soundsation DMX512 Lighting Controller User Manual

DMX512 Lighting Controller

USER MANUAL
MANUALE utente
SCENEMAKER 1216 User manual

Contents

DMX512 Lighting Controller

Please read this manual carefully and proper take care of this manual.
Leggete questo manuale e conservatelo per future consultazioni!

Dear customer,
First of all thanks for purchasing a SOUNDSATION® product. Our mission is to satisfy all possible needs of musical instrument, professional audio and lighting users offering a wide range of products using the latest technologies. We hope you will be satisfied with this item and, if you want to collaborate, we are looking for a feedback from you about the operation of the product and possible improvements to introduce in the next future. Go to our website **www.soundsationmusic.com** and send an e-mail with your opinion, this will help us to build instruments ever closer to customer's real requirements. One last thing: read this manual before using the instrument, an incorrect operation can cause damages to you and to the unit. Take care!
The SOUNDSATION Team

IMPORTANT SAFETY SYMBOLS

| ⚡ | CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN | ⚠ |

⚡	The symbol is used to indicate that some hazardous live terminals are involved with in this apparatus, even under the normal operating conditions, which may be sufficient to constitute the risk of electric shock or death.
⚠	The symbol is used in the service documentation to indicate that specific component shall be replaced only by the component specified in that documentation for safety reasons.
⏚	Protective grounding terminal
~	Alternating current/voltage
⚡	Hazardous live terminal
ON	Denotes the apparatus is turned on
OFF	Denotes the apparatus is turned off
WARNING	Describes precautions that should be observed to prevent the danger of injury or death to the operator.
CAUTION	Describes precautions that should be observed to prevent danger of the apparatus.

TAKING CARE OF YOUR PRODUCT

- Read these instructions
- Keep these instructions
- Heed all warning
- Follow all instructions

1. **Water / Moisture**

   The apparatus should be protected from moisture and rain and can not be used near water; for example near a bathtub, a kitchen sink, a swimming pool, etc.

2. **Heat**

   The apparatus should be located away from heat sources such as radiators, stoves or other appliances that produce heat.

3. **Ventilation**

   Do not block areas of ventilation opening. Failure to do could result in fire. Always install according to the manufacturer's instructions.

4. **Object and Liquid Entry**

   Objects do not fall into and liquids are not spilled into the inside of the apparatus for safety.

5. **Power Supply**

   In case of external power supply, the apparatus should be connected to the power supply only of the type as marked on the apparatus or described in the manual. Failure to do could result in damage to the product and possibly the user. Unplug this apparatus during lightning storms or when unused for long periods of time.

6. **Electrical Connection**

   Improper electrical wiring may invalidate the product warranty.

7. **Cleaning**

   Clean only with a dry cloth. Do not use any solvents such as benzene or alcohol.

8. **Servicing**

   Do not implement any servicing other than those means described in the manual. Refer all servicing to qualified service personnel only. Only use accessories/attachments or parts recommended by the manufacturer.

INTRODUCTION

Thank you for purchasing our Scenemaker 1216 Intelligent Lighting Controller. Enjoy your new equipment and make sure to read this manual carefully before operation!
This user manual is made to provide both an overview of controls, as well as information on how to use them. In order to help you to understand the connections between the various controls, we have gathered in groups according to their functions

1.1. Unpacking
Your Scenemaker 1216 controller was carefully packed to ensure safe transport. Despite this, we recommend you to carefully examine the package and its contents for any
signs of physical damage, which can occur during transport. It is composed by following parts:

- 1x Scenemaker 1216 unit

- 1x External Power Adapter

- This User Manual

☞ **ATTENTION:** Packaging bag is not a toy! Keep out of reach of children!!! Keep in a safe place the original packaging material for future use.

1.2. Accessories
SOUNDSATION can supply a wide range of quality accessories that you can use with your DMX controller, like Cables, Splitters, Stands, and a wide range fixtures.
All products in our catalogue has been long tested with this device so we recommend to use Genuine SOUNDSATION Accessories and Parts.
Ask your SOUNDSATION dealer or check out our website **www.soundsationmusic.com** for any accessories you could need to ensure best performance of the product.

OVERVIEW

Scenemaker 1216 is a universal intelligent lighting controller. It allows you to manage up to 12 fixtures composed of 16 channels each (192 channels in total), and up to 184 programmable scenes.
Six chases can contain up to 184 steps composed by the saved scenes (the steps) and in any order. Programs can be triggered by music, MIDI, automatically or manually.
On control surface you will find various programming tools such as 8 universal channel sliders, quick access scanner and scene buttons, as well as a LED display for easier navigation of controls and menu functions.

