MANUAL SPRING-V2

software version from V1.5 (24/48 channels)

Theater
t e c h n i s c h
lab
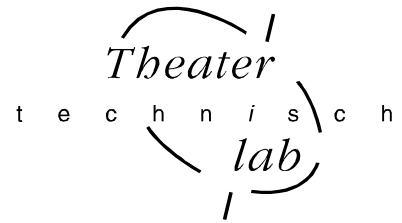
General

The SPRING is a 24 channel memory lighting control desk with a DMX512 output and an analogue output (0-10[V]) or 0-370[uA]). You can extend the SPRING to a 48-channel desk with extra software. The SPRING has two faderbanks with 24 faders, a split up crossfader and a MASTER fader. Each channel has a level led and a push button. These buttons are channel pointers for: level flash, level view/preview and DMX soft patch.

This desk is designed to play back manual made presets as well as presets recorded in memory. You can store 250 presets in memory. You can fade in these presets with the crossfader or with a GO-button action in a programmable fade in, delay in, fade out and delay out time. The SPRING has a LOOP/chase section. You can add 3 pre-programmed loops or loops you have defined yourself to the present light scene. The loops you make yourself consist of scenes. These scenes follow each other by crossfade in the programmed fade times and delay times. You get a stepped chase by giving the rhythm with the TEMPO button.

The SPRING has several possibilities for remote control: external GO-button, preset controller and MIDI.

The SPRING has four users levels: so you can reduce the control possibilities and adjust the user interface to the experience of the user (see under set up).

Definitions

A **SCENE** is the visible result of the setting of 24 control channels (on stage).

A **PRESET** is a level setting of 24 control channels, made with the faders on the bank whose led doesn't burn (manual preset). The result becomes visible after a crossfade.

A **MEMORY** or **SCENE RECORD** is a preset stored in memory.

A **LOOP** is a repeating automatically sequence of fading in memories. The fade in speed is determined by the programmed fade in, delay in and fade out, delay out times of the memories that are used to build the loop.

STEPPED LOOP-mode of a loop is the situation in which memories follow up each other step by step (no crossfade)

The **FADERBUTTONS** are the squared black buttons below the faders.

Legend

[.......] points to a button, <......> points to a led and "..." is a displayed text.

For example: [GO/stop] means: the button 'GO/stop', <live> burns, means: the led 'live' burns.

User situations

- **Manual play**

The SPRING has two faderbanks, called A and B. Each bank has 24 faders and a red indication led in the middle. This led indicates whether the faders of the corresponding bank are in control or not. The faderbank that isn't in control is available for making a preset. You can make a preset visible on stage with the crossfader or with a GO-button action in a programmable fade time.

The output levelleds indicate the output level of each channel. Each channel has a button, if you push this button it is possible to flash the channel output level (put directly on 100%) or you can see the output level in percents at the display of the present scene (view level live scene) or of the preset (view level next scene) of the corresponding channel. It depends on the choice you have made with the [SET button function].

- **Memory play**

The SPRING can store 250 presets in its memory. Each scene record (memory) gets a name, which exists of a letter (A up till E) and a number (1 up till 50). For example: "A34". You can select a preset with the two scroll buttons [<<] and [>>]. You can make a scene record visible on stage with the crossfader or a GO button action, just like you make a manual made preset visible. You can directly change the channel levels of the present scene by using the faders of the bank that is in control (red led <live level control> is on). With the other faderbank you can change the channel level output of the selected "next" presets. See for more information page 3: to set and to view output level of each channel.

You can directly switch to manual play anytime you want.

- **To store a scene as**

In this mode you can store a preset (channel level setting) in memory as "Y:XX". Y=A,B,C,D or E. X=1, 2,...up until 50. It is also possible to change or copy a memory.

- **Define loop**

You define a loop of existing memories (scene records). With [define loop] you record the first and the last memory of the sequence. You can program 3 loops. You can change and delete the loops, too.

- **Fade time**

In this mode you can set the fade in time, delay in time and the fade out, delay out time separately for each preset or memory and you can check previous recorded times. Default fade in and fade out time is 3 seconds. Default delay in and delay out times is 0 seconds.

- **Delete scene**

In the delete mode you can remove a memory or delete all memories.

- **Sequence**

You can adapt the sequence to play back memories. You can set autofollow if you want a certain memory automatically to follow up another memory.

