

CONTROLLER FEATURES

280 DMX Channels - 14 units of 20 channel fixtures
 14 Chases with up to 255 steps each
 14 Scene banks with 22 scenes in each bank
 Chases can be run with sound activation
 Chases can be run at a preset speed and fade
 2 Row X 16 Character LCD Display
 DMX Polarity output switch.
 Removable 4 MB Memory Card
 Power Input: 13 - 15 VDC, 500 mA minimum
 Power Connector: 2.1 mm, Center Pin +
 Dimensions: 19"W X 9"H X 3.25"H
 Weight: 6.7 Pounds

GENERAL DESCRIPTION

The SM-280 is a fixture (or scanner) oriented DMX controller. It can control up to 14 fixtures of 20 DMX channels each. The unit can also be used to control conventional dimmer packs. The SM-280 includes 14 scene banks. Each bank can contain up to 22 scenes. There are also 14 programmable chases. Each chase may contain up to 255 steps. Scene banks can be automatically run like chases.

Each fixture is permanently assigned a block of DMX addresses. The table below shows the assignments.

Fixture #	Channels
1	1-20
2	21-40
3	41-60
4	61-80
5	81-100
6	101-120
7	121-140
8	141-160
9	161-180
10	181-200
11	201-220
12	221-240
13	241-260
14	261-280

The fixtures must be set to accommodate these DMX assignments. This is usually done using DIP switches on the fixture to set its starting address. Refer to the fixture manual for exact instructions. The information is sometimes shown on a tag or chart on the fixture. If you set multiple fixtures to the same addresses then they will controlled together.

FIXTURE FUNCTIONS

You will need to know which channel within a fixture is assigned to each fixture function (Pan, Tilt, Color, Dimming, etc.). This information is contained in the fixture manual.

DMX CONNECTIONS

Any system using DMX control should be connected together as a chain of devices. The control cable should proceed from the controller to the first fixture and then on to other fixtures in a continuous "daisy chain" fashion. Most fixtures have a DMX IN and a DMX OUT connector to be used to connect the chain. The control cable should NOT be split into a multiple run star arrangement with a cable running from the controller directly to each fixture.

DMX CONNECTOR PIN ASSIGNMENTS

There are two different connectors which can be used for DMX control. They are both XLR connectors. Some units use 3 pin connectors. Others use 5 pin connectors. The SM-280 transmits DMX from a 3 pin female connector on the back edge of the unit. If your fixtures use 5 pin connectors then you can make up an adapter cable to accommodate this. The table below shows the pin assignments.

PIN #	SIGNAL NAME
1	DMX COMMON
2	DMX DATA -
3	DMX DATA +
4	NOT USED
5	NOT USED

Some fixtures use a reversed signal assignment. In this case the DATA - and DATA + pins are reversed. The SM-280 has a reversing switch on the back edge to accommodate this situation.

DMX TERMINATION

A DMX chain should be terminated at the last fixture (and ONLY the last fixture) on the chain. This is done by installing a commonly available 1/4 Watt, 120 Ohm resistor across the DATA - and DATA + wires at the last fixture. If you have only a few fixtures close together and a very short run to the controller then you may be able to operate without the terminator.



CONTROLS AND INDICATORS

- 1. SCANNER / SCENES Buttons (22): Activates a Fixture, Scene, Scene Bank, or Chase during programming or operation.
- 2. Indicate which function the SCANNER / SCENES buttons are enabled for.
- 3. Select which function the SCANNER / SCENES buttons are enabled for.
- 4. Channel Faders (8): Sets DMX channel values. Ch 1-8 can be adjusted when Page A is selected. Channels 9 - 16 are adjusted using Page B.
- 5. Auto / Insert:
Auto: Activates Auto-Run for Scenes and chases.
Insert: Inserts a scenes and chase steps in programming mode.
- 6. Delete/Music:
Delete: Deletes scenes, chase steps and chases in program mode.
Music: Activates Music Auto-Run for scenes and chases.
- 7. Copy: Copies fixture settings during setup. Copies scenes and chase steps in program mode.