MAIN FEATURES

- 12 Fixtures with 16 DMX Channels each; 192 Channels in total

- 23 banks of 8 programmable scenes, 184 scenes total

- 6 chases of 184 programmed scenes from 23 bank

- Execute multiple chases simultaneously

- 8 Sliders x 2 Pages for direct control of channels

- Auto Mode controlled by Speed and Fade Time

- 8-CH / 16-CH modes for Assigned or Reversed DMX channels

- Master Blackout

- Built-in microphone for music triggering
- USB connection for LED Goose-neck Lamp (Not included)
- LED Display for easy navigation of menus
- MIDI control over banks, chases and Blackout

4.1. Front Panel
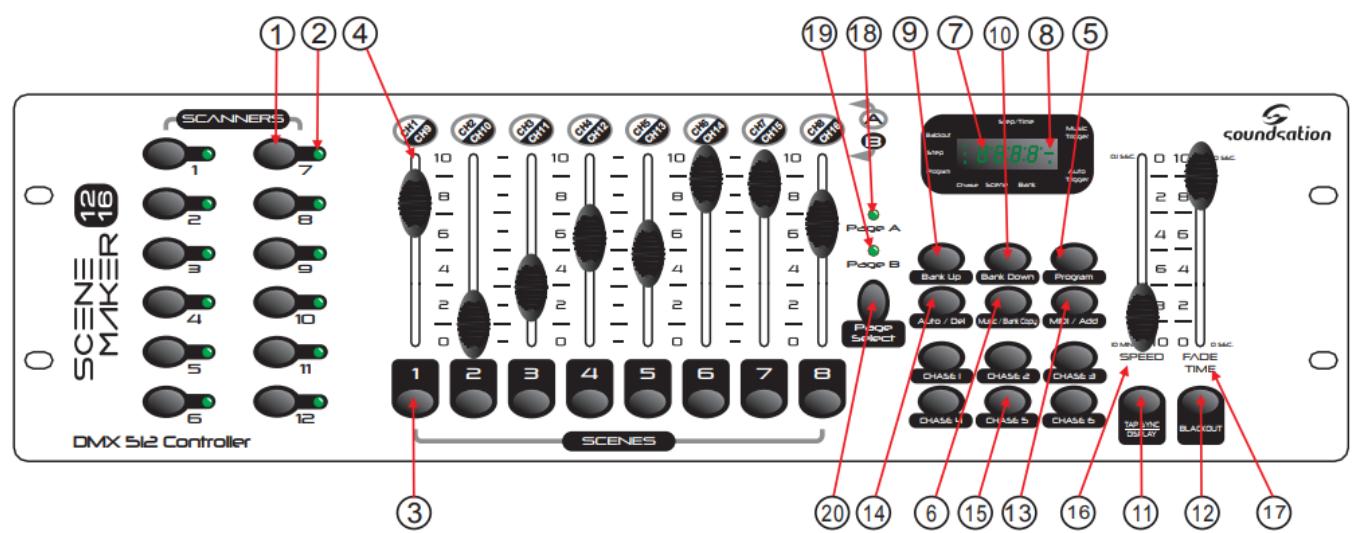
1. Scanner Buttons (1-12): 12 scanners of 16 DMX channels & fader control. Press a scanner button to turn on manual fader control. Press the scanner button again to turn off fader control.

Scanners	DMX channels	Fader control	LED
1	16-Jan	Off/On	Off/On
2	17-32	Off/On	Off/On
3	33-48	Off/On	Off/On
4	49-64	Off/On	Off/On
5	65-80	Off/On	Off/On
6	81-96	Off/On	Off/On
7	97-112	Off/On	Off/On
8	113-128	Off/On	Off/On
9	129-144	Off/On	Off/On
10	145-160	Off/On	Off/On
11	161-176	Off/On	Off/On
12	177-192	Off/On	Off/On

2. Scanner Indicator LEDs: The LED next to the button lights up or goes out to indi-cate your selection.

3. Scene Select Buttons: Press the scene buttons to load or store your scenes. There are a maximum of 240 programmable scenes.

4. Channel Faders: These faders are used to control the intensity of channel 1-8 or channel 9-16 depending upon the selected page (A or B).

5. Program Button: Used to enter Program mode.

6. Music/Bank Copy: Activates Music mode or copies a bank of scenes.

7. LED Display: Shows current activity or programming state.

8. Mode indicator LEDs: Provides operating mode status (Manual, Music or Auto).

9. Bank Up: Selects target bank from the available 30 banks.

10. Bank Down: Selects target bank from the available 30 banks.

11. TAP SYNC/DISPLAY: This is a Tap-Sync during playback, and commutes DMX value changes displayed in the LED panel to percentages during programming.

