COMMUNIQUÉ™

Communications Software for GENIUS

Operator's Manual

Strand Lighting

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Introduction 1

Communiqué is an additional software package for Strand Lighting's GSX & LBX consoles and is part of the **Genius** range of lighting software. Once installed, it provides the following communication features:-

- **External Submasters** to allow remote control of Submaster faders from a manual desk or simple potentiometer (fader).
- **External Macro Triggers** to allow remote triggering of macros using simple switch contacts.
- **Dmx In Dimmer Mode** allows an external DMX source, for instance an FX desk, to be combined with the existing console dimmer patch.
- **Dmx In Channel Mode** allows an external DMX source, for instance a manual desk, to control the channel levels within a Submaster.
- **ASCII Remote Control** allows full remote control of the console from a PC or Mac. through a simple RS232 link.
- **Midi Show Control** allows show playback to be controlled from a Midi show controller.
- **Midi Tracking Backup** allows two consoles to run the same show in complete synchronisation for the purposes of gaining extra channel facilities or as a backup.
- **Macro Triggering** by Midi or RS232 serial input.

About this Manual

This manual is part of the **Genius** family of software and should be used only in conjunction with Strand Lighting's **Genius** range of software and an appropriate lighting console.

The other Operator manuals in the series are as follows:-

- GENIUS Lighting Software
- KALEIDOSCOPE Effects and Colour Control Software

The manuals form an integral part of the product, please ensure they are maintained in good condition and always kept in a safe place, preferably with the console.

Registering Your Software

Please ensure you complete the supplied registration card and return it to your nearest Strand Lighting office.

Registration information and how to load Application software is covered in the Genius Operator's Manual, Chapter 3 **Software Installation.**

Remote Submasters & Macros

The first 12 Submasters can be remotely controlled by external faders or a manual desk such as Strand's LX. If the Submasters have been configured as macro triggers then only an external volt-free switch contact is required since a +10v supply pin is provided on the Analogue Input connector.

This facility could be used to allow a stage manager to control house lights or to trigger any macro or run a cue remotely.

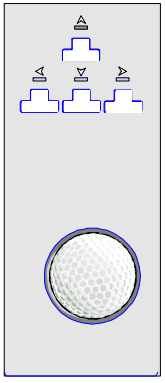
External submasters can still be used with LBX when all the console fader handles are configured as channel faders. Strand's (+10v) LX desk connects to the remote input using a standard straight through cable.

Selecting External Submasters

To set up, go to the SUBMASTER screen

1. Move the cursor with the arrow keys to select the Submaster you require.

2. Move the highlight box to the Function field and wheel to EXTERNAL.



In the SETUP menu all external Submasters can have their top level adjusted by a scaling factor between 80% and 120%. Scaling allows you to compensate for any variations in signal levels between your console and the external equipment to which you are connected.

External Submasters are indicated by a **X** in the Submaster section of the OUTPUT screen.

Submasters

SUB:	In/Out	Function	Macro	Inhibitive	SUB:	In/Out
1	0 / 0	LOCAL	OFF	NO	13	0 / 0
2	0 / 0	LOCAL	OFF	NO	14	05/08
3	0 / 0	LOCAL	OFF	NO	15	10/30
4	0 / 0	EXTERNAL	OFF	NO	16	0 / 0
5	0 / 0	LOCAL	OFF	NO	17	0 / 0
6	0 / 0	LOCAL	OFF	NO	18	0 / 0
7	0 / 0	LOCAL	OFF	NO	19	0 / 0
8	0 / 0	LOCAL	OFF	NO	20	0 / 0
9	0 / 0	LOCAL	OFF	NO	21	0 / 0
10	0 / 0	LOCAL	OFF	YES	22	0 / 0
11	0 / 0	LOCAL	OFF	YES	23	0 / 0
12	0 / 0	LOCAL	OFF	NO	24	0 / 0

SUBMASTERS SCREEN

SUBMASTERS

01 02 03 04 05 06 07 08 09 10 11 12
X I I

13 14 15 16 17 18 19 20 21 22 23 24

OUTPUT SCREEN

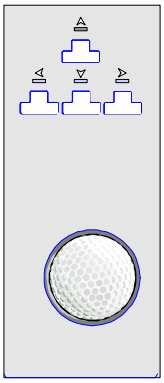
External submaster fader levels are combined with the console submaster fader levels on a highest takes precedence basis.