- 8. Setup/Group:
Setup: Activates setup operation which enables you to control how the fixture will respond to several controller functions.
Group: Causes up to 6 Banks of Auto-Run scenes to run at the same time.
- 9. X Fine: Activates pan control for the Up/Down buttons.
- 10. Y Fine: Activates tilt control for the Up/Down buttons.
- 11. , 12. Up, Down: Changes channel DMX values during manual fixture operation. Scrolls through chase steps.
- 13. Fine: Switches the Pan/Tilt wheels and Up/Down buttons between large and small DMX increments. Enables setup of speed and fade preset values for chase operation.
- 14. Memory Card: Reader/Writer for an external 4MB memory card which can be used to store scene and chase data.
- 15. LCD Display: Shows various controller status and information depending on the operation being performed.

16. Spl Scene: Accesses one of 14 additional scenes which are independent of scenes in normal banks.
17. Tap / Display:
Tap: Controls the speed of Auto-Run Scenes and chases. Push TAP several times at the rate you want the scenes or chases to run. This is an alternative to using the SPEED fader.
Display: Used to alter the format of some display information items.
18. Pause: Temporarily stops Auto-Run scenes and chases. The DMX channel levels will hold their current setting during pause. Push briefly to turn Pause ON or OFF.
19. Memory Select: Switches SM-280 operation between internal memory and the external memory card.
20. Page A/B: Controls which DMX channels are active for the channel faders. Channels 1 - 8 are Page A. Channels 11 - 18 are page B. Both A and B can be active at the same time.
21. Program / Record:
Program: Switches the SM-280 into the program mode. Hold it down for about 3 sec. to toggle program mode ON or OFF. The program mode indicator flashes when the unit is in program mode.
Record: Used in program mode during recording of scenes and chases. Also used in Setup to record changes.
22. Speed Slider: Controls the speed of Auto-Run scenes and chases. The range is 0.1 sec./step to 10 min./step. Also used when assigning channel functions in Setup mode.
23. Fade Slider: Controls the fade time of Auto-Run scenes and chases. The range is 0 sec. to 30 sec.. Also used when assigning channel functions in Setup mode.
24. Power ON/OFF: Controls SM-280 main power.
25. Pan Wheel: Controls left/right operation of fixtures when assigned.
26. Tilt Wheel: Controls up/down operation of fixtures when assigned.
27. Fog Machine: Controls remote operation of certain types of fog machines.

28. Black: (Blackout) Sets all DMX channels to zero level output. A Setup procedure can be used to prevent a fixture channel from being affected by this function.

REAR PANEL CONNECTORS AND CONTROLS

All SM-280 external connections are made at the rear panel. A rear panel diagram identifies the connectors.

See the sections DMX CONNECTIONS and DMX CONNECTOR PIN ASSIGNMENTS for details about the DMX signal connections.

DO NOT APPLY AC LINE POWER TO THE FOG MACHINE CONNECTOR. It is only for remote control of certain compatible fog generating machines.

CHARACTER SYMBOLS IN THE DISPLAY

The controller LCD display often will show the * (asterisk) character for a value which has not yet been set or selected. Unless a specific example is being given the display diagrams in this manual will show the * character as place holders instead of the actual characters.

INITIAL CONTROLLER SETUP

Several SM-280 functions can be modified to change the way that a fixture responds to the controller.

1. You can rearrange fixture channel assignments.
2. You can reverse the action of the faders.
3. You can select whether or not a fixture channel is affected by the controller fade time.
4. You can change the effect of the blackout function for fixture channels.

The Setup Mode is used to control these functions.

ENTER SETUP MODE

1. Push Setup. The display will appear as below.

Setup
Select: + / -

2. Push Fixture and select a fixture by pushing its Scanner / Scene Button (1 - 14). The display below uses fixture 1 as an example.

Sel" Fixture 01
Setup: Scanner

From this point you use the Up and Down buttons to scroll through the available setup options for a fixture.

You can exit Setup mode by pushing Setup again.

ASSIGN FIXTURE CHANNELS

The channel assignments within a fixture can be assigned to other faders or the PAN or TILT wheels.