12. Blackout button: Sets all channel to "0".

13. MIDI/Add Button: Activates MIDI external control and is also used to confirm the record/save process.

14. Auto/Del Button: Used to activate Auto mode and as delete function during programming.

15. Chase Buttons (1-6): These buttons are used to activate chases of programmed scenes.

16. Speed fader: This will adjust running time of a scene or a step within a chase.

17. Fade-Time fader: Also considered a cross-fade, sets the interval time between two scenes in a chase.

18. Page A indicator LED: Represents Ch 1-8 range selected.

19. Page B indicator LED: Represents Ch 9-16 range selected.

20. Page Select Button: Used to select Page A (1-8) and Page B (9-16). In manual mode, press to toggle between the two pages or to select both pages simultaneously. Both LEDs on will allow control of both lower and upper range channel.

4.2. Rear Panel
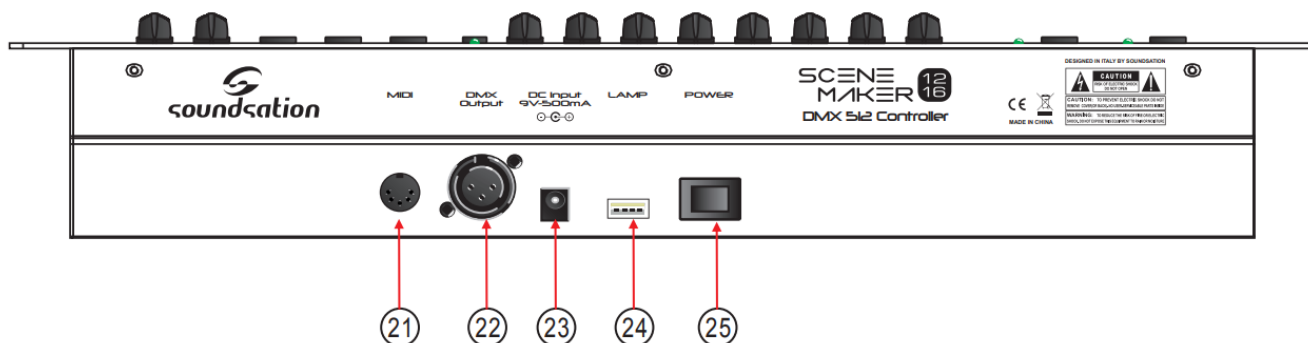
21. MIDI IN: For triggering of Banks/Chases using a MIDI device

22. DMX Out: This connector sends your DMX values DMX scanners or DMX packs.

23. DC Input: DC 9 -12V, 500mA min.

24. USB Port: Used to connect a USB goose-neck lamp (not included).

25. Power Switch: This switch turns On/Off the console.

4.3. Common Terms

The following are common terms used in intelligent light programming.

Blackout is a state by where all lighting fixtures light output are set to 0 or off, usually on a temporary basis.

DMX-512 is an industry standard digital communication protocol used in entertainment lighting equipment. For more information read Sections "12.1. DMX Introduction" at page 21 and "12.2. Building a Serial DMX Chain" at page 22 in the Appendix.

Fixture refers to your lighting instrument or other device such as a moving head or dimmer of which you can

control.

Programs are a bunch of scenes stacked one after another. It can be programmed as either a single scene or multiple scenes in sequence.

Scenes are static lighting states.

Sliders, also known as faders.

Chases can also be called programs. A chase consists of a bunch of scenes stacked one after another.

Scanner refers to a lighting instrument with a Pan and Tilt mirror; however, the Scenemaker 1216 controller it can be used to control any DMX-512 compatible device as a generic fixture.

MIDI is a standard for representing musical information in a digital format. A MIDI input would provide external triggering of scenes using MIDI device such as a MIDI keyboard or sequencer.

Stand Alone refers to a fixture's ability to function independently of an external controller and usually in sync to music, due to a built in microphone.

Fade slider is used to adjust the time between scenes within a chase.

Speed slider affects the amount of time a scene will hold its state. It is also considered a waiting time.

Shutter is a mechanical device in the lighting fixture that allows you to block the light path. It is often used to lessen the intensity of the light output and to strobe.

Patching refers to the process of assigning fixtures a DMX channel.

Playbacks can be either scenes or chases that are directly called to execution by the user. A playback can also be considered program memory that can be recalled during a show.

OPERATION GUIDE

5.1. Setting up the system

1. Connect this fixture to electric power via DC adapter.

2. Plug in DMX cable(s) to your intelligent lighting as described in the fixtures respective manual. For a quick introduction on DMX see the "12.1. DMX Introduction" at page 21 section in the Appendix of this manual.

5.2. Fixture Addressing
Scenemaker 1216 is programmed to control 16 channels of DMX per fixture, therefore the fixtures you wish to control with the corresponding "SCANNER" buttons on the unit, must be spaced 16 channels apart. Please refer to your individual fixture's manual for DMX addressing instructions.

5.3. PAN and TILT Assignment
Because not all lighting fixtures are alike or share same control attributes, this Controller allows the user to assign the fader the correct PAN and TILT channel for every individual fixture, including 16-bit channel assignments.