- **Assign**

Only available if the SPRING is equipped with the extra software for 48 channels.

- **Set-up**

The set-up possibilities are: Soft patch (you can define the soft patch between 24 control channels and 512 DMX channels), proportional patch, test the soft patch, reset the soft patch to default, to block soft patch changing, to block channel flashing, to adjust the default fade time, to choose between MIDI or remote preset controller, to choose between 4 user levels and create and restore a backup.

Operation in general

With [select item] you determine the position of the cursor and with that you have determined which item you want to change. With [change item] (the scroll buttons [<<] or [>>]) you can change the value of the selected item.

In case the question mark: "?" appears on the display you answer with [yes] or [no].

To get back in your 'play back mode' you push [EXIT memory control]. You get the following basic display:

```
live:  B33
next:  B18
```

"live: B33" means that the output signal consists of memory B33
"next: B18" means that the next output signal will consist of memory B18
"live: 'manual'" means that the output signal consists of the 24 channel levels set on the faderbank whose <live level control> burns.
"next: 'manual'" means that the next output signal will consist of the 24 channel level set on the faderbank whose <live level control> does not burn.

If you scroll to the beginning or the end of the memory list, you see on the display: "Start of SCENE RECORD list" or "End of SCENE RECORD list".

If you haven't recorded anything yet, and you start a certain action, than you get: "There are no SCENE RECORDS!". You first have to record some presets before you can finish your action.

Finally

By power-on the software version is displayed for 2 seconds. After that the SPRING automatically fades in the latest used memory. If the SPRING acted in 'manual play' when turned off, than the desk automatically goes back to manual play after power on.

All channel levels are processed 40 times a second and send through the DMX exit. The DMX data-rate =40[1/s].

The SPRING can store 250 presets.

The possible fade times are: 0,0 0,1 0,2 0,3 0,4 0,5 0,6 0,8 1,0 1,2 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 6,0 7,0.....20 22 24 ....60 63 68 71 78 82 86 91 96 100 110 120 130 140 150 170 180 210 230 270 330 410 550 820 seconds.

BASIC OPERATIONS

The SPRING as a manual desk

- **To create and to change a scene**

```
live:  'MANUAL'
next:  'MANUAL'
```

Select with [MANUAL PLAY] for next "manual" on the display. Make a crossfade. You get this display. Check if both parts of the crossfader are together in the same end position. You can directly create a scene visible on stage on the faderbank whose led <live level control> burns. It depends on the position of the crossfader which faderbank is in control.

- **To create and to change a preset**

```
live:  D23
next:  'MANUAL'
```

Select with [MANUAL PLAY] for next "manual" on the display. You get this display. Check if both parts of the crossfader are together in the same end position. You can make a preset on the faderbank whose led doesn't burn. You put the faders in the right position. To get the exact channel level output in percents on display: see below

- **Manual crossfade**

```
FadeOUT: 016%  MAN
Fade IN: 016%  A10
```

To make a preset visible on stage: move both faders of the crossfader in the direction of the burning crossfader led. The crossfader part whose led burns, makes all channel level increases visible. The other crossfader part makes all channel level decreases visible. As soon as both crossfader parts are on the side of the burning led, this led goes off and the other one goes on; the crossfade is finished, the faderbanks exchange their function. During the fade you see on the display in percents the progress of the fade. You see which recorded scene it concerns. And "MAN" means: manual made scene.

- **Automatic crossfade**

Push the green [GO/stop]: now there is an automatic crossfade. The present scene disappears and the preset appears on stage. How to change fade times: see below. The default fade in and fade out times are 3[s]. The default delay in and delay out times are 0[s]. You can change the default values for the fade times in the set up.

Notice the faderbanks don't exchange their function when the automatic crossfade is finished.

Now, of course, you can also change a channel level in the scene. First you have to check if the fader is active: the channel level must correspond with the fader's position: move the fader up/down till you have picked up the level. To do it smoothly you can check the channel level in percents on the display (see below).

- **To view and to set channel level in percents**

Output level:

```
    Live scene
Ch04, Level =075%
```

At the right side of the fader buttons you find [SET button function]. Select option: 'view level live scene' (red led <live> is on). Push the faderbutton of the channel you want to view or change. At the display you see the corresponding channel output level in percents. If you move the fader on the faderbank whose red led burns you see the value at the display changing.

