

Description

This command is sent from ROTO after receiving the REQUEST ROTO FW VERSION command.

Direction	DAW Compatibility
TO ROTO	N Ableton Live
FROM ROTO	Y Bitwig Studio

2.15 REQUEST ROTO SYSEX API VERSION: OF

Command

F0 00 22 03 02 **0A 0F** F7

Description

This command is sent from the DAW to request the ROTO SYSEX API version.

Direction	DAW Compatibility
TO ROTO	Y Ableton Live
FROM ROTO	N Bitwig Studio

2.16 ROTO SYSEX API VERSION: 10

Command

F0 00 22 03 02 **0A 10** <VX VY> F7

VX = ROTO-CONTROL SYSEX API major version

VY = ROTO-CONTROL SYSEX API minor version

Description

This command is sent from ROTO after receiving the REQUEST ROTO SYSEX API VERSION command.

Direction	DAW Compatibility
TO ROTO	N Ableton Live
FROM ROTO	Y Bitwig Studio

3. PLUGIN Commands: 0B

3.1 SET PLUGIN MODE: 01

CommandF0 00 22 03 02 **0B** 01 F7**Description**

This command is sent from ROTO when PLUGIN mode is selected.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.2 NUM PLUGINS: 02

CommandF0 00 22 03 02 **0B** 02 <NP> F7

NP = Number of PLUGINS on the current track

Description

This command is sent from the DAW to indicate how many PLUGINS are on the currently selected track.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.3 FIRST PLUGIN: 03

CommandF0 00 22 03 02 **0B** 03 <FP> F7

FP = First PLUGIN index in multiples of 8 (00 = PLUGIN page 1, 08 = PLUGIN page 2, etc.)

Description

This command is sent from the DAW to indicate the current PLUGIN page.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.4 SET FIRST PLUGIN: 04

CommandF0 00 22 03 02 **0B** 04 <FP> F7

FP = First PLUGIN index in multiples of 8 (00 = PLUGIN page 1, 08 = PLUGIN page 2, etc.)

Description

This command is sent from ROTO to indicate when the page of PLUGINS has been changed.

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

3.5 PLUGIN DETAILS: 05

Command

```
F0 00 22 03 02 0B 05 <PI PH:8 PE PN:0D PT NP> F7
PI = PLUGIN index
PH = PLUGIN hash
PE = PLUGIN enabled status: Disabled (00), Enabled (01)
PN = PLUGIN name: 0D-byte NULL terminated ASCII string, padded with 00s if needed
PT = PLUGIN type: Normal (00), MACRO PLUGIN (01), Third-party PLUGIN (02)
NP = Number of MACRO PLUGIN control pages, set to 00 if not a MACRO PLUGIN. Ignored if the
connected DAW is Ableton Live
```

Description

This command is sent from the DAW for each PLUGIN on the current PLUGIN page.

Direction		DAW Compatibility	
TO ROTO	Y	Ableton Live	Y
FROM ROTO	N	Bitwig Studio	Y

3.6 PLUGIN DETAILS END: 06

Command

```
F0 00 22 03 02 0B 06 F7
```

Description

This command is sent from the DAW once all PLUGIN DETAILS commands have been sent.

Direction		DAW Compatibility	
TO ROTO	Y	Ableton Live	Y
FROM ROTO	N	Bitwig Studio	Y

3.7 ROTO SELECT PLUGIN: 07

Command

```
F0 00 22 03 02 0B 07 <PI> F7
PI = Index of the PLUGIN to select
```

Description

This command is sent from ROTO when a PLUGIN is selected.

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

3.8 DAW SELECT PLUGIN: 08

Command

F0 00 22 03 02 0B 08 <PI MP FS> F7

PI = Index of the PLUGIN to select

MP = MACRO PLUGIN page index (zero-based), set to 00 if not a MACRO PLUGIN. Ignored if the connected DAW is Ableton Live

FS = Force selection of the PLUGIN, overriding PLUGIN lock if needed: No force (00), Force (01)

Description

This command is sent from the DAW when a PLUGIN is selected.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.9 SET DEVICE LEARN: 09

Command

F0 00 22 03 02 0B 09 <DL> F7

DL = Device learn status: Off (00), On (01)

Description

This command is sent from ROTO when entering or exiting learn mode.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.10 LEARN PARAM: 0A

Command

F0 00 22 03 02 0B 0A <PI:2 PH:6 MP CI NS PP:2 PN:0D SN:NS*0D> F7

PI = Param index

PH = Param hash

MP = MACRO param: NO (00), YES (01)

CI = Add a centre (top) indent: NO (00), YES (01). If this is set to YES, the number of steps (NS) setting is ignored. Only applies to knob controls.