1. Press and hold PROGRAM & TAP SYNC button until the led blinks. Then different DMX channel. Faders are given a channel buttons together (1) time to access the number and are labeled on the surface of the channel assignment mode.

2. Press a SCANNER button that represents the fixture you would like to set PAN & TILT movements.

3. Move one fader of 1-8 channel to select the pan channel (press page button to toggle between pages A and B).

4. Press the Tap Sync/Display button to Pan / Tilt.

5. Move again one fader of 1-8 channel to select this time Tilt channel (press page button to toggle between pages A and B).

6. Press and hold Program & TAP SYNC/DISPLAY buttons to exit and save setting. All LEDs will blink.

    ☞ **NOTE:** All wheels can be re-assigned to output on different DMX channels.
    You can re-assign Pan / Tilt channel to all controller fader channels.

5.4. Resetting the System
Warning: This will reset the controller to its factory defaults. This will erase all programs and settings.

1. Turn off the unit.

2. Press and hold BANK UP and AUTO/DEL.

3. Turn on power (while still holding BANK UP and AUTO/DEL).

5.5. Copy Scanner
Example: Copying Scanner 1 into Scanner 2

1. Press and hold SCANNER button 1.

2. While holding button 1 press scanner button 2.

3. Release SCANNER button 1 first before releasing SCANNER button 2 and LED indicator of SCANNER 2 will ON.

4. The target SCANNER LED indicators will flash to confirm successful copy.

☞ **NOTE:** To save time, you can copy the settings of one Scanner button to another.

5.6. Fade Time Assign
You can choose whether fade time during scene execution is implemented broadly to all output channels, or only to the Pan & Tilt movement channels. This is relevant because often you will want gobos and colors to change quickly while not affecting the movement of the light.

1. Turn OFF the controller

2. Hold the BLACKOUT and TAP SYNC/DISPLAY buttons simultaneously.

3. Turn on the controller.

4. Press the TAP SYNC/DISPLAY button to toggle between the two modes. Either all chan- nels (A) or Pan & Tilt only (P).

5. Press BLACKOUT and TAP SYNC/DISPLAY to save settings. All LEDS will blink to confirm setting.

6.1. Manual Mode
Manual mode allows direct control of all scanners. You are able to move them and change attributes by using the channel faders.

1. Press the AUTO/DEL button repeatedly until the MANUAL LED is lit.

2. Select a SCANNER button.

3. Move faders to change fixture attributes.

4. PAGE SELECT A/B button: Use to switch between fader control of (A: Ch1~8), (B: Ch 9~16).

5. TAP SYNC/DISPLAY button: Press to toggle the output indicator on LED display between DMX values (0-255) or percentage (0-100).

☞ **NOTES:** All changes made while in Manual Mode are temporary and will not be recorded.

6.2. Review Scene or Chase
This instruction assumes that you have already recorded scenes and chases on the controller. Otherwise, please skip this section and go to programming.
6) SCENE Review

1. In manual mode, select one of the 23 banks by pressing the BANK UP/DOWN buttons.

2. Select a SCENE button (1 to 8) to review.

3. Move the faders to change fixture attributes.

4) CHASE Review

1. In manual mode, press any one of the 6 CHASE buttons.

2. Press TAP SYNC/DISPLAY button to view step number on display.

3. Press BANK UP/DOWN buttons to review all scenes in the chase.

☞ **NOTES:** Make sure you still are in MANUAL mode.

PROGRAMMING

A program (bank) is a sequence of different scenes (or steps) that will be called up one after another. In the Scenemaker 1216, 23 programs can be created of 8 scenes in each.

7.1. Entering Program Mode

1. Press Program button around 2 seconds until its LED blinks.

7. 2 . Create a Scene
A scene is a static lighting state. Scenes are stored in banks. There are 23 bank memories on the controller, and each bank can hold 8 scene memories. The console can save 184 total scenes.

1. Press the PROGRAM button until the LED blinks.

2. Position SPEED and FADE/TIME sliders to any place you need to achieve the effect you want to create..

3. Select the SCANNERS you wish to include in your scene.

4. Compose a look by moving the sliders.

5. Tap MIDI/Add button to prepare save.

6. Choose a BANK (1 – 23) to change if necessary.

7. Select a SCENES button to store.

8. Repeat steps 3 through 7 as necessary. 8 scenes can be recorded in a Program.

9. To exit program mode, hold the PROGRAM button.

☞ **Notes:** De-select Blackout if LED is lit. You can select more than one fixture.

You can access channels 9~16 by pressing the Page Select button. This is necessary for fixtures that use more than 8 channels of control. There are 8 scenes available in every bank. All LEDs will flash to confirm. The LED display will now indicate the Scene number and Bank number used.