Preset level:

```
    Next scene
Ch22, Level =022%
```

At the right side of the fader buttons you find [SET button function]. Select option: 'view level next scene' (red led <live> is off). Push the faderbutton of the channel you want to view or change. At the display you see the corresponding channel output level in percents. If you move the fader on the faderbank whose led is off, you see the value at the display changing.

- **To flash a channel output level**

At the right side of the fader buttons you find [SET button function]. Select option: 'flash output'. You have to push the button for 2 seconds (red led <live> blinks). If this fails check if you have blocked channel flash in the set up (see page 8 'block channel flash'). Push the faderbutton of the channel you want to flash. You put the channel output level at once at 100%.

The SPRING as memory control desk (level-2)

- **To create a memory**

```
Store as   A13?
Source:'Output'.
```

You make a preset on the faderbank, whose led is on. Push [store scene as]. With the scroll buttons [<<] [>>] you can chose a memory name. If the name you have chosen already exists, than you see: "Modify A13?" Otherwise you see: "Store as". Push [yes] to store the memory. The display says: "Busy, Command Processing…." And than the SPRING returns to the basic display. You can leave this mode without saving anything by pushing [EXIT memory control] or [no].

Push [select item] to select the second line on the display. Push [<<] or [>>] to choose the "source" of your record. You have three options:
1. "output": you record the current output, this is often the present light-scene you see on stage. This makes it possible to record a light-scene you have frozen during a fade in.
2. "LIVEscn.": you record the scene that you have made on the active faderbank, this is the faderbank whose <live level control> is on. See: 'to change memory: live'
3. "NEXTscn.": you record the scene that you have made on the non-active faderbank, this is the faderbank whose <live level control> is off. See: 'to change memory: blind'

- **To change a memory: live**

```
Modify   D18?
Source: Livescn.
```

Get the basic display. Select with the scrollbuttons [<<] and [>>] for "next", the memory you want to change. For example: D18. Make this memory visible with the crossfader. Change the scene on the faderbank who is in control (<live level control> is on). Push [store scene as]. If you only want to record what you have made on the active faderbank you have to select with [select item] the second line on the display. Change with [<<] or [>>] the "Source" in "Livescn." Push [yes] if you want to record the memory.

- **To change a memory invisible: blind**

```
Modify   A13?
Source: NEXTscn.
```

Get the basic display. Select with the scrollbuttons [<<] and [>>] for "next", the memory you want to change. For example: A13. Change the memory on the faderbank who is not in control (<live level control> is off). See 'to set and to view output level of each channel' for how you can get the output percentages on the display and how to change them. Push [store scene as] and select with [<<] and [>>] the memory you want to modify: in this example "A13". Select with [select item] the second line on the display. Change with [<<] or [>>] the "Source" in "NEXTscn". Push [yes] if you want to record the memory.

- **To copy a memory**

Get the basic display. Select with the scrollbuttons [<<] and [>>] for "next", the memory you want to copy. Make this memory visible with the crossfader. Push [store scene as]. Use the scrollbuttons [<<] and [>>] to select the memory name for the copy. Make sure the source is set on "Livescn.". Push [yes]. The display says: "Busy, Command Processing…." And than the SPRING returns to the basic display.
If you want to make a copy of the next scene, handle as above, but don't make the crossfade and select in the second line of the display for the "Source: NEXTscn".

- **To delete a memory**

```
DEL record A03?
Delete all?
```

Push [delete scene]. The display shows the number of the actual memory. Select with [<<] or [>>] the memory you like to delete. Confirm your choice by pushing [yes].
You can delete all the memories at once. Go with [select item] to the second line of the display. Push [yes]. The display shows the following warning: "Delete ALL scene memories, SURE?" If you push again on [yes] you have deleted all the memories.
Push on [no] or on [EXIT memory control] to quite the delete mode.

- **To change the play back sequence, to insert a memory**

The sequence of the memories is at first equal to the sequence in which you record the memories. If you want to change this sequence, you must handle as follow:

```
E30 follows A04?
autofollow: n
```

Create and record the scene you want to insert, for example E30. Push on [sequence]. Select with [<<] or [>>] the number you like to insert, in this case "E30". The display shows the actual sequence, for example "E30 follows "A13". Go with [select item] to "A13". Select with [<<] or [>>] the memory you want "E30" to follow on, in this case "A04" (You can only select memories that exist).