1. Enter Setup Mode and select a fixture.
2. Push Up. The display will show channel numbers (Channel **) and corresponding controller fader numbers (con *).

```
Setup_Fixture **  
Channel ** Con *
```

3. Use the Fade slider to scroll through the controller fader numbers (con). The corresponding fixture channel number will also be shown (channel). The pan and tilt wheels are shown on the display as X and Y respectively.

Use the Speed slider to change the fixture channel number for the controller fader number displayed.

The example display below shows that the 3rd channel in fixture 1 will respond to controller fader 2.

```
Setup_fixture 01  
Channel 03 con 2
```

4. Push Program/Record to save the new channel assignments. The controller indicators will flash briefly.

REVERSE CHANNEL OPERATION

The action of the faders and PAN/TILT wheels can be reversed. This normally used with PAN/TILT controls but can be applied to other functions.

1. Enter Setup Mode and select a fixture.
2. Push Up or Down until the display shows as below.

```
Setup_Fixture **  
Channel ** Rev *
```

3. Use the Speed slider to scroll through the fixture channels and use the fade slider to set the channel to Y (yes) or N (no) reverse operation.

4. Push Program/Record to save the new setting. The controller indicators will flash briefly.

SET CHANNEL FADE APPLICATION

You can control whether or not fade times will be applied to a fixture channel. This is often used with the pan and tilt channels.

1. Enter Setup Mode and select a fixture.
2. Push Up or Down until the display shows as follows.

```
Setup_Fixture **  
Channel ** fade*
```

3. Use the Speed slider to scroll through the fixture channels and use the Fade slider to set the channel to Y (yes) or N (no) for fade application.
4. Push Program/Record to save the new assignments. The controller indicators will flash briefly.

SET CHANNEL BLACKOUT APPLICATION

Fixture channels can be set to respond to or ignore blackout.

1. Enter Setup Mode and select a fixture.
2. Push Up or Down until the display shows as follows.

```
Setup_Fixture **  
Channel ** dark *
```

3. Use the Speed slider to scroll through the fixture channels and use the Fade slider to set the channel to Y (yes) or N (no) for blackout application.

COPY FIXTURE SETTINGS

Once you have completed the setup for a fixture you can copy those settings to another fixture. This is useful when you have several of the same model fixtures.

1. Enter Setup Mode and select a fixture which has been already set up.
2. Push Copy. The display will be as shown as follows.

```
COP"Fixture **_A1  
-> Fixture **_A1
```

3. Select the fixture which will receive the settings by pushing its SCANNER/SCENES button. The display will show that fixture on the bottom row.
4. Push Program/Record to copy the assignments. The controller indicators will flash briefly.
5. Push Copy again to exit from the copy menu.

MANUAL FIXTURE OPERATION

When the SM-280 is turned on it is in manual mode with Blackout invoked. The display appears as follows:

```
Manual
Sel" Fi_sc_ba_ch
```

You can select a fixture (Fi), a scene (sc), a scene bank (ba), or a chase (ch) by using its associated button. Only manual fixture operation is covered in this section since you have to be able to operate a fixture to use it for programming scenes and chases.

1. Push Fixture. The display will show as follows:

```
Sel" Fixture **
Manual
```

2. Push a Scanner /Scenes button to select a specific fixture. The display will show the fixture number. You can select multiple fixtures to be controlled together. Make sure Blackout is OFF.
3. Use the channel faders and/or pan/tilt wheels to run the selected fixture. The display shows the fixture number and the DMX value of the last fader moved.

The Up and Down buttons can also be used to adjust a channel value. The X Fine and Y Fine Buttons can be used to switch the Up/Down controls to the Pan and Tilt channels.

```
Hand_Fixture **
Slide * Data ***
```

If the fixture has more than 10 channels then you will have to use Page A/B to switch to Page B to access channels 11 - 20.

PAN AND TILT WHEELS

The Pan and tilt wheels default to channels 9 and 10 respectively and are shown in the display as X and Y. They can be reassigned using the Setup mode.

COARSE/FINE CONTROL

The Fine button can be used with the Pan/Tilt wheels and Up/Down buttons to adjust the applicable channel in large or small increments. When the indicator on the Fine button is ON - these controls will change the channel DMX value in larger increments.