7.3 . Running a Program

1. Use BANK UP/DOWN buttons to change Program banks if necessary.

2. Press the AUTO/DEL button repeatedly until the AUTO LED turns on.

3. Adjust PROGRAM speed via the SPEED fader and the loop rate via the FADE TIME fader.

4. Alternatively you can tap the TAP SYNC/DISPLAY button twice. Time between two taps sets the time between SCENES (up to 10 minutes).

NOTE: De-select Blackout if LED is lit.

7.4 . Check a Program

1. Press and hold PROGRAM button until its LED blinks.

2. Use BANK UP/DOWN buttons to select the PROGRAM bank to review.

3. Press the SCENES buttons to review each scene individually.

7.5 . Editing a Program
Scenes will need to be modified manually.

1. Press and hold the PROGRAM button until the LED blinks.

2. Use BANK UP/DOWN buttons to change Program banks if necessary.

3. Select the desired fixture via the SCANNERS button.

4. Adjust and change fixture attributes using channel faders.

5. Press the MIDI/Add button to prepare the save.

6. Select the desired SCENES button to save.

NOTE: De-select Blackout if LED is lit.

7.6 . Copy a Bank

1. Press and hold the PROGRAM button until the LED blinks.

2. Use BANK UP/DOWN buttons to select the PROGRAM bank you will copy.

3. Press MIDI/Add button to prepare the copy.

4. Use BANK UP/DOWN buttons to select the destination PROGRAM bank.

5. Press MUSIC/BANK COPY button to execute the copy. All LEDs on the controller will blink.

NOTE: All 8 scenes in a Program bank will be copied.

CHASE PROGRAMMING

A chase is created by using previously created scenes. Scenes become steps in a chase and can be arranged in any order you choose. It is highly recommended that prior to programming chases for the first time; you delete all chases from memory. See "8.5. Delete all Chase Programs" at page 18 for instructions.
8.1. Create a Chase
A chase can contain 184 scenes as steps. The term steps and scenes are used interchangeably.

1. Press PROGRAM button until the LED blinks.

2. Press CHASE (1 – 6) button you wish to program.

3. Change BANK, if necessary, to locate a scene.

4. Select the SCENE to insert.

5. Tap the MIDI/Add button to store.

6. Repeat steps 3 – 5 to add additional steps in the chase. Up to 184 steps can be recorded.

7. Press and hold the PROGRAM button to save the chase.

8.2. Running a Chase

1. Press a CHASE button then press the AUTO/DEL button.
2. Adjust Chase speed by tapping TAP SYNC/DISPLAY button twice at a rate of your choosing.

☞ **NOTE:** The time between 2 taps will set chase speed (up to 10 minutes).

8.3. Checking a Chase

1. Press and hold PROGRAM button until its LED will on.
2. Select the desired CHASE button.
3. Press the TAP SYNC/DISPLAY button to switch the LED display to steps.
4. Review each scene/step individually by using the BANK UP/DOWN buttons.

8.4. Edit a Chase
5) Copy a Bank into A Chase

1. Press and hold the PROGRAM button to enter programming mode.
2. Press the desired CHASE button.
3. Select the BANK to be copied using the BANK UP/DOWN buttons.
4. Press MUSIC/BANK COPY button to prepare copy.
5. Press MIDI/Add button to copy the bank. All LEDs will blink.

6) Copy A Scene Into A Chase

1. Press and hold the PROGRAM button to enter programming mode.
2. Press the desired CHASE button.
3. Select the BANK to be copied using the BANK UP/DOWN buttons.
4. Press the SCENE button that corresponds to the scene to be copied.
5. Press MIDI/Add button to copy the scene. All LEDs will blink.

6) Insert A Scene Into A Chase

1. Press and hold PROGRAM button to enter programming mode.
2. Press the desired CHASE button.
3. Press TAP SYNC/DISPLAY to switch the LED display to steps view.
4. Use BANK UP/DOWN buttons to navigate steps and locate the insert point of the new scene. The display will read the step number (for example: to insert a scene between Step 05 and 06, navigate using BANK buttons until the display reads STEP 05).
5. Press MIDI/Add button to prepare the insert and LED display shows "STEP 06".
6. Use the BANK UP/DOWN button to locate the SCENE.
7. Press the SCENE button that corresponds to the scene to be inserted.
8. Press MIDI/Add button to insert the scene. All LEDs will blink.

9) Delete a Scene in a Chase

1. Press and hold PROGRAM button to enter programming mode.

2. Press the desired CHASE button that contains the scene to be deleted (LED will show selected chase number).
3. Press TAP SYNC/DISPLAY button to switch the LED display to steps.
4. Select the scene/step to be deleted using BANK UP/DOWN buttons.
5. Press AUTO/DEL button to delete the step/scene. All LEDs will blink.

6) Delete a Chase

1. Press and hold PROGRAM button to enter programming mode.
2. Press the desired CHASE button (1 – 6) to be deleted.
3. Press and hold AUTO/DEL button and target CHASE button to delete the chase. All LEDs will blink.

