

Shine Maxi Digi 02 WW Shine Maxi Digi 02 CW

User Manual - version 0.0.4 –







Version 0.0.4

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Please read this manual carefully before carrying out the installation!!! Although our products are very robust, incorrect wiring may destroy the module!

During the operation of the device the specified technical parameters shall always be met. At the installation the environment shall be fully taken into consideration. The device must not be exposed to moisture and direct sunshine.

A soldering tool may be necessary for the installation and/or mounting of the devices, which requires special care.

During the installation it shall be ensured that the bottom of the device should not contact with a conductive (e.g. metal) surface!





Content

Ι.	Features	4
2.	Package Content	4
3.	Technical parameters	4
4.	Cutting to size	5
5.	Installation and connection	5
6.	Connecting the anti-flickering capacitor	8
7.	Advanced features	9
8.	Address programming	10
9.	Decoder reset	
10.	Function and Output mapping	11
11.	Dimming and Fade	12
12.	Analog Operation	
13.	Consist operation	13
14.	Secondary address (decoder lock)	14
15.	User data	15
16.	Other functions	15
17	CV table	16

Version 0.0.4

1. Features

- 14 low current high brightness white LED lighting module
- Suitable for carriage, platforms or building's interior lighting.
- On board DCC function decoder with 3+1 outputs.
- DCC and DC operation
- User adjustable length in 4 additional steps, max 275 min 240 mm.
- Function mapping F0, F1-F16

Available versions:

Shine Maxi Digi 02 Cool White order code tOm 02070312 Shine Maxi Digi 02 Warm White order code tOm 02070313

2. Package Content

The Shine Maxi Digi lighting modules are supplied in transparent plastic bags or blister packs. Check when unpacking the product if the following parts are present: 1 x Shine Maxi Digi 02 (Cool White or Warm White).

3. Technical parameters

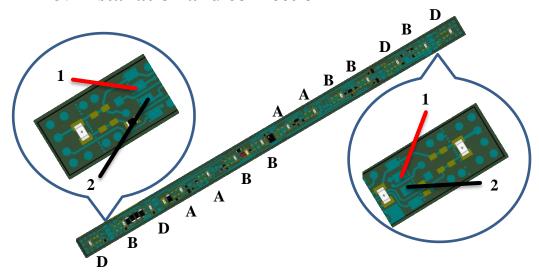
- 14 LEDs organized in 3 groups and one extra function output.
- Size LxWxH: 275 mm x 11mm x 3mm
- Maximum current consumption @16Vdc max 40mA (max 10mA for each group)
- Supply voltage: 6-24 Vdc or standard DCC signal



4. Cutting to size

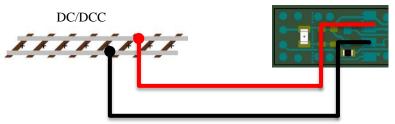
The operation can be performed at the points indicated in the below illustration. Care shall be taken to not damage the circuit. Use a cutting plier and straight, firm movements for cutting. Clean the debris at the edges of the pcb after the cutting, to avoid short circuits

5. Installation and connection





The connections marked with 1 and 2 have to be connected to the DC/DCC track voltage. The connections are available at both end of the module



The on board 14 LEDs are distributed along the board, and they are connected in 3 group as follows:

- Group 1 of LEDs (LEDs marked with A) are connected to Output 1 of the on board function decoder
- Group 2 of LEDs (LEDs marked with **B**) are connected to Output 2 of the on board function decoder
- Group **3** of LEDs (LEDs marked with **D**) are connected to Output 4 of the on board function decoder

The Output 3 of the function decoder is not used internally, and is

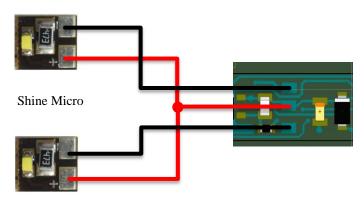
available for external use, as it is illustrated. In the same location the Output 4 is also available, to extend its functionality.