NS = Number of steps: 00 or 02 - 18

PP = Param position: 0 - 16383, formatted as two 7-bit values

PN = Param name: 0D-byte NULL terminated ASCII string, padded with 00s if needed

SN = If NS is <= 10: An array of NS x 0D-byte NULL terminated ASCII strings, each string padded with 00s if needed

If NS > 10: No data

Description

This command is sent from the DAW when in learn mode and a PLUGIN param has been selected in the DAW to be learned. It is also sent from the DAW in response to each CONTROL MAPPED command received via ROTO.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.11 CONTROL MAPPED: OB

Command

F0 00 22 03 02 **OB OB** <PI:2 PH:6 CT CI MP> F7

PI = Param index

PH = Param hash

CT = Control type: Knob (00), Switch (01)

CI = Index of the control within the current PLUGIN page

MP = MACRO param: NO (00), YES (01)

Description

This command is sent from ROTO for each control that is mapped on the current PLUGIN page.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.12 SET PLUGIN ENABLED: OC

Command

F0 00 22 03 02 **OB OC** <PI ES> F7

PI = PLUGIN index

ES = PLUGIN enabled status: Disabled (00), Enabled (01)

Description

This command is sent from ROTO when the selected PLUGIN is enabled or disabled.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.13 SET PLUGINS LOCK: OD

Command

F0 00 22 03 02 **OB OD** <LS> F7

LS = PLUGINS lock status: Unlocked (00), Locked (01)

Description

This command is sent from ROTO when the selected PLUGIN is locked or unlocked.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.14 UNMAP CONTROL: 0E

Command

F0 00 22 03 02 **0B 0E** <CT CI> F7

CT = Control type: Knob (00), Switch (01)

CI = Index of the control within the current PLUGIN page

Description

This command can be sent from a DAW to unmap a mapped control on the current controls page.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.15 SET MAPPED CONTROL NAME: 0F

Command

F0 00 22 03 02 **0B 0F** <PI:2 PH:6 PN:0D> F7

PI = Param index

PH = Param hash

PN = Param name: 0D-byte NULL terminated ASCII string, padded with 00s if needed

Description

This command can be sent from a DAW to update the displayed name of a macro param.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

3.16 MACRO PLUGIN PAGE INDEX: 10

Command

F0 00 22 03 02 **0B 10** <PI> F7

PI = MACRO PLUGIN Page index (zero based). Not sent if the plugin is not a MACRO PLUGIN.

Description

This command is sent from ROTO when a MACRO PLUGIN is selected, and the page of controls is changed via the arrow keys

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

3.17 CONTROL LEARNED: 11

Command

F0 00 22 03 02 **0B 11** <CT CI> F7

CT = Control type: Knob (00), Switch (01)

CI = PLUGIN control index (00 - 3F)

Description	
This command is sent from ROTO when a control (knob or switch) has been successfully learned.	

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

3.18 TOGGLE REMOTE PAGE: 12

Command	
F0 00 22 03 02 0B 12 F7	

Description	
This command is sent from ROTO to request the DAW to toggle the remote page in a PLUGIN.	

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	N
FROM ROTO	Y	Bitwig Studio	Y

4. MIX Commands: 0C

4.1 SET MIX ALL TRACKS MODE: 01

Command

```
F0 00 22 03 02 0C 01 <AM KM SM SI> F7  
AM = All tracks mode: Audio (00), Master-Return (01)  
KM = Knob mode: Level (00), Pan (01), Send (02)  
SM = Switch mode: Mute (00), Solo (01), Arm Recording (02)  
SI = Send index: The (zero-based) index of the send to control if the Knob mode is Send.  
Ranges from 0 - Number of available sends
```

Description

This command is sent from ROTO to set the mixer in MIX all tracks mode.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

4.2 SET MIX TRACK MODE: 02

Command

```
F0 00 22 03 02 0C 02 <CI> F7  
CI = Track control page index in multiples of 8 (00 = Track controls page 1, 08 = Track controls page 2, etc.)
```

Description

This command is sent from ROTO to set the mixer in MIX track mode.

Direction	DAW Compatibility	
TO ROTO	N	Ableton Live
FROM ROTO	Y	Bitwig Studio

4.3 NUM SEND TRACKS: 03

Command

```
F0 00 22 03 02 0C 03 <NS> F7  
NS = Number of available send tracks
```

Description

This command is sent from the DAW to indicate how many send tracks are available.

Direction	DAW Compatibility	
TO ROTO	Y	Ableton Live
FROM ROTO	N	Bitwig Studio

4.4 DAW SELECT TRACK: 04

Command

```
F0 00 22 03 02 0C 04 <TI:2 TN:0D CS GT> F7
```

TI = Track index, formatted as two 7-bit values
TN = Track name: 0D-byte NULL terminated ASCII string, padded with 00s if needed
CI = Colour scheme: 00 – 52 (see Appendix A)
GT = Grouped track: NO (00), YES (01)

Description

This command is sent from the DAW when a mixer track is selected.

Direction		DAW Compatibility	
TO ROTO	Y	Ableton Live	Y
FROM ROTO	N	Bitwig Studio	Y

4.5 SET ALL TRACKS MODE: 05

Command

F0 00 22 03 02 0C 05 <AM> F7

AM = All tracks mode: Audio (00), Master-Return (01)

Description

This command is sent from ROTO when the MIX all tracks mode is changed to show audio or master-return tracks.