PROGRAMMING SCENES

A scene is a recorded snapshot of all the channel settings of one or more fixtures. The SM-280 can record 308 scenes. The scenes are arranged in 14 banks of 22 scenes each.

ALL SCENE ADD, COPY, INSERT, AND DELETE FUNCTIONS ARE DONE IN THE PROGRAM MODE.

Press PROGRAM for about 3 seconds to activate the program mode. The PROGRAM indicator flashes continuously when program mode is active.

ADD A SCENE TO A BANK

1. Push Bank and select a bank to store the scene by pushing a SCANNER/SCENES button (1-14).
2. Push Scene and select a scene to be stored by pushing a SCANNER/SCENES button (1-22).

The display bottom row will show the bank number, the number of scenes recorded in the bank, and the scene you selected.

The display top row may show the last fader used and its value.

```
E Slide * Da ***
Ban ** Sce ** / **
```

3. Push Fixture and select a fixture by pushing a SCANNER/SCENES button. You can select more than one. The display will show the number of the last fixture you select.
4. Adjust the fixture faders and/or Pan/Tilt wheels to the desired settings as in manual fixture operation.
5. Deselect the fixture and select another one to adjust. The first fixture will hold its settings.
6. Repeat steps 2 through 4 until all fixtures for the scene are included.
7. Push Program/Record to store the complete scene. The controller indicators will flash briefly.

You cannot store a scene beyond the next available scene in a bank. For instance: If the bank has 4 scenes in it and you try to program scene 7 then your scene will be recorded but it will appear in scene 5.

EDIT A SCENE

You can edit the settings of one or more of the fixtures in a scene without re-recording all the fixture settings. This process does not apply to the last scene in the bank. If you edit the last scene the results will be a new scene.

The process is done in Program mode and is almost the same as in described in ADD A SCENE TO A BANK. When you select the scene it will activate the fixtures in it. You can then alter the settings for a fixture and record the scene with the changes.

INSERT A SCENE IN A BANK

This will insert a scene between two other existing scenes in a bank.

1. Push Bank and select a bank to store the scene by pushing a SCANNER/SCENES button (1-14).
2. Push Scene and select the scene which will become the new scene by pushing a SCANNER/SCENES button (1-22). For example: If you want to insert a scene between scenes 2 and 3 you would select scene 3. In other words the new scene will be inserted before existing scene 3.
3. Push Auto/Insert.
4. At this point the process is the same as for RECORD A SCENE. Select and set up the fixtures as desired.
5. When all fixtures are set - Push Program/Record to store the inserted scene. The controller indicators will flash briefly.

DELETE A SCENE

1. Push Bank and select the bank containing the scene by pushing a SCANNER/SCENES button (1-14).
2. Push Scene and select the scene to be deleted by pushing a SCANNER/SCENES button (1-22). The display will show the bank and scene number.
3. Push Delete/Music. The display will show as follows

```
Bank_Del_Scen
Bank ** Sce **/ **
```

4. Push Program/Record to complete the deletion. The controller indicators will flash briefly.

COPY A SCENE

You can copy the contents of a scene to another scene in the same or a different scene bank.

1. Push Bank and select a the bank containing the scene to be copied using a SCANNER/SCENES button (1-14).
2. Push Scene and select the scene to be copied to be using a SCANNER/SCENES button (1-22).
3. Push Copy. The display will show the bank and scene selected as follows.

```
Ban_sce_Copy
Select: Bank **
```

4. Push Bank and select the Bank which will receive the scene using a SCANNER/SCENES button (1-14). The display will show as follows.

```
Ban ** Cop_sce
Select: Scen **
```

5. Push Scene and select the scene which will receive the copy using a SCANNER/SCENES button (1-22). The display top row will show the bank/scene number to be copied. The bottom row will show the bank and scene numbers where the scene will be copied.

```
E" Ba 01 Sc **/ **
-> Ba 03 Sc **/ **
```

5. Push Program/Record. The copy will be made and the controller indicators will flash briefly.

DELETE ALL SCENES IN A BANK

This will clear ALL the scenes in a bank.