8.5. Delete all Chase Programs

☞ **CAUTION!** This procedure will result in irrevocable loss of chase step memory. The individual scenes and program banks will be preserved.

1. Turn the Scenemaker 1216 off.
2. Press and hold BANK DOWN button and AUTO/DEL button while turning on the control-ler.
3. All LEDs will blink.

SCENE PROGRAMMING (STEPS)

9.1. Insert a Scene

1. Press and hold PROGRAM button to enter programming mode.
2. Press the desired CHASE button (e.g.: to insert a scene between Steps 05 and 06, navigate using BANK buttons until the display reads STEP05).
3. Press TAP SYNC/DISPLAY to switch the LED display to steps view.
4. Use BANK UP/DOWN buttons to navigate steps and locate the insert point of the new scene. The display will read the step number.
5. Press MIDI/Add button to prepare the insert and LED display step 06.
6. Use the BANK UP/DOWN button to locate the SCENE.
7. Press the SCENE button that corresponds to the scene to be inserted.
8. Press MIDI/Add button to insert the scene. All LEDs will blink.

9.2. Copy a Scene

1. Press and hold PROGRAM button to enter programming mode.
2. Select the BANK that contains the scene to be copied using the BANK UP/DOWN buttons.
3. Press the SCENE button that corresponds to the scene to be copied.
4. Press MIDI/Add button to copy the scene.
5. Select the destination BANK that contains the scene memory to record onto using the BANK UP/DOWN buttons.
6. Press the desired SCENE button to complete copy. All LEDs will blink.

9.3. Delete a Scene

1. Press and hold PROGRAM button to enter programming mode.
2. Select the BANK that contains the scene to be deleted by using BANK UP/DOWN buttons.

    ☞ **NOTE:** When deleting a scene the physical location is not removed, however, all 192 DMX channels available to the scene will be set to value 0.

3. Press and hold the AUTO/DEL button.
4. Press the SCENE button that corresponds to the scene you want to delete. All LEDs will blink.

9.4. Delete all Scenes
Turn off the console.

1. Press and hold PROGRAM button and BANK DOWN button while turning on power to the controller.

    ☞ **CAUTION!** This process is irreversible. All scenes with data will be set to 0.

PLAYBACK

10.1. Running in Sound Mode

1. Press MUSIC/BANK COPY button until MUSIC LED turns on.

    ☞ **NOTE:** In the Sound mode, programs will be triggered by the sound using its built-in microphone.

2. Select the program BANK to run in sound active mode using the BANK UP/DOWN buttons.
3. Alternatively you can press a single CHASE button (1 – 6) or several CHASE buttons in sequence and all selected chases will loop in the selected order.

    ☞ **NOTE:** Multiple chases selected will loop and run in the order originally selected.

4. You can adjust the duration time using FADE TIME fader.

10.2. Running in Auto Mode

1. Press AUTO/DEL button until AUTO LED turns on.

    ☞ **NOTE:** In the Auto mode, programs will be triggered by controllers fade and speed time as set on the faders.

2. If a CHASE button is not pressed the controller will automatically run a BANK program.
3. Change BANK programs by using BANK UP/DOWN buttons.
4. Alternatively you can press a single CHASE button (1 – 6) or several CHASE buttons in sequence and all selected chases will loop in the order selected.

    ☞ **NOTE:** Multiple chases selected will loop and run in the order originally selected.

5. You can adjust the time between steps by moving SPEED fader and the duration of the step by moving FADE TIME fader.

10.3. Blackout

1. Blackout button brings all lighting output to 0 or off.

MIDI OPERATION

Scenemaker 1216 only responds to MIDI commands on the MIDI channel which is set to full stop. All MIDI controls are performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the blackout on note.

1. Press and hold MIDI/Add button for about 3 seconds.
2. Select the MIDI control channel (1-16) via the BANK UP/DOWN buttons.

   ☞ **NOTE:** This is the Channel that the controller will receive MIDI note commands.

3. Press and hold the MIDI/Add button for 3 seconds to save settings.

| MIDI NOTE	FUNCTION (TURN ON/OFF)
00 to 07	Scenes 1~8 in BANK 1
08 to 15	Scenes 1~8 in BANK 2
16 to 23	Scenes 1~8 in BANK 3
24 to 31	Scenes 1~8 in BANK 4
32 to 39	Scenes 1~8 in BANK 5
40 to 47	Scenes 1~8 in BANK 6
48 to 55	Scenes 1~8 in BANK 7
56 to 63	Scenes 1~8 in BANK 8
64 to 71	Scenes 1~8 in BANK 9
72 to 79	Scenes 1~8 in BANK 10
80 to 87	Scenes 1~8 in BANK 11
88 to 95	Scenes 1~8 in BANK 12
96 to 103	Scenes 1~8 in BANK 13
104 to 111	Scenes 1~8 in BANK 14
112 to 119	Scenes 1~8 in BANK 15
120	Chase 1
121	Chase 2
122	Chase 3
123	Chase 4
124	Chase 5
125	Chase 6
126	BLACKOUT

APPENDIX

12.1. DMX Introduction

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required.

Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

12.2. Building a Serial DMX Chain

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling.
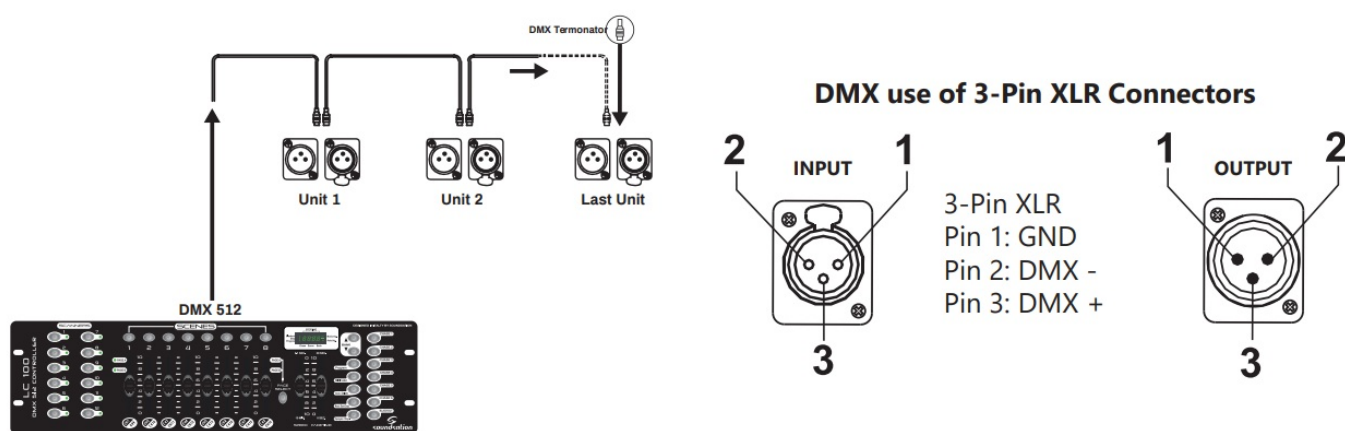
Connect fixtures using shielded 2-conductor twisted pair cable with 3-pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-), and pin 3 is Data positive (S+).
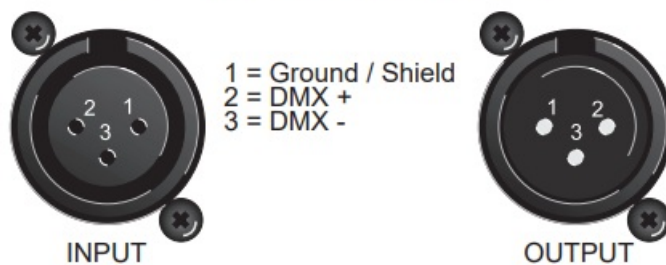

CAUTION: Wires must not come into contact with each other; otherwise the fixtures will not work at all, or will not work properly.

12.3. DMX Terminator

DMX is a resilient communication protocol, however errors still occasionally occur. In order to prevent electrical noise from disturbing and corrupting the DMX control signals, a good habit is to connect DMX output of last fixture in the chain to a DMX terminator, especially over long signal cable runs.

The DMX terminator is simply an XLR connector with a 120Ω (ohm), 1/4 Watt resistor connected across Signal (-) and Signal (+), respectively, pins 2 and 3, which is then plugged into the output socket on last projector in the chain. The connections are illustrated below.