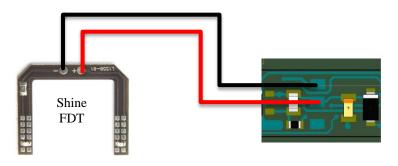
- Connection 3 is wired on the board to Output 3 of the function decoder
- Connection 4 is wired on the board to Output 4 of the function decoder
- Connection point **5** is the common (positive) terminal of the function decoder

To these outputs are available for connection of other lighting modules, for example Shine Micro for cockpit lighting, or Shine FDT as taillight.

Cockpit connection example



Taillight connection example

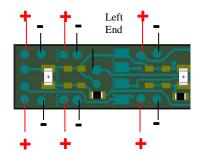


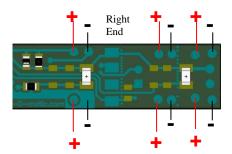


6. Connecting the anti-flickering capacitor

On both ends of the module, there are available several connections for the anti-flickering capacitors. Please solder the supplied capacitors in the proper position.

The capacitors are polarized electronic devices. Please respect the polarity as indicated! Soldering the capacitors with wrong polarity can damage the module, or/and the capacitors!







The positive terminal of the capacitor has to be connected to any of the connections marked with + while the negative terminal to the connection points marked with -

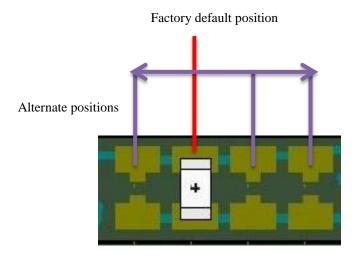
The module can be fixed to the ceiling of the carriage frame by double-sided adhesive tape, or can be holded in place with the help of the Shine Pastic Supports (PS Shine).





7. Advanced features

The PCB layout of the Shine Midi Digi 02 module allows the repositioning of the LEDs which results in a better fit in the carriages. The LEDs can be shifted left and right in several positions with a ~ 3 mm pitch, as illustrated below.



For the soldering operations a proper soldering station and soldering skills are required. Incorrect soldering can damage or destroy the module. We recommend these operations only for advanced users!

The LEDs are polarized electronic devices, please do not change their polarity during the repositioning!

Version 0.0.4

8. Address programming

The on board function decoder of Shine Maxi Digi 02 can be used either with short addresses (1-127) or long addresses (1-9999). The factory default is short addressing (bit 5 of CV29 is 0), with the address 3 (CV1=3).

The address can be changed by placing the decoder on the Programming Track (PT), and changing the CV1 value, according to the instructions of your Command Station.

If long addressing is needed, the addressing mode has to be changed in the configuration CV of the decoder (bit 5 of CV29). Changing the bit5 of CV29 value to 1 will activate the long addressing mode, and the decoder will respond to the long address specified in CV17 and CV18. Bit5 has a decimal value of 32, so changing bit5 to binary 1 is equivalent with the adding of 32 to the decimal value of CV29 (CV29 has a factory default value of 6, activating bit 5 means, to add 32 to this value, 6+32=38, the new value for CV29 will be 38).

The long addresses will be calculated with the following algorithm (in our example we will consider the long address 2000)

- -divide the desired long address with 256 (in our example 2000/256= 7, remainder = 208)
- -add 192 to the result and program it in CV17 (7+192=199, program the value of 199 in CV17)
- -program the value of the remainder of the division in CV18 (program the value of 208 in CV18)

After programming CV29, CV17 and CV18 to the mentioned values, the decoder can be accessed with the address 2000. To switch back to short addressing, the bit5 of CV29 has to be deactivated.



Version 0.0.4

9. Decoder reset

The Shine Maxi Digi 02 is delivered in factory configuration, with the CV values specified in the column "Default value" in the CV table (see chapter 17). At any time, the decoder can be restored to the default values by performing a reset. The reset procedure consists of programming any numerical value to CV8.

10. Function and Output mapping

Each function (from F0 to F16) can be used to activate/deactivate one or more outputs (from the total of 4 outputs) of the on board decoder. The correspondence between functions and outputs is called Function Mapping. The mapping is performed by programming the corresponding bits in CV33 thru CV47.

The functions F0 (generally called light function) and F1 can be defined separately for each direction of travel. The other function (F2-F16) does not depend on the direction of travel. To each physical output of the on board decoder, a bit value is assigned in the CV that maps the function.