1. Push Bank.
2. Hold down the SCANNER/SCENES button for the bank you want to be cleared (1-14) and push Delete/Music. The display will show the bank you selected.

```
Bank_Delet
Delet -> bank **
```

3. Release both of the buttons and push the SCANNER/SCENES for the bank again. The display will show the bank number.
4. Push Program/Record to complete the deletion. The controller indicators will flash briefly.

COPY A BANK OF SCENES

This will copy the programmed contents of a scene bank to another bank. If the bank receiving the scenes has more programmed scenes than the bank being copied from then those scenes will be retained.

1. Push Bank.
2. Hold down the SCANNER/SCENES button (1 - 14) for the bank to be copied FROM and push Copy. Then release both buttons.
3. Push the SCANNER/SCENES button for the bank (1 - 14) which will be copied TO. The display will show both the FROM and TO banks.

```
Bank_Copy  
Ban ** -> Ban **
```

4. Push Program/Record to complete the copy. The controller indicators will flash briefly.

PROGRAMMING CHASES

The SM-280 contains 14 user programmable chases. Each chase may include up to 255 steps.

EACH CHASE STEP CONSISTS OF A SCENE WHICH HAS ALREADY BEEN RECORDED.

A chase step can use any scene in any bank. Any scene can be used in multiple chase steps and in multiple chases.

ALL CHASE ADD, COPY, INSERT, AND DELETE FUNCTIONS ARE DONE IN THE PROGRAM MODE.

Hold down Program/Record for about 3 seconds to activate the program mode. The Program indicator flashes continuously when program mode is active.

ADD A STEP TO A CHASE

This will add a scene at the end of a chase.

1. Push Chase.
2. Select a chase using a SCANNER/SCENES button (1-14). The display top row will show the

chase number, the number of steps in the chase and 000 for the current step.

```
E"cha <*> ***/ **  
ViewStep? + ^ -
```

3. Push Up. The display will show the bank number (b), the scene number (s), the period or step time (p), and the fade time (f) for the first step.

```
E"cha <*> ***/ **  
b ** s** p**** f ****
```

You can use Up/Down to scroll thru the existing steps.

4. Push Bank and select the bank number containing the scene to be used for the new step by pushing a SCANNER/SCENES button (1-14).
5. Push Scene and select the scene number to be used for the new step by pushing a SCANNER/SCENES button (1-22).
6. Push Program/Record. The scene will be added at the end of the chase, The display will update and the controller indicators will flash briefly.
7. Push Fine and use the Speed slider and/or Fade slider to set the period and fade times.
8. Push Program/Record. The values will be recorded and the controller indicators will flash briefly.

INSERT A STEP IN A CHASE

This is similar to adding a scene to a chase but the scene will be inserted at a specific step and the remaining steps will be pushed forward.

1. Push Chase.
2. Select a chase using a SCANNER/SCENES button (1-14). The display top row will show the chase number, number of steps in the chase, and the current step.

```
E"cha<*> ***/ **  
Viewstep? + ^ -
```

3. Push Up and or Down to scroll to the step where the scene will be inserted. The display will show the bank number (b), the scene number (s), the period or step time (p), and the fade time (f) of the

chase steps. The scene will be inserted in front of (before) the step you select.

4. Push Bank and select the bank containing the scene to be used for the new step by pushing a SCANNER/SCENES button (1-14).
5. Push Scene and select the scene for the new chase step using a SCANNER/SCENES button (1-22).
6. Push Auto/Insert. The display bottom row will show the bank and scene you have selected.
7. Push Program/Record. The scene will be inserted, the display will update, and the controller indicators will flash briefly.

DELETE A STEP IN A CHASE

This will remove a step from a chase. Steps following the deleted step will close gap.

1. Push Chase.
2. Select a chase using a SCANNER/SCENES button (1-14). The display top row will show the chase number, the number of steps in the chase and 000 for the current step.
3. Push Up and or Down to scroll to the step which will be deleted.
4. Push Delete/Music. The display bottom row will show the step you have selected.
5. Push Program/Record. The step will be deleted, The display will update, and the controller indicators will flash briefly.

DELETE ALL STEPS IN A CHASE

This will clear the complete contents of a chase.