In the display appears the question mark "?". You still need to confirm the change. Push on [yes] and E30 will follow A04. You leave the sequence mode automatically. Push [no] if you want to start over again without changing and push [EXIT memory control] to return to the basic display.

If you want to put a memory at the beginning of the sequence scroll with [<<] until the displays says: "E30 follows START list?". Push on [yes] and E30 will be the first memory in the list.

- **To change / to view the fade in time.**

```
A33 :  t_IN=5.0s?
delay_IN =2.0s
```

Push [fade-IN time]. Select with [<<] or [>>] the memory whose fade-in time you want to change. The display shows the current fade in time. Select with [select item] the "t_IN". Change the displayed time with [<<] or [>>]. Push [yes]. The question mark disappears, this means the new time is recorded. If it concerns a manual preset ("MAN"), this is the time for the first automatic crossfade you make [GO/stop]. In the same way you can change the "delay-IN" value. Delay in is the time between the GO-command and the start of the fade-in. In this example: 2.0 sec after you have given the GO-command, A33 starts to fade in, in 5.0 sec.

- **To change / to view the fade out time**

```
B10 : t_OUT= 10s?
delay_OUT = 15s
```

Push [fade-OUT time]. Select with [<<] or [>>]the memory whose fade-out time you want to change. The display shows the current fade out time. Select with [select item] the "t_OUT". Change the displayed time with [<<] or [>>]. Push [yes]. The question mark disappears, this means the new time is recorded. If it concerns a manual preset ("MAN"), this is the time for the first automatic crossfade you make. In the same way you can change the "delay-OUT" value. Delay out is the time between the GO-command and the start of the fade-OUT of the memory that <u>precedes</u> the selected memory. In this example: 15 sec after you have given the GO-command, the memory that <u>precedes</u> B10 starts to fade out, in 10 sec.

Attention: the fade out time is the same as the fade in unless you change the fade out time explicitly.

- **To make a memory visible on stage**

Select with [EXIT memory control] the basic display. Push [<<] or [>>] to select for "next" the memory you want to see. Manual fade-in: move the crossfader in the direction of the crossfader led that burns. The crossfader part whose led burns, makes the increase of all channel level visible. The other crossfader part makes the decrease of all channel level visible.

```
Del'OUT: 013s E20
Del' IN: 013s E21
```

Automatically: push on [GO/stop]; the display shows in percents the progression of the fade. The memory becomes visible (if the MASTER is set open). In case of a programmed delay the display shows a count down in seconds of that delay, see the picture.

- **Go-fade: stop/cancel/overrule**

To <u>stop</u> a going auto fade push once again on [GO/stop]; with this button you can toggle between GO and stop. The displays shows the warning: "..stop!". To <u>cancel</u> a fade push on [<<] or [>>] or on [MANAUL PLAY]. '<u>Overrule</u>' takes place as you move the crossfader to the crossfader led that burns; with overrule you can only speed up the crossfade time. If you first stop the fade and than you make an overrule the auto fade is changed in a manual crossfade, so now you can also slow down or undo the fade-in.

- **To set / to view autofollow**

```
E30 follows A04
autofollow: y
```

Push [sequence]. Select with [<<] or [>>] the memory you want to follow automatically on the preceding memory. With [yes] you can turn on the autofollow: "autofollow:y" and with [no] you can turn off the autofollow: "autofollow:y". If autofollow is set for a certain memory, the fade in of this memory starts automatically after the fade of previous memory has finished. In this example "E30" follows "A04" automatically at the moment that the fade of "A04" is finished (you don't have to push [GO/stop]) .

- **To create and to view an user defined loop**

```
Loop 1: start=---
end=---
```

Create the memories you need for your loop. A loop consists of succeeding memories. Push on [define loop]. The display shows "Loop 1". Select with [<<] or [>>] the number of the loop you want to define. Options are 1, 2 and 3. If you haven't defined a loop yet, you get a display, like the one beside. Now the pre-programmed loop is available. (see: to start and to stop loops/chases)

```
Loop1: start=A10?
end=--- , Erase?
```

Select with [select item] "start=---" and with [<<] or [>>] the memory you want for your first step. Push [yes] to confirm, the question mark will disappear.

```
Loop1: start=A10
end=A50?, Erase?
```

In the same way you select the last step after "end=---". In this example loop 1 starts with A10 en ends with A50 to start with A10 again. The crossings within the loop take place in the programmed fade and delay times.
With [EXIT memory control] the Spring returns to the basic display.