If the function activates the corresponding physical output the decimal values in brackets (powers of 2) for each bit will be considered. If the function does not use the corresponding output, the bit value will be considered zero. The mapping CV will be programmed with the sum of the decimal values of each active output.

For example, if you want to use function F2 to activate output 4, CV37 will be used for mapping (which configures / maps F2) Bit3 is used to activate Output 4, its decimal value is 8, so CV37 will be programmed with the value 8. If we want to use F2 to activate



Version 0.0.4

Output3 too, we will add to the previously determined value the corresponding value for Output3 (bit2, with a decimal value of 4). CV37 will be programmed with the sum of 4+8 which is 12.

For functions F0 and F1 2 CVs are used for mapping, one for each direction of travel. F0 is factory configured in such a way that all outputs are activated for both directions. F1 is factory configured to activate Otput1 for both directions.

11. Dimming and Fade

The light intensity of the LEDs connected to the outputs of the onboard decoder can be changed individually by dimming using CV48 thru CV51. The factory default value for each of them is the decimal value 127 (half intensity). Programming the zero value in any of these CVs, result in a continuous output at maximum intensity level of the corresponding output.

A progressive on and off function can be activated using CV112 and CV113, creating a incandescent bulb effect. These CVs are globally for all 4 outputs of the decoder. However, if no dimming is required on any of the outputs (example, a device is connected to output 3 which requires DC voltage) the dimming fade in/out can be disabled in CV117. The outputs settled in CV117 will not perform the dimming and fade in/out. The factory configuration on each of the 4 outputs activates the dimming and fade effects. Special effects can be obtained using values in the range of 20-50 for CV112 and CV113.

12. Analog Operation

The on board function decoder of the Shine Maxi Digi 02 is delivered with analog DC operation enabled, and F0 activated for



Version 0.0.4

both travel direction (bit 2 is set in CV29 and CV14 is enabled for use of F0 function in both directions of travel. CV14 = 1 + 3 = 4). Connecting the board to an analog voltage, will activate all outputs of the on board function decoder. If you want to activate other functions in analog DC mode, they have to be defined in CV13 and CV14. Prior to this, the mapping of the function has to be defined in CV33 thru CV47.



Only functions F0, F1-F14 can be used in analog DC mode.

13. Consist operation

The on board function decoder of the Shine Maxi Digi 02 lighting board can use the Advanced Consist functions. To activate this feature, the consist address has to be set in CV19. When the content of CV19 differs from 0, the decoder will perform functions that are defined in CV21 and CV22 only if they are transmitted to the consist address. All other functions will be performed while they are sent to the base address (defined in CV1 or CV17/18).

Functions declared in CV21, CV22 will not be performed while they are transmitted to the base address.

Consists is useful if we want to run two or more engines in the same train (this means several mobile decoders), as well as multiple traction and want to perform some of the functions individually for each decoder, and other functions globally for all of the decoders.

Speed and direction commands will be sent to all decoders within the same consist. In this way the headlights (of locomotives) and tail light of carriages can be turned on and off, based on the direction commands sent to the consist addresses, while the interior lights in



Version 0.0.4

different carriages can be turned on and off based on their individual base addresses.



Only functions F0, F1-F12 can be used in consist mode.

14. Secondary address (decoder lock)

When using multiple decoders within the same housing, it is useful to use a secondary address that will allow the selection of the decoder in question. In this way any of the decoders that are inside the same housing (carriage body) can be programmed on the Programming Track without removing it. The secondary addresses are programmed into CV16 before the decoders (in our case the Shine Maxi Digi 02 with the onboard decoder) is being assembled in their housing.

The ranges of secondary addresses are 1-7 (value of 0 means that secondary addressing is not used). This permits the use of maximum 7 decoders in the same carriage or locomotive housing, which is more than enough.

If the value of CV16 is not equal to zero, the decoders will accept programming commands only if the secondary address of decoder that is intended to be programmed is programmed prior in CV15, and it matches the value in CV16 (it should be the same as CV16 of the decoder in question).



WARNING: even CV16 can be programmed only if the correct value is programmed in CV15.