Selecting External Macro Triggers

To set up, go to the SUBMASTER screen

1. First ensure that the Submaster Function is set to EXTERNAL.

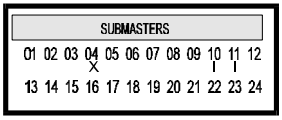
3. Move the highlight box to the Macro field and wheel to the macro number you wish to associate with this external submaster.



Submasters

SUB:	In/Out	Function	Macro	Inhibitive	SUB:	In/Out
1	0 / 0	LOCAL	OFF	NO	13	0 / 0
2	0 / 0	LOCAL	OFF	NO	14	05/08
3	0 / 0	LOCAL	OFF	NO	15	10/30
4	0 / 0	EXTERNAL	5	NO	16	0 / 0
5	0 / 0	LOCAL	OFF	NO	17	0 / 0
6	0 / 0	LOCAL	OFF	NO	18	0 / 0
7	0 / 0	LOCAL	OFF	NO	19	0 / 0
8	0 / 0	LOCAL	OFF	NO	20	0 / 0
9	0 / 0	LOCAL	OFF	NO	21	0 / 0
10	0 / 0	LOCAL	OFF	YES	22	0 / 0
11	0 / 0	LOCAL	OFF	YES	23	0 / 0
12	0 / 0	LOCAL	OFF	NO	24	0 / 0

SUBMASTERS SCREEN



OUTPUT SCREEN

The selected macro will be run whenever the combined remote and console fader levels move off zero.

DMX IN

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This is one of the console's most powerful communication features and allows another DMX desk to be used in conjunction with your console.

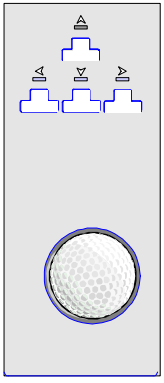
DMX IN has two operating modes which can be used together :-

- **Channel Mode** uses the incoming DMX levels as the contents of a user selectable submaster. These channel levels can be mastered by the submaster fader and used to record from. The levels are visible on the VDU Output Display when they are active.
  [max. 125 channels]
- **Dimmer Mode** patches the incoming DMX levels to outgoing DMX via the dimmer patch. These dimmer levels can be mastered by a user selectable submaster fader. They cannot be recorded and are not visible on the VDU Output display.
  [1st 250 dimmers only]

Selecting DMX IN Submasters

To set up, go to the SUBMASTER screen

1. Move the cursor with the arrow keys to select the Submaster you require.



2. Move the highlight box to the Function field and wheel to DMX CHAN or DMX DIM.

Submasters

SUB:	In/Out	Function	Macro	Inhibitive	SUB:	In/Out
1	0 / 0	LOCAL	OFF	NO	13	0 / 0
2	0 / 0	DMX CHAN	OFF	NO	14	05/08
3	0 / 0	LOCAL	OFF	NO	15	10/30
4	0 / 0	DMX DIM	OFF	NO	16	0 / 0
5	0 / 0	LOCAL	OFF	NO	17	0 / 0
6	0 / 0	LOCAL	OFF	NO	18	0 / 0
7	0 / 0	LOCAL	OFF	NO	19	0 / 0
8	0 / 0	LOCAL	OFF	NO	20	0 / 0
9	0 / 0	LOCAL	OFF	NO	21	0 / 0
10	0 / 0	LOCAL	OFF	YES	22	0 / 0
11	0 / 0	LOCAL	OFF	YES	23	0 / 0
12	0 / 0	LOCAL	OFF	NO	24	0 / 0

SUBMASTERS SCREEN

SUBMASTERS

01	02	03	04	05	06	07	08	09	10	11	12
	C		D						I	I	
13	14	15	16	17	18	19	20	21	22	23	24

OUTPUT SCREEN

DMX IN Submasters are indicated by a **D** (dimmer mode) or **C** (channel mode) in the Submaster section of the OUTPUT screen. No channel levels need be entered for either DMX IN submasters.

Using DMX IN Channels

Once you have selected a DMX IN CHAN submaster simply connect your DMX source to the DMX IN port and push the selected fader up. You will see the DMX IN Channels on the Output screen in Yellow. Changes in the incoming levels will be displayed on the Output screen and mastered by the selected fader.