1. Push Chase.
2. Hold down the SCANNER/SCENES button for the chase to be cleared (1-14) and push Delete/Music. Release both buttons.
3. Push the SCANNER/SCENES button for the chase again. The display will show the chase you selected.

```
Chase_Delet  
Delet _ Chase **
```

4. Push Program/Record. The chase will be cleared, and the controller indicators will flash briefly.

COPY A SCENE BANK TO A CHASE

This will copy the contents of any scene bank into a chase.

1. Push Chase and select a chase by pushing a SCANNER/SCENES button (1-14).
2. Push Copy and select the bank to be copied by pushing a SCANNER/SCENES button (1-14).

The display top row will show the selected chase, the existing steps in the chase and the current step number. The bottom row will show the scene bank you selected. If the chase already contains steps then the contents of the bank will be copied to the end of the chase.

```
E" cha <**> ***/ **  
Copy _ Bank **
```

3. Push Program/Record. The bank will be copied and the controller indicators will flash briefly.

COPY A CHASE

This will copy the contents of a chase to another one .

1. Push Chase.
2. Hold down the SCANNER/SCENES button for the chase which will be copied (1-14) and push Copy.
3. Push the SCANNER/SCENES button (1-14) for the chase which will receive the copy. The display will show both chase numbers as follows.

```
Chase_Copy  
Cha ** -> Cha **
```

4. Push Program/Record. The chase will be copied and the controller indicators will flash briefly.

MANUAL SCENE OPERATION

You can manually activate a scene (1-22) in any bank (1-14). Make sure that Blackout is OFF

1. Push Bank and select the bank containing the scene you want to activate using a SCANNER/SCENES button (1-14).

2. Push Scene. The SCANNER/SCENES button indicators will show which scenes have been programmed.
3. Push a SCANNER/SCENES button (1-22) to activate a programmed scene. Its indicator will flash continuously when the scene is active. The display bottom row will show the selected bank, the number of programmed scenes in the bank and the currently active scene. The following example display shows that bank 1 has 6 programmed scenes and scene 2 is active.

```
M" Slide * da ***
Ban 01 Sce 06/02
```

MANUAL CHASE OPERATION

You can manually operate any chase (1-14) if it has been programmed. This enables you to activate (scroll through) the steps manually. Make sure that Blackout is OFF.

1. Push Chase and select the desired chase using a SCANNER/SCENES button (1-14).

The display top row will show the chase number, the total number of steps in the chase, and the current step number. The following example display shows that chase 2 has been selected and it has 15 steps. It also shows the current step number which is 000 since you have not yet activated a step.

```
M-Cha<02>015/000
b ** s ** p *** f ***
```

2. Use Up and/or Down to activate the chase steps.

The display bottom row will show details for the current step. They include the bank number (b*), the scene number (s**), and the preset speed (p****) and fade time (f****).

```
M-Cha<02>015/000
b ** s ** p *** f ***
```

AUTO RUN SCENE BANKS

The SM-280 can automatically cycle through the contents of one or more scene banks at a user selected speed and fade time. Multiple banks will run in the order they are selected.

1. Push Auto/Insert.
2. Push Bank and select a bank (1-14) using a SCANNER/SCENES button. You can select more than one. The bank(s) will begin cycling. The speed and fade time are dependent on the setting of the Speed and Fade sliders.

The display will show detailed information for the running banks and scenes.

```
f **** Sc < ** / ** >
p **** Ar " Bank **
```

You can combine the Auto-Run operation of up to 6 scene banks so that they will run at the same time by pushing SETUP GROUP when multiple banks are running. This is useful when one bank uses only some of the fixtures and another bank uses different ones.

AUTO RUN CHASES

The SM-280 can automatically run one or more chases at a user controlled speed and fade time. Multiple chases will run in the order they are selected.

1. Push Auto/Insert.
2. Push Chase and select a chase to run by pushing a SCANNER/SCENES button (1-14). The chase will activate. The display will show the detailed information for the chase including the total number of steps in the chase, the current step number, and the speed and fade time.

```
f **** St" ** / **
p **** Ar" Chas **
```

When the Speed and Fade sliders are positioned at the bottom the chases will run at the preset speed and fade time. You can adjust the speed and fade time using these sliders. The speed range is from 0.1 sec./step to 10 min./step. The fade range is from 0 sec. to 30 sec..