Using secondary addressing is important to know that the only CV that can read and written without knowing the secondary address is



Version 0.0.4

CV15. For this reason the values used are limited to the range 1-7. If the secondary address of the decoder is forgotten within 7 iterations it can be found.

This way of accessing / programming of the decoder CVs is useful in case of railcars, or permanently connected sets, which have more decoders built in, and it would be very inconvenient their programming in the traditional way (on Programming Track all decoders would be programmed with the same CV values, what most likely is not desired).

Assigning secondary addresses to each decoder of the railcar or carriage sets, when placing them on the Programming Track, only the decoder for which the CV15 = CV16 will be programmed. In this way we can program several decoders independently, even if they are on the programming track in same time.

15. User data

CV105 and CV106 are two CVs that can be used to store user identifiers (serial number, etc.). The particularity of these two CVs is that after a reset their contents will not be erased.

16. Other functions

The on board decoder has implemented a function to save the last function command received. This feature can be activated programming the decimal value 1 in CV56. With this feature activated, the decoder will start up activating the functions that were active before power interruption, even if DCC commands were not received to activate these functions.



Version 0.0.4

17. CV table

CV	Default value	Value Range	Description
1	3	0-127	Decoder Address Short, 7 bits
7	2	-	Software Version (only readable)
8	78	-	Manufactured ID/RESET (readable 78 = train-O-matic, any written value
			will reset the decoder to the factory default values
13	0	0-255	Analog Mode, Alternate Mode Function Status F1-F8
			Bit $0 = 0(0)$: F1 not active in Analog mode
			= 1(1): F1 active in Analog mode
			Bit $1 = 0(0)$: F2 not active in Analog mode
			= 1(2): F2 active in Analog mode
			Bit $2 = 0(0)$: F3 not active in Analog mode
			= 1(4): F3 active in Analog mode
			Bit $3 = 0(0)$: F4 not active in Analog mode
			= 1(8): F4 active in Analog mode
			Bit $4 = 0(0)$: F5 not active in Analog mode
			= 1(16): F5 active in Analog mode
			Bit $5 = 0(0)$: F6 not active in Analog mode



			= 1(32): F6 active in Analog mode
			Bit $6 = 0(0)$: F7 not active in Analog mode
			= 1(64) F7 active in Analog mode
			Bit $7 = 0(0)$: F8 not active in Analog mode
			= 1(255): F8 active in Analog mode
14	3=	0-255	Analog Mode, Alternate Mode Function. Status F0f,F0r, F9-F14,
			Bit $0 = 0(0)$: F0f not active in Analog mode
	1+		= 1(1): F0f active in Analog mode
			Bit $1 = 0(0)$: F0r not active in Analog mode
	2		= 1(2): F0r active in Analog mode
			Bit $2 = 0(0)$: F9 not active in Analog mode
			= 1(4): F9 active in Analog mode
			Bit $3 = 0(0)$: F10 not active in Analog mode
			= 1(8): F10 active in Analog mode
			Bit $4 = 0(0)$: F11 not active in Analog mode
			= 1(16): F11 active in Analog mode
			Bit $5 = 0(0)$: F12 not active in Analog mode
			= 1(32): F12 active in Analog mode
			Bit $6 = 0(0)$: F13 not active in Analog mode
			= 1(64) F13 active in Analog mode
			Bit $7 = 0(0)$: F14 not active in Analog mode
			= 1(255): F14 active in Analog mode



Version 0.0.4

0-7Lock Value: Enter the value to match Lock ID in CV16 to unlock CV 15 0 programming. No action and ACK will be performed by the decoder when LockValue is different from LockID. In this situation only CV15 write is allowed. 0-7LockID: To prevent accidental programming use unique ID number for 16 0 decoders with same address (0..7) 1-loco decoder, 2-sound decoder, 3function decoder, ... 192 192-255 Extended Address, Address High 17 18 0-255Extended Address, Address Low 19 0 0 - 127Consist Address If CV #19 > 0: Speed and direction is governed by this consist address (not the individual address in CV #1 or #17+18); functions are controlled by either the consist address or individual address, see CV"s #21 + 22. 0-25521 Functions defined here will be controlled by the consist address. 0 Bit 0 = 0(0): F1 controlled by individual address = 1(1): by consist address Bit 1 = 0(0): F2 controlled by individual address by consist address = 1(2): Bit 2 = 0(0): F3 controlled by individual address