- **To delete loop**

Push on [define loop]. Select with [<<] or [>>] the number of the loop you want to delete. Select with [select item] "Erase?" and push [yes] to confirm. The loop is erased immediately and the display is like the first one pictured with the item 'create and view an user defined loop' (see above).

Push [EXIT memory control] to quite this mode.

- **To start and to stop loops/chases**

Push [GO/stop] 1, in the LOOP CONTROL section, to start the pre-programmed chase (loop) 1. If you have created your own loop 1: your loop starts. If you push [GO/stop] again the chase/loop disappears from the scene. You can add three loops to the present scene at the same time. You can start 'the stepped loop mode' for a loop by pressing [TEMPO] twice in the desired rhythm while pushing the corresponding GO/stop button. In this way you determine the step speed of a pre-programmed loop.

The Spring in 48 channel mode: level 3

General instructions and remarks

When you set up the Spring for level 3 (use the menu for set up levels), you are able to use 48 channels and 24 sub-masters. The software is optional and is absent in the standard software of the Spring-V2.

Attention: As soon as you set up the Spring for level 3 the analogue out is no longer valued. Also the patch table is reset to default: a table is created for 48 channels, the old table for 24 channels will be lost. All other set ups and memories are kept. The user interface is as follows:

1. The lower fader bank are channel faders. With [channel 24-48] you switch between channel 1 up and until 24 (blue led off) and channel 25 up and until 48 (blue led on). With [SET button/fader function] you switch between 'live control' and 'preset/next control'. Corresponding the level leds switch between indicating the output levels or indicating a pre-view of the next scene.
2. The upper fader bank are sub-masters. With [assign] you can attach a sub-master to a memory.

Read in the other parts of this manual 48 channels instead of 24 channels.

- **To create or change a scene of 48 channels: live**

Select with [SET button/fader function] 'live level control' (red led is on). With the lower fader bank and with [channel 25-48] you can create or change a scene of 48 channel visible on stage. Blue led off: the faders adjust 1 up and until 24. Blue led on: the faders adjust 25 up and until 48. The level leds indicate the output levels of the channels. You can see the channel output value in percents on the display, when you push the corresponding fader button. To change a channel output level: keep the fader button pressed while moving the corresponding fader slowly until you see the value at the display changing. Move the fader to the desired position.

- **To create or to change a preset of 48 channels: blind**

Select with [MANUAL PLAY] for "next" "manual" on the display. Select with [SET button/fader function] 'next level control, the red led is off. With the lower fader bank and with [channel 25-48] you can create or change a preset of 48 channels. Blue led off: the faders adjust 1 up and until 24. Blue led on: the faders adjust 25 up and until 48. The level leds indicate channel values of the preset. You can see the channel value of the preset in percents on the display, when you push the corresponding fader button. Push [MANUAL PLAY] to force at once all the channel levels to the level according the positions of their faders.

- **To assign a sub-master to a memory**

```
Sub-Master01 <=>
SCENErecord ---
```

Create the memories you want to assign. Push on [assign]. You get the next display: "---" This means no assignment made yet. Select with [<<] or [>>] the number of the sub-master, for example "05". Move the cursor with [select item] to the item "SCENErecord". With [<<] or [>>] you select one of memories you created before. For example "D12".

The display is as follow:

```
Sub-Master05 <=>
SCENErecord D12?
```

Push on [yes] to store your choice in memory. You can erase an assignment by pushing [no]. To do this it is not necessary to move the cursor to "SCENErecord".

- **To add a memory to the scene on stage with a sub-master**

Assign as described above the memories to the sub-masters. By moving the sub-masters (the faders of the upper fader bank) you can add 24 memories simultaneously to the actual scene. When you select with [SET button/fader function] 'live level control' the level leds indicate the total scene on stage.