DMX Terminator

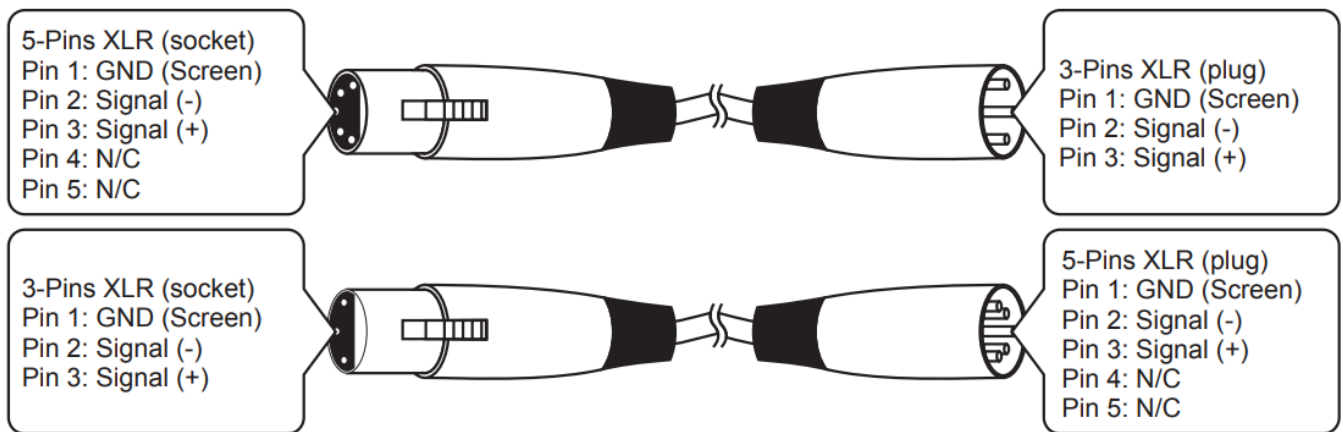120ohm, 1/4W Resistor

1 2
3
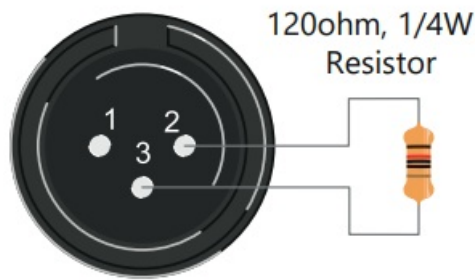
☞ Complimentary signal cable can transmits signals to 20 unit fixtures at most. Signal amplifier is a must to connect more fixtures.

12.4. 3-Pin vs 5-Pin DMX cables

DMX connection protocols used by controllers and fixtures manufacturers are not standardized around the world. However, two are the most common standards: 5-Pin XLR and 3-Pin XLR system. If you wish to connect Scenemaker 1216 to a 5-Pin XLR input fixture, you need to use an adapter-cable or make it by yourself.

Following the wiring correspondence between 3-Pin and 5-Pin plug and socket standards

5-Pins XLR (socket)
Pin 1: GND (Screen)
Pin 2: Signal (-)
Pin 3: Signal (+)
Pin 4: N/C
Pin 5: N/C

3-Pins XLR (plug)
Pin 1: GND (Screen)
Pin 2: Signal (-)
Pin 3: Signal (+)

3-Pins XLR (socket)
Pin 1: GND (Screen)
Pin 2: Signal (-)
Pin 3: Signal (+)

5-Pins XLR (plug)
Pin 1: GND (Screen)
Pin 2: Signal (-)
Pin 3: Signal (+)
Pin 4: N/C
Pin 5: N/C

SPECIFICATIONS

Power Supply	DC 9V-12V, 500mA min.
USB Lamp (not included)	5V – 200 mA max
Protocols	DMX-512 USITT
Data Input	Locking 3-pin XLR male socket
Data Output	Locking 3-pin XLR female socket
Data Pin Configuration	Pin 1 shield, Pin 2 (-), Pin 3 (+)
Controller Size (WxHxD):	482 x 82 x 133 mm
Net Weight	2.0 kg
Packing Dimension (WxHxD):	560 x 135 x 185 mm
Packing Gross Weight:	2.6 kg

WARRANTY AND SERVICE

All SOUNDSATION products feature a limited two-year warranty. This two-year warranty is specific to the date of purchase as shown on your purchase receipt.
The following cases/components are not covered from the above warranty:

- Any accessories supplied with the product

- Improper use

- Fault due to wear and tear

- Any modification of the product effected by the user or a third party

SOUNDSATION shall satisfy the warranty obligations by remedying any material or manufacturing faults free of charge at SOUNDSATION's discretion either by repair or by exchanging individual parts or the entire appliance. Any defective parts removed from a product during the course of a warranty claim shall become the property of SOUNDSATION.
While under warranty period, defective products may be returned to your local SOUNDSATION dealer together with original proof of purchase. To avoid any damages in transit, please use the original packaging if available. Alternatively you can send the product to SOUNDSATION SERVICE CENTER – Via Enzo Ferrari , 10 – 62017 Porto Recanati – Italy . In order to send a product to service center you need an RMA number. Shipping charges have to be covered by the owner of the product.
For further information please visit **www.soundsationmusic.com**

WARNING

PLEASE READ CAREFULLY – EU and EEA (Norway, Iceland and Liechtenstein) only

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2202/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized onefor-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (WEEE).
Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.
For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service.

MADE IN CHINA

This product is imported in EU by
Questo prodotto viene importato nella UE da
FRENEXPORT SPA – Via Enzo Ferrari, 10 – 62017 Porto Recanati – Italy
www.soundsationmusic.com
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Documents / Resources

soundsation DMX512 Lighting Controller [pdf] User Manual
DMX512 Lighting Controller, DMX512, Lighting Controller, Controller

Manuals+,