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			= 1(4): by consist address
			Bit $3 = 0(0)$: F4 controlled by individual address
			= 1(8): by consist address
			Bit $4 = 0(0)$: F5 controlled by individual address
			= 1(16): by consist address
			Bit $5 = 0(0)$: F6 controlled by individual address
			= 1(32): by consist address
			Bit $6 = 0(0)$: F7 controlled by individual address
			= 1(64): by consist address
			Bit $7 = 0(0)$: F8 controlled by individual address
			= 1(255): by consist address
22	0	0-63	Functions defined here will be controlled by the consist address.
			Bit $0 = 0(0)$: F0 (forw.) controlled by individual address
			= 1(1): by consist address
			Bit $1 = 0$ (0): F0 (rev.) controlled by individual address
			= 1(2): by consist address
			Bit $2 = 0(0)$: F9 controlled by individual address
			= 1(4): by consist address
			Bit $3 = 0(0)$: F10 controlled by individual address
			= 1(8): by consist address
			Bit $4 = 0(0)$: F11 controlled by individual address



	1	1	
			= 1(16): by consist address
			Bit $5 = 0(0)$: F12 controlled by individual address
			= 1(32): by consist address
29	6=	0-63	Configuration Data
			Bit $0 = 0(0)$: Locomotive Direction normal
			= 1(1): Locomotive Direction reversed
			Bit $1 = 0(0)$: 14 speed steps
	2+		= 1(2): 28 /128 speed steps
			Bit $2 = 0(0)$: Power Source Conversion NMRA Digital Only (only DCC)
	4		= 1(4): Power Source Conversion Enabled (DC + DCC)
			Bit 3-Not available
			Bit $4 = 0(0)$: speed table set by configuration variables #2,#5, and #6
			= 1(8): Speed Table set by configuration variables #66-#95
			Bit $5 = 0(0)$: one byte addressing (short addressing)
			= 1(16): two byte addressing (extended/long addressing)
			Bit 6 -Not available
			Bit 7 -Not available
30	0	0/1	Error CV. If the read out value is "1", an overcurrent event occurred since
			the last reset. The value can be cleared with programming "0" to CV30
33	15=	0-15	F0, Forward move mapping



			Bit $0 = 0(0)$: Out1 not active on F0 forward
	1+		= 1(1): Out1 active on F0 forward
			Bit $1 = 0(0)$: Out2 not active on F0 forward
	2+		= 1(2): Out2 active on F0 forward
			Bit $2 = 0(0)$: Out3 not active on F0 forward
	4+		= 1(4): Out3 active on F0 forward
			Bit $3 = 0(0)$: Out4 not active on F0 forward
	8		= 1(8): Out4 active on F0 forward
34	15=	0-15	F0, Backward move mapping
			Bit $0 = 0(0)$: Out1 not active on F0 backward
	1+		= 1(1): Out1 active on F0 backward
			Bit $1 = 0(0)$: Out2 not active on F0 backward
	2+		= 1(2): Out2 active on F0 backward
			Bit $2 = 0(0)$: Out3 not active on F0 backward
	4+		= 1(4): Out3 active on F0 backward
			Bit $3 = 0(0)$: Out4 not active on F0 backward
	8		= 1(8): Out4 active on F0 backward
35	1=	0-15	F1, Forward move mapping
			Bit $0 = 0(0)$: Out1 not active on F1 forward
	1		= 1(1): Out1 active on F1 forward
			Bit $1 = 0(0)$: Out2 not active on F1 forward
			= 1(2): Out2 active on F1 forward