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

4.6 TOGGLE TRACK GROUPING: 06

Command

F0 00 22 03 02 0C 06 <TI:2> F7

TI = Track index formatted as two 7-bit values

Description

This command is sent from ROTO to toggle track grouping on the currently selected track (if grouping is applicable for that track).

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	Y
FROM ROTO	Y	Bitwig Studio	Y

4.7 REQUEST SEND TRACK NAMES: 07

Command

F0 00 22 03 02 0C 07 <SI> F7

SI = SEND names index (zero based)

Description

Request a block of 8 send track names from the DAW containing the send track names index.

Direction		DAW Compatibility	
TO ROTO	N	Ableton Live	N
FROM ROTO	Y	Bitwig Studio	Y

4.8 SEND TRACK NAMES: 08

Command

F0 00 22 03 02 0C 08 <SI SN:08*0D> > F7

SI = SEND names index (zero based)

SN = An array of 8 x 0D-byte NULL terminated ASCII strings, each string padded with 00s if needed

Description

This command should be sent by the DAW after receiving either the SET MIX ALL TRACKS MODE, SET MIX TRACK MODE, or REQUEST SEND TRACK NAMES commands and at least one send track is present in the DAW:

1. SET MIX ALL TRACKS MODE command is received:

It must send a block of 8 send track names with the start index being a multiple of 8 and containing the send index received in the command. Examples:

- Send index is 00, the send track names sent should be from index 00.
- Send index is 07, the send track names sent should be from index 00.
- Send index is 08, the send track names sent should be from index 08.
- Send index is 14, the send track names sent should be from index 10.

Note: If the track with the send index is renamed, the block of 8 track names must be resent to ROTO.

2. SET MIX TRACK MODE command is received:

It must send a block of 8 SEND names with the start index being calculated based on the track control page index received in the command. Examples:

- Track control page index is 00, the send track names sent should be from index 00.
- Track control page index is 08, the send track names sent should be from index 06.
- Track control page index is 10, the send track names sent should be from index 0E.

3. REQUEST SEND TRACK NAMES command is received:

It must send a block of 8 send track names with the start index being a multiple of 8 and containing the send index received in the command.

Note: If there is no send track name then set all 00s for that string.

Direction		DAW Compatibility	
TO ROTO	Y	Ableton Live	N
FROM ROTO	N	Bitwig Studio	Y

Appendix A: Colour Scheme Table

The Colour Scheme table is specified below, with the background colour in RGB and the text colour as black or white.

Index (decimal)	Background Colour			Text Colour
	Red	Green	Blue	
0	FF	94	A0	Black
1	FF	A5	27	Black
2	D3	99	25	Black
3	FF	F4	77	Black
4	C6	FB	00	Black
5	1B	FF	2D	Black
6	26	FF	A2	Black
7	5F	FF	DF	Black
8	90	C5	F6	Black
9	57	80	DB	Black
10	97	A7	F6	Black
11	E0	6C	DB	Black
12	ED	53	9A	Black
13	FF	FF	F6	Black
14	FF	36	34	Black
15	FF	6C	02	Black
16	9E	62	48	Black
17	FF	F0	32	Black
18	8C	FF	63	Black
19	3F	C3	00	Black
20	00	BF	A8	Black
21	19	E9	F6	Black
22	10	A4	E5	Black
23	00	7D	B9	Black
24	8D	6C	DB	Black
25	BD	77	BF	Black
26	FF	39	CC	Black
27	D8	D0	C8	Black
28	EC	68	56	Black
29	FF	A3	6F	Black
30	DB	AD	6D	Black
31	F6	FF	A7	Black
32	DA	E4	92	Black
33	C1	D0	6F	Black
34	A1	C4	88	Black
35	DC	FD	D9	Black
36	D4	F1	EF	Black
37	C0	C1	DA	Black
38	D4	BB	DB	Black

39	B4	98	DC	Black
40	ED	DC	D9	Black
41	AF	A9	A3	Black
42	EE	92	86	Black
43	BE	82	52	Black
44	9E	83	66	Black
45	C6	BA	65	Black
46	AC	BE	00	Black
47	81	BO	4A	Black
48	8D	C2	B3	Black
49	A1	B3	BD	Black
50	8A	A5	BF	Black
51	88	93	C4	Black
52	AB	95	AE	Black
53	C6	9F	B7	Black
54	C3	71	90	Black
55	7F	7B	76	Black
56	B5	33	31	White
57	AF	51	2F	White
58	76	4F	3E	White
59	E3	C3	00	White
60	8A	96	1D	White
61	56	9F	2F	White
62	0A	9C	88	White
63	24	63	7F	White
64	1B	2F	90	White
65	30	52	9C	White
66	65	4B	A6	White
67	A9	4B	A6	White
68	D3	2E	6A	White
69	3E	3C	39	White
70	10	10	10	White
71	FF	00	00	White
72	00	FF	00	Black
73	FF	FF	00	Black
74	00	00	F6	White
75	FF	00	F6	White
76	00	FF	F6	Black
77	84	00	00	White
78	84	80	00	Black
79	00	80	00	White
80	00	80	7B	Black
81	00	00	7B	White
82	84	00	7B	White