

This protocol is for use with GLD systems loaded with firmware version V1.4 and later.

**Note** The MIDI Strip messages were added in V1.4. All other MIDI messages were available from V1.1 release.

**Note** Socket Preamp numbers **MP** have changed in V1.4. Refer to the table.

## MIDI control:

GLD supports MIDI control via **MIDI In** and **MIDI Out** sockets on the rear of the GLD mixer.

## TCP/IP control:

TCP/IP control is available via the **Network** port on the rear of the GLD mixer. This uses the MIDI messages described in this document.

Clients should be configured to use TCP port **51325**.

**Note** The GLD MIDI channel number is used within the TCP/IP messages. Make sure the TCP/IP message MIDI channel number and the MIDI channel number set on the GLD using its **Setup / Control / MIDI** screen are the same.

## The following functions can be controlled using MIDI:

- |                        |                                |  |
|------------------------|--------------------------------|--|
| • Fader levels         | <b>NRPN</b>                    | Input, Mix master, FX send, FX return, DCA |
| • Mutes                | <b>Note On</b>                 | Input, Mix master, FX send, FX return, DCA |
| • Send levels          | <b>NRPN</b>                    | Aux and FX sends                           |
| • DCA assign           | <b>NRPN</b>                    |  |
| • Input to Main assign | <b>NRPN</b>                    |  |
| • Preamp - Gain        | <b>Pitchbend</b>               |  |
| • Preamp - Pad, 48V    | <b>Sysex</b>                   |  |
| • Name & Colour        | <b>Sysex</b>                   |  |
| • Scene Recall         | <b>Program Change</b>          |  |
| • MIDI transport       | <b>MIDI Machine Control</b>    |  |
| • Mix Select           | <b>Polyphonic Key Pressure</b> |  |

All MIDI message **numbers** shown in this specification are hexadecimal.

Refer to the end of this specification for a table of MIDI values for the variable parameters listed here.

## MIDI channel number

**N**

MIDI channel 1 to 16 = **0** to **F**

## Channel numbers

**CH**

(refer to table)

FX Send 1 to 8 = **00** to **07**

FX Return 1 to 8 = **08** to **0F**

DCA 1 to 16 = **10** to **1F**

Input 1 to 48 = **20** to **4F**

Mix 1 to 20 = **60** to **73**

## Sysex Header

### Sysex Header

This applies to all Sysex messages described later in this specification

**F0, 00, 00, 1A, 50, 10, MV, mV, 0N**

Where **MV** = 01 (Major version)

**mV** = 00 (Minor version)

## Mute on

**NOTE ON** with velocity > 40 followed by NOTE OFF

**9N, CH, 7F, 9N, CH, 00**

## Mute off

**NOTE ON** with velocity < 40 followed by NOTE OFF

**9N, CH, 3F, 9N, CH, 00**

## Received Mute messages

Velocity 00 and NOTE OFF messages are ignored

Velocity 01 to 3F = Mute off

Velocity 40 to 7F = Mute on

## Fader Level

**NRPN** with parameter ID 17

Fader value **LV** -inf to +10dB = 00 to 7F (refer to table)

Select channel	Parameter	Set fader value
<b>BN, 63, CH,</b>	<b>BN, 62, 17,</b>	<b>BN, 06, LV</b>

## Channel Assignment to Main Mix ON

**NRPN** with parameter ID 18

ON value = 40 to 7F

Select channel	Parameter	Set ON
<b>BN, 63, CH,</b>	<b>BN, 62, 18,</b>	<b>BN, 06, 7F</b>

## Channel Assignment to Main Mix OFF

**NRPN** with parameter ID 18

OFF value = 00 to 3F

Select channel	Parameter	Set OFF
<b>BN, 63, CH,</b>	<b>BN, 62, 18,</b>	<b>BN, 06, 3F</b>

## AUX / FX Send Level

**NRPN** with parameter ID **Snd**

Where **Snd** for Mix 1 to 30 = parameter ID 20 to 3D

Send value **LV** -inf to +10dB = 00 to 7F

Select channel	Parameter	Set Send value
<b>BN, 63, CH,</b>	<b>BN, 62, Snd,</b>	<b>BN, 06, LV</b>

Mix buses 1-30 follow the order of the current configuration:

- Mono Groups
- Stereo Groups
- Mono FX
- Mono Auxes
- Stereo FX
- Stereo Auxes
- Main Mix

### Example – Template1 LR Show

20	1	StGrp1L	30	17	Aux5
21	2	StGrp1R	31	18	Aux6
22	3	StGrp2L	32	19	StAux1
23	4	StGrp2R	33	20	-
24	5	FX1	34	21	Main L
25	6	FX2	35	22	Main R
26	7	FX3	36	23	-
27	8	FX4	37	24	-
28	9	FX5	38	25	-
29	10	FX6	39	26	-
2A	11	FX7	3A	27	-
2B	12	FX8	3B	28	-
2C	13	Aux1	3C	29	-
2D	14	Aux2	3D	30	-
2E	15	Aux4			
2F	16	Aux4			

Groups and Main mix do not have send levels and these messages are ignored.