			Bit $2 = 0(0)$: Out3 not active on F1 forward
			= 1(4): Out3 active on F1 forward
			Bit $3 = 0(0)$: Out4 not active on F1 forward
			= 1(8): Out4 active on F1 forward
36	1=	0-255	F1, Backward move mapping
			Bit $0 = 0(0)$: Out1 not active on F1 backward
	1		= 1(1): Out1 active on F1 backward
			Bit $1 = 0(0)$: Out2 not active on F1 backward
			= 1(2): Out2 active on F1 backward
			Bit $2 = 0(0)$: Out3 not active on F1 backward
			= 1(4): Out3 active on F1 backward
			Bit $3 = 0(0)$: Out4 not active on F1 backward
			= 1(8): Out4 active on F1 backward
37	2=	0-255	F2 mapping
			Bit $0 = 0(0)$: Out1 not active on F2
			= 1(1): Out1 active on F2
			Bit $1 = 0(0)$: Out2 not active on F2
	2		= 1(2): Out2 active on F2
			Bit $2 = 0(0)$: Out3 not active on F2
			= 1(4): Out3 active on F2
			Bit $3 = 0(0)$: Out4 not active on F2
			= 1(8): Out4 active on F2



38	4=	0-255	F3 mapping
			Bit $0 = 0(0)$: Out1 not active on F3
			= 1(1): Out1 active on F3
			Bit $1 = 0(0)$: Out2 not active on F3
			= 1(2): Out2 active on F3
			Bit $2 = 0(0)$: Out3 not active on F3
	4		= 1(4): Out3 active on F3
			Bit $3 = 0(0)$: Out4 not active on F3
			= 1(8): Out4 active on F3
39	8=	0-255	F4 mapping
			Bit $0 = 0(0)$: Out1 not active on F4
			= 1(1): Out1 active on F4
			Bit $1 = 0(0)$: Out2 not active on F4
			= 1(2): Out2 active on F4
			Bit $2 = 0(0)$: Out3 not active on F4
			= 1(4): Out3 active on F4
			Bit $3 = 0(0)$: Out4 not active on F4
	8		= 1(8): Out4 active on F4
40	0	0-255	F5 mapping
			Bit $0 = 0(0)$: Out1 not active on F5
			= 1(1): Out1 active on F5
			Bit $1 = 0(0)$: Out2 not active on F5



			= 1(2): Out2 active on F5
			Bit $2 = 0(0)$: Out3 not active on F5
			= 1(4): Out3 active on F5
			Bit $3 = 0(0)$: Out4 not active on F5
			= 1(8): Out4 active on F5
41	0	0-255	F6 mapping
			Bit $0 = 0(0)$: Out1 not active on F6
			= 1(1): Out1 active on F6
			Bit $1 = 0(0)$: Out2 not active on F6
			= 1(2): Out2 active on F6
			Bit $2 = 0(0)$: Out3 not active on F6
			= 1(4): Out3 active on F6
			Bit $3 = 0(0)$: Out4 not active on F6
			= 1(8): Out4 active on F6
42	0	0-255	F7 mapping
			Bit $0 = 0(0)$: Out1 not active on F7
			= 1(1): Out1 active on F7
			Bit $1 = 0(0)$: Out2 not active on F7
			= 1(2): Out2 active on F7
			Bit $2 = 0(0)$: Out3 not active on F7
			= 1(4): Out3 active on F7
			Bit $3 = 0(0)$: Out4 not active on F7



			= 1(8): Out4 active on F7
43	0	0-255	F8 mapping
			Bit $0 = 0(0)$: Out1 not active on F8
			= 1(1): Out1 active on F8
			Bit $1 = 0(0)$: Out2 not active on F8
			= 1(2): Out2 active on F8
			Bit $2 = 0(0)$: Out3 not active on F8
			= 1(4): Out3 active on F8
			Bit $3 = 0(0)$: Out4 not active on F8
			= 1(8): Out4 active on F8
44	0	0-255	F9 / F13 mapping
			Bit $0 = 0(0)$: Out1 not active on F9
			= 1(1): Out1 active on F9
			Bit $1 = 0(0)$: Out2 not active on F9
			= 1(2): Out2 active on F9
			Bit $2 = 0(0)$: Out3 not active on F9
			= 1(4): Out3 active on F9
			Bit $3 = 0(0)$: Out4 not active on F9
			= 1(8): Out4 active on F9
			Bit $4 = 0(0)$: Out1 not active on F13
			= 1(16): Out1 active on F13
			Bit $5 = 0(0)$: Out2 not active on F13