The DMX IN CHAN submaster can then be used just like other submasters.

Patching DMX IN Dimmers

To patch DMX IN Channels go to the PATCH display.

DMX IN Channels are identified on the display by a preceding **D**. (e.g. D1, D2, D50) and have a different colour.

The default patch for Communiqué patches the first 250 DMX IN dimmers, 1 to 1, immediately after the dimmers patched to console channels.

To change the default enter the following commands :-

[MUX OUT Dimmer Number] @PATCH + [DMX IN Dimmer Number] @PATCH [scaling factor] *

Note the + signifies a DMX IN dimmer number. The last @PATCH, for scaling, is optional. Scale factors are always entered as full percentages, independent of channel control mode - ENTER is always required.

21 @PATCH +34 @PATCH 110 *	Patches DMX IN dimmer 34 to Output Dimmer 21 at 110% scaling.
25@PATCH +120 *	Patches DMX IN dimmer 120 to Output Dimmer 25.

Using DMX IN Dimmers

Once you have selected a DMX IN DIM submaster **AND** checked that the patch is set up correctly connect your DMX source to the DMX IN port and push the selected fader up.

You won't be able to see any changes in the Output screen as dimmer levels are not displayed. Look at the lights being driven by your console, those patched to the external source will be controlled by it and the levels mastered by the DMX IN DIM submaster fader.

ASCII Remote Control 4

The ASCII Remote Control facility allows most facilities of your console to be automatically remotely controlled using a serial communications protocol. The controlling equipment could be any computer (PC or Mac) or a dedicated show controller. You must program the controlling equipment to only send messages to the console that it can understand.

Selecting & Configuring

To configure, go to the SETUP screen

1. Move the highlight box with the cursor keys to the RS232 Function field and wheel to ASCII IN.

2. Move the highlight box to the RS232 port configuration fields and set to the protocol used by your controlling equipment.

Connecting up

Connect the controlling equipment to the 9-pin RS232 port at the back of your console using a serial cable.

See the **Genius** manual for details of the RS232 port pinouts. Make sure you understand the wiring of your cable, to avoid damage to your console or other equipment.

Remote Control Messages

Program your controlling equipment to generate the following codes :-

Normal	Macro	Dec	Hex	Ch
CUT		13	0D	CR
GO		32	20	Space
RECNOSUBS		49	31	1
RECORD	UNDOREC	50	32	2
RECTIME	UNDORECTIME	51	33	3
STOP_BACK		52	34	4
DISPLAY		54	36	6
F1		55	37	7
F2		56	38	8
F3		57	39	9
ATCOL	UNDOATCOL	65	41	A
TIME		66	42	B
NEXT		67	43	C
LAST	LASTCMD	68	44	D
ON	FULL	69	45	E
THRU	THRUON	70	46	F
FX	FXUPDATE	71	47	G
7		72	48	H
8		73	49	I
9		74	4A	J
PLUS	SOLO	75	4B	K
SUB	UPDATESUB	76	4C	L
4		77	4D	M
5		78	4E	N
6		79	4f	O
MINUS	REMDIM	80	50	P
CUE	UPDATECUE	81	51	Q
1		82	52	R
2		83	53	S
3		84	54	T
AT	UNDOAT	85	55	U
MACRO		86	56	V
0		87	57	W
. (dot)		88	58	X
CLR	CLRCMD	89	59	Y
ENTER		90	5A	Z

To obtain functions in the Macro column select Macro then the option. E.g. to get REMDIM, select MACRO MINUS.

RS232 Trigger Macro

Communiqué also supports a user definable trigger facility that can be programmed to run any macro when a user specified message of up to three bytes is received.

To configure, go to the SETUP screen:-

1. Move the highlight box with the cursor keys to RS232 Trig Bytes and wheel or key in the three trigger byte values [0..255] you require.

2. Next move the highlight box with the cursor keys to the RS232 Trig Macro and wheel or key in the number of the trigger macro you require.

When all three bytes or the Macro are OFF no triggers will occur. When a message is received the specified macro will be executed regardless of other RS232 Function settings.

Trig Bytes set to OFF are ignored, so triggers of 1, 2 or 3 bytes can be used.