**Note** The order depends on the current configuration and can change if the Mixer Config is changed.

## DCA Assignment ON

**NRPN** with parameter ID 40

ON value **DB** for DCA 1 to 16 = 40 to 4F

Select channel	Parameter	Set ON
<b>BN</b> , 63, <b>CH</b> ,	<b>BN</b> , 62, 40,	<b>BN</b> , 06, <b>DB</b>

## DCA Assignment OFF

**NRPN** with parameter ID 40

OFF value **DA** for DCA 1 to 16 = 00 to 0F

Select channel	Parameter	Set OFF
<b>BN</b> , 63, <b>CH</b> ,	<b>BN</b> , 62, 40,	<b>BN</b> , 06, <b>DA</b>

## Socket Preamp numbers

**MP** (refer to table)

dSNAKE 1-24 preamp **MP** = 00 to 17

dSNAKE EXPANDER 1-8 preamp **MP** = 18 to 1F

dSNAKE EXPANDER 9-16 preamp **MP** = 28 to 2F

Surface EXPANDER 1-8 preamp **MP** = 20 to 27

Surface 41-44 preamp **MP** = 30 to 33

## Socket Preamp Gain

**Pitchbend** message

This adjusts the Gain of the preamp at a socket

Preamp socket numbers **MP** as above

GAIN value **GV** min to max = 00 to 7F (refer to table)

**EN**, **MP**, **GV**

## Socket Preamp Pad

**Sysex** message

This turns Pad on or off for the preamp at a socket

Preamp socket numbers **MP** as above

To get Pad status from GLD

Send... **Sysex Header**, 07, **MP**, F7

Reply... **Sysex Header**, 08, **MP**, **Pad**, F7 where **Pad** OFF = 00, ON = 7F

To set Pad

**Sysex Header**, 09, **MP**, **Pad**, F7 where **Pad** OFF = 00 to 3F, ON = 40 to 7F

## Socket Preamp 48V

**Sysex** message

This turns 48V (Phantom Power) on or off for the preamp at a socket

Preamp socket numbers **MP** as above

To get 48V status from GLD

Send... **Sysex Header**, 0A, **MP**, F7

Reply... **Sysex Header**, 0B, **MP**, **48V**, F7 where **48V** OFF = 00, ON = 7F

### To set 48V

**Sysex Header**, 0C, MP, 48V, F7 where 48V OFF = 00 to 3F, ON = 40 to 7F

## Channel Name

**Sysex** message

This gets or sets the Name with up to 8 characters (up to 5 can be displayed on the GLD strip LCD)

### To get Name from GLD

Send... **Sysex Header**, 01, CH, F7

Reply... **Sysex Header**, 02, CH, Name, F7 where Name = string of hex ascii characters

### To set Name

**Sysex Header**, 03, CH, Name, F7 where Name = string of hex ascii characters

## Channel Colour

**Sysex** message

This gets or sets the Colour with a choice of off or one of 7 colours

### To get Colour from GLD

Send... **Sysex Header**, 04, CH, F7

Reply... **Sysex Header**, 05, CH, Col, F7 where Col = 00 to 07 (refer to table)

### To set Colour

**Sysex Header**, 06, CH, Col, F7 where Col = 00 to 07 (refer to table)

## Scene Recall

**Bank** and **Program Change** message

To recall one of the 500 Scenes (4 banks)

Also transmits this message when a Scene is recalled from the GLD screen

### For Scene 1 to 128

Scene **SS** 1 to 128 = 00 to 7F (refer to table)

Select bank      Recall Scene

**BN**, 00, 00,      **CN**, **SS**

### For Scene 129 to 256

Scene **SS** 129 to 256 = 00 to 7F (refer to table)

Select bank      Recall Scene

**BN**, 00, 01,      **CN**, **SS**

### For Scene 257 to 384

Scene **SS** 257 to 384 = 00 to 7F (refer to table)

Select bank      Recall Scene

**BN**, 00, 02,      **CN**, **SS**

### For Scene 385 to 500

Scene **SS** 385 to 500 = 00 to 73 (refer to table)

Select bank      Recall Scene

**BN**, 00, 03,      **CN**, **SS**

## MIX Select

Polyphonic Key Pressure message

AN, CH, Sel where Sel 0 = MIX off  
1 = MIX on

## MIDI Strips

Custom MIDI messages

Fader strips within the Banks can be assigned as MIDI Strips. There are 32 MIDI Strips available.

Each fader strip control can be assigned to transmit a custom MIDI message. This is used for controlling audio within a Digital Audio Workstation (DAW), a slave mixer, or parameters on external equipment such as effects devices. MIDI Strips can be named and coloured. They are stored within Scenes and can be made Safe from Scene recall.

The Template Shows load the following factory default messages for the MIDI Strip controls. These can be restored by recalling Scene 498 within the Template Show:

- Fader B1, 00, <VAR> to B1, 1F, <VAR>
- Rotary Gain B2, 00, <VAR> to B2, 1F, <VAR>
- Rotary Pan B2, 20, <VAR> to B2, 3F, <VAR>
- Rotary Custom 1 B2, 40, <VAR> to B2, 5F, <VAR>
- Rotary Custom 2 B2, 60, <VAR> to B2, 7F, <VAR>
- Mute key = 91, 00, <VAR> to 91, 1F, <VAR>
- Mix key = 91, 20, <VAR> to 91, 3F, <VAR>
- PAFL key = 91, 40, <VAR> to 91, 5F, <VAR>

Where <VAR> is the value determined by the position of the control.

**Note** The Sel key is not included as this is needed to select this Processing screen for setting up the MIDI Strip.