SPECIAL ACTIONS

To change the Spring's set up

The Spring has eight set up menus. These menus give you the opportunity to control the general functioning of the Spring. By pressing [set up] once or a few times you can select the following menus. Push [EXIT memory control] to quite the set up menu. If you leave without storing a change, you get a warning; the Spring will ask you to push [yes] or [no], as yet.

- **To view soft patch**

Soft patch records the relation between the 24 channels of the Spring and the 512 DMX output channels.
There are three set up menus for soft patch:
1. In this menu you can patch and make proportional patch: start point is the steering channel
2. In this menu you can test a DMX-channel and patch it directly to a steering channel: start point is the DMX channel
3. In this menu you can lock soft patch changes and reset to default patches

```
Ch01 patched to
DMXch001: y, 100%
```

Push [set up] until you see soft patch menu 1. In this menu the channels are your start point. You can see for each channel (Chxx) over which DMX channels the output is sent. To select a channel quickly: push the corresponding fader button. Or you push [select item] to put the cursor on "Chxx" and you select the right channel by pushing [<<] or [>>]. If the output goes over more than one DMX channel, you see the DMX channel numbers in a chase. If there doesn't exist a patch with a DMX channel, than you get: "DMX---".

- **To change soft patch (if not locked under set-up)**

```
Ch01 patched to
DMXch051: n
```

Select a channel you want to change the patch of. You can do this in two ways: push the corresponding fader button or, push [select item] to put the cursor on "Chxx" and select with [<<] or [>>] a channel. Push after this [select item] to select "DMXchxxx" and change the number with [<<] or [>>]. If a patch doesn't exist, than you get: "n". If a patch exists, you get: "y". The scrolling stops automatically when a patch is found. With [yes] you make a patch and with [no] you delete a patch.

For example: If you want to delete an existing patch between channel 1 and DMXchannel 51, push [no]: the display shows as above.

```
...deletes patch
to ch05 !   OKAY?
```

A DMX channel can only contain the information of one channel. So if you have made a patch with channel 5 to DMXch030 and later on you make a patch with channel 9 to DMX030, too, you delete the former patch of channel 5 with this DMX channel. In that case you get a warning. With [yes] you realize your latest patch, with [no] you don't.

```
Ch22 patched to
DMX---
```

If you delete the last patch for a channel the display shows: "---". This means: not patched. In this example channel 22 is not related to any DMX channel. So you won't see the output of channel 22 in your light-scene on stage.
Push on [EXIT memory control] to leave the patch-mode.

ATTENTION: if you don't succeed in changing the patches, check whether this isn't locked (see: to lock the possibility to patch).

- **Proportional patch**

```
Ch04 patched to
DMXch004: y, 080%?
```

With the Spring-V2 it is possible to make a proportional patch. This means you can adjust the programmed output value of a channel in percentage, that must be send over the particular DMX-channel. You set it as follows: Push [set up] until you select patch menu 1. Select with [<<] or [>>] the channel you want to patch proportionally. You will see the patched DMX channels in a chase. At the right side of the second line you see in percents the proportion of the patch. Push [select item] to put the cursor on this item. Change with [<<] or [>>] the proportion. If this channel is set on (on stage), you can see this change directly. Push [yes] to record this new set up (the question mark disappears). In this example it means: you can find the output of channel 4 for 80% on DMX channel 4. Push on [EXIT memory control] to leave the patch-mode.
Notice: You can only change the proportion if patch change is not locked (see: to lock the possibility to patch).

- **To test a DMX channel in combination with direct patch function**

```
Test DMXch001?
Patch' to Ch01:y
```

In soft patch menu 2 the DMX channels are your start point. This is a useful tool to change soft patch. With this menu you can see what is connected on each DMX channel (for example: which spotlights). Put the cursor on "DMXchxxx?", push [yes]. Now you see a 100% output of the selected DMX channel. When you keep [yes] pushed while scrolling you can quickly search for the right DMX-channel. To make a soft patch between that DMX channel and a one of the channel of the Spring, just push the fader button belonging to that channel. With [yes] you confirm the patch. Pushing [no] deletes the existing patch. With [EXIT memory control] you leave this patch-mode or with [set up] you choose a different item

- **Possibility to lock soft patch changes**

```
Patch Lock ON!:n
RESET SoftPatch?
```

In soft patch menu 3 you can lock your soft patch set up. Push [yes] if you want to prevent careless changes in your patch set up.: "Patch Lock ON!: y" Now you can only look at your patch set ups, but you can't change anything. Push [no] to erase the blockade: "Patch Lock ON!: n".