			= 1(32): Out2 active on F13
			Bit $6 = 0(0)$: Out3 not active on F13
			= 1(64): Out3 active on F13
			Bit $7 = 0(0)$: Out4 not active on F13
			= 1(128): Out4 active on F13
45	0	0-255	F10 / F14 mapping
			Bit $0 = 0(0)$: Out1 not active on F10
			= 1(1): Out1 active on F10
			Bit $1 = 0(0)$: Out2 not active on F10
			= 1(2): Out2 active on F10
			Bit $2 = 0(0)$: Out3 not active on F10
			= 1(4): Out3 active on F10
			Bit $3 = 0(0)$: Out4 not active on F10
			= 1(8): Out4 active on F10
			Bit $4 = 0(0)$: Out1 not active on F14
			= 1(16):Out1 active on F14
			Bit $5 = 0(0)$: Out2 not active on F14
			= 1(32):Out2 active on F14
			Bit $6 = 0(0)$: Out3 not active on F14
			= 1(64):Out3 active on F14
			Bit $7 = 0(0)$: Out4 not active on F14
			= 1(128): Out4 active on F14



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46	0	0-255	F11 / F15 mapping
			Bit $0 = 0(0)$: Out1 not active on F11
			= 1(1): Out1 active on F11
			Bit $1 = 0(0)$: Out2 not active on F11
			= 1(2): Out2 active on F11
			Bit $2 = 0(0)$: Out3 not active on F11
			= 1(4): Out3 active on F11
			Bit $3 = 0(0)$: Out4 not active on F11
			= 1(8): Out4 active on F11
			Bit $4 = 0(0)$: Out1 not active on F15
			= 1(16):Out1 active on F15
			Bit $5 = 0(0)$: Out2 not active on F15
			= 1(32):Out2 active on F15
			Bit $6 = 0(0)$: Out3 not active on F15
			= 1(64):Out3 active on F15
			Bit $7 = 0(0)$: Out4 not active on F15
			= 1(128): Out4 active on F15
47	0	0-255	F12 / F16 mapping
' '	~	0 233	Bit $0 = 0(0)$: Out1 not active on F12
			= 1(1): Out1 active on F12
			Bit $1 = 0(0)$: Out2 not active on F12
			= 1(2): Out2 active on F12



			Bit $2 = 0(0)$: Out3 not active on F12
			= 1(4): Out3 active on F12
			Bit $3 = 0(0)$: Out4 not active on F12
			= 1(8): Out4 active on F12
			Bit $4 = 0(0)$: Out1 not active on F16
			= 1(16):Out1 active on F16
			Bit $5 = 0(0)$: Out2 not active on F16
			= 1(32):Out2 active on F16
			Bit $6 = 0(0)$: Out3 not active on F16
			= 1(64):Out3 active on F16
			Bit $7 = 0(0)$: Out4 not active on F16
			= 1(128): Out4 active on F16
48	127	0-255	Out 1 Light intensity, [1-255], 0-continous
49	127	0-255	Out 2 Light intensity, [1-255], 0-continous
50	127	0-255	Out 3 Light intensity, [1-255], 0-continous
51	127	0-255	Out 4 Light intensity, [1-255], 0-continous
56	0	0-1	Save Last Output States
			0-DontSave
			1-Save
105	0	0-255	USER data
106	0	0-255	USER data



112	15	1-127	FadeIN AUX Light Effect Fade ON, ex.:1=8ms, 15=120ms 125=1000ms
113	3	1-127	FadeOUT AUX Light Effect Fade OFF
117	0	0-15	Bit $0 = 0(0)$: Out1 could be dimmed and faded
			= 1(1): continues signal with no fading on Out1
			Bit $1 = 0(0)$: Out2 could be dimmed and faded
			= 1(2): continues signal with no fading on Out2
			Bit $2 = 0(0)$: Out3 could be dimmed and faded
			= 1(4): continues signal with no fading on Out3
			Bit $3 = 0(0)$: Out4 could be dimmed and faded
			= 1(8): continues signal with no fading on Out4
			No Effect(Fading) on AUX, continues signal, Output Mapping, AUX Out
			1-4

Shine Maxi Digi 02

User Manual

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