You can also control the speed with the Tap/Display while a chase is running. Push Tap/Display twice. The interval between the taps will set the speed.

You can combine the Auto-Run operation of up to 6 chases so that they will run at the same time by pushing SETUP GROUP when multiple chases are running. This is useful when one bank uses only some of the fixtures and another bank uses different ones.

MUSIC AUTO RUN SCENE BANKS OR CHASES

The SM-280 contains an internal microphone which can be used to synchronize bank or chase Auto Run with music playing near by.

1. Push Delete/Music.
2. Activate Auto Run for a bank or chase.

As an alternative you can start the bank or chase first and then push Delete/Music to switch to music sync.

Pushing Delete/Music while music Auto Run is active will stop Auto Run.

SPECIAL SCENES

The SM-280 has 14 additional scenes which can be programmed and accessed using the SPL Scene button

You can program them like a scene in a bank. The display prompts for the scene numbers when Spl Scene is in use.

MIDI OPERATION

The MIDI Channel assignment for the SM-280 can be assigned in the Setup mode.

1. Push Setup. The display will appear as below.

```
Setup
Select: + / -
```

2. Use the Up and Down buttons to scroll through the setup options until the display shows as follows:

```
Setup: midi_ch
midi_ch **
```

3. Use the speed slider to select a MIDI channel.
4. Push Program/Record to save the new assignment. The controller indicators will flash briefly.
5. Push Setup to exit from the setup mode.

EXTERNAL MEMORY CARD

The SM-280 is supplied with a 4 MB external memory card which can be used to automatically record scene and chase program data. When a card is installed, the Memory Select button can switch the controller between its internal memory or the external card. Controller/Fixture initial setup data is always

from internal memory.

External memory card operation is active when the RED indicator on the Memory Select button is ON.

The card is a special purpose device intended ONLY for use with the SM-280 controller. It cannot be used with other devices.

If you install and activate the card when programming scenes and chases then that information will be saved to the card. If the card is active when you operate the unit then the scene and chase data will come from the card instead of the internal memory.

FOG MACHINE CONTROL

The rear panel of the SM-280 has a IEC connector for remote control of certain fog machines. It looks like a computer power cable connector.

DO NOT PLUG THIS CONNECTOR INTO A POWER SOCKET OR APPLY AC LINE POWER TO IT.

The controller will be damaged if this is done.

If properly connected to a compatible fog machine then the indicator on the controller FOG MACHINE button will light when the fog machine is ready to use. The FOG MACHINE button can be used to activate the machine.

The logo features the text "SHOW☆PRO" on either side of a central banner that reads "WARRANTY". The banner is dark with white text, and the "SHOW☆PRO" text is in a bold, sans-serif font with a star between the words. The entire logo is set against a light background with a dark border.

SHOW☆PRO **WARRANTY** **SHOW☆PRO**

All **SHOW☆PRO** products are warranted for a period of TWO YEARS from the date of purchase against defects in materials and workmanship.

This warranty is subject to the following restrictions and conditions:

- A) If service is required, you may be asked to provide proof of purchase from an authorized Lightronics dealer.
- B) This warranty is valid only for the original purchaser of the unit.
- C) This warranty does not apply to damage resulting from abuse, misuse, accidents, shipping, and repairs or modifications by anyone other than an authorized Lightronics service representative.
- D) This warranty is void if the serial number is removed, altered or defaced.
- E) This warranty does not cover loss or damage, direct or indirect arising from the use or inability to use this product.
- F) Lightronics reserves the right to make any changes, modifications, or updates as deemed appropriate by Lightronics to products returned for service. Such changes may be made without prior notification to the user and without incurring any responsibility or liability for modifications or changes to equipment previously supplied. Lightronics is not responsible for supplying new equipment in accordance with any earlier specifications.
- G) This warranty is the only warranty either expressed, implied, or statutory, upon which the equipment is purchased. No representatives, dealers or any of their agents are authorized to make any warranties, guarantees, or representations other than expressly stated herein.
- H) This warranty does not cover the cost of shipping products to or from Lightronics for service.
- I) Lightronics Inc. reserves the right to make changes as deemed necessary to this warranty without prior notification.