Notes

MIDI

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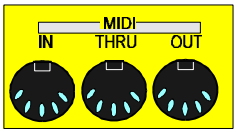
Communiqué supports several different MIDI operating modes some of which can be used together :-



- **Midi Show Control** allows show playback to be controlled from a Midi show controller.
- **Midi Tracking Backup** allows two consoles to run the same show in complete synchronisation for the purposes of gaining extra channel facilities or as a backup.
- **Macro Triggering** by any user programmable MIDI message.

MIDI Show Control

MIDI Show Control is an industry standard for the control of a variety of show equipment including lighting.

The procedure below allows automatic remote control of playback from a MIDI Show Controller:-

1. Set the console MIDI MSC ID on the SETUP screen.
2. Connect MIDI OUT from the Show Controller to MIDI IN on the console.

Cues replayed on the Show Controller with the selected MSC ID will be automatically replayed on the console ensuring that the output is kept in synchronisation.

MIDI Tracking Backup

Two identical consoles can be linked via MIDI to provide a tracking back-up facility. This will ensure that cues replayed on one console (*master*) are also replayed on the other (*slave*).

The procedure below allows a slave console to track a master console:-

1. Save the whole show and Setup onto a floppy from the master desk.
2. Load the whole show and Setup from the floppy into the slave desk.
3. Set the master desk MIDI Mode to OUT on the SETUP screen.

4. Set the master desk MIDI Channel to 1 on the SETUP screen.

5. Set the slave desk MIDI Mode to IN on the SETUP screen.

6. Set the slave desk MIDI Channel to 1 on the SETUP screen.

7. Connect MIDI OUT from the master desk to MIDI IN on the slave desk.

Cues replayed on the master console will be automatically replayed on the slave desk ensuring that the output of both desks are kept in synchronisation.

MIDI Trigger Macro

Communiqué also supports a user definable trigger facility that can be programmed to run any macro when a user specified message of up to three bytes is received.

To configure, go to the SETUP screen:-

1. Move the highlight box with the cursor keys to MIDI Trig Bytes and wheel or key in the three trigger byte values [0..255] you require.

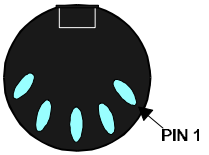
2. Next move the highlight box with the cursor keys to the MIDI Trig Macro and wheel or key in the number of the trigger macro you require.

When all three bytes or the Macro are OFF no triggers will occur. When a message is received the specified macro will be executed regardless of other MIDI Function settings.

Trig Bytes set to OFF are ignored, so triggers of 1, 2 or 3 bytes can be used.

Connector Pinouts

MIDI

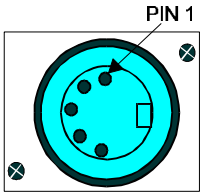


5 pin female DIN- type 180

Pin	Description
Pin 1	No connection
Pin 2	Shield
Pin 3	No connection
Pin 4	Data signal +
Pin 5	Data signal -

All MIDI sockets have the same pinouts.

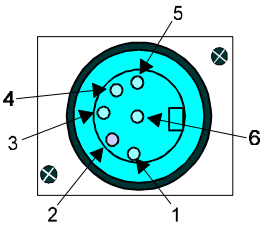
DMX512 IN



5 pin male XLR

Pin	Description
Pin 1	Data GND
Pin 2	Data signal -
Pin 3	Data signal +
Pin 4	No connection
Pin 5	No connection

RS485

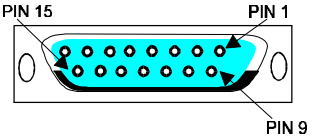


6 pin female XLR

Pin	Description
Pin 1	Screen GND
Pin 2	+10V
Pin 3	Data + RS485
Pin 4	Data - RS485
Pin 5	RS 232 RX
Pin 6	RS 232 TX

Analogue input

15 pin female D-type with holding screws.



Pin	Description
Pin 1	Remote input 1
Pin 2	Remote input 2
Pin 3	Remote input 3
Pin 4	Remote input 4
Pin 5	Remote input 5
Pin 6	Remote input 6
Pin 7	Remote input 7
Pin 8	Remote input 8
Pin 9	Remote input 9
Pin 10	Remote input 10
Pin 11	Remote input 11
Pin 12	Remote input 12
Pin 13	Signal GND
Pin 14	Signal GND
Pin 15	+10V