- **To reset soft patch**

```
Set default Soft
Patch! OKAY?
```

With soft patch menu 3 you can reset your patch set up to default values. This means channel 1 is patched with DMX channel 1, channel 2 is patched with DMX channel 2, etcetera, up until channel 24. The DMX channels from number 25 are not related at all.
Put the cursor on the second line. Push [yes]. You get a warning text. Push [yes] if you want to continue, push [no] if you decide not to change anything. You can only reset the patches set up, if patch isn't locked.

- **To block channel flash**

```
BLOCK flashing:n
Default t=3.0s
```

In menu 4 you can block the flash function of the fader button. Put the cursor on the first line, push [yes]. Now the flash function is blocked. Push [no] to erase this blockade.

- **To set up default fade times**

In menu 4 you can also set your own default fade times (see the above display). If you change the default time into, for example; "t=4.0s", all the new recorded memories will automatically have a fade time of 4 seconds. Put the cursor with [select item] on the second line. Change with [<<] or [>>] the value of the default fade time. Push [yes] to confirm. Push [no] if you decide not to change anything.

- **To set a user level**

```
User Level =2
24Ch Memory Desk
```

You can adapt the operation of the SPRING to the situation in which you are going to use it: you can turn off some functions. There are four so called 'users levels'. With [<<] or [>>] you can select level 0, 1, 2 or 3 (the latest only with software for 48 channels). The second line describes the status. To confirm push [yes]. Push [EXIT memory control] to return to the basic display.

The different levels are:

Level 0: only MANUAL play. During functioning the display says: "USER LEVEL0 MANUAL play only". All memory functions and actions are inaccessible. Only [set up] works and give you the 'user level' menu.

Level1: MANUAL play and you can start the pre-programmed loops or loops that are self made under level 2. The display says: "USER LEVEL1 MANUAL play+LOOPS". The Spring functions as a manual desk, and you can add 3 loops to the current light-scene. Only [set up] and the buttons of the loop section function.

Level2: All control possibilities are available.

If you posses extra software for 48 channels, than you can set a fourth user level: level 3

Level3: Now you activate the software that makes the SPRING suitable to handle 48 channels and 24 submasters. Attention: At the moment you set up the Spring for level 3 a new default patch table is created; your own specific made table will be lost. All created memories, loop definitions etc are kept.

- **Remote preset controller**

```
Remotecontrol =
PRESETselector
```

With set up menu 6 you can choose three option of remote control. Options are: "OFF", "PRESET selector" and "MIDI". With [<<] or [>>] you choose one of these options and with [yes] you confirm your choice.

Options "PRESETselector" gives you the opportunity to call up memories remotely with a remote preset controller. Memory A1 can be automatically called up with button 1 of the preset controller, memory A2 with button 2 etc. You can connect two preset controllers with each other to get more 14 buttons, three to get 21 buttons and with four 28 buttons. With button 28 you call up memory A28.

Attention: To make sure the remote preset controller functions well, you must set the "MIDI, channel" on "01" and save this. (see beneath).

- **Midi control**

```
Remotecontrol =
MIDI, channel 01
```

Do you want to control the Spring with MIDI, choose the "Remotecontrol= MIDI" option in the set up 6 menu. After this put the cursor with [select item] on "channel01" and select with [<<] or [>>] the channel number you want. Push [yes] to confirm.

The SPRING can only act as a SLAVE device; it can only accept commands. The SPRING reacts on channel messages type 'program change'. With these messages you can remotely fade-in the existing memories of the SPRING. The relation between the data byte value and the memories is simple: byte value 0 starts memory A01, value 1 starts memory A02, ...value 49 starts A50, value 50 starts B1 ....value 99 starts B50, value 100 starts C1 up and until value 127 starts memory C28. See for more information about MIDI our website [*]).

Attention: Put the "MIDI, channel" on "01" and safe this, before you select as remote control option "PRESETselector", otherwise the remote preset controller won't function well.

- **Remote-go**

The remote input accepts also an external GO-button. You have to connect it with a momentary switch between pin2 & pin3. With a jumper setting on the PCB you can set the GO-button to react as a GO/stop or as a GO button. More info about connecting an external GO-button is available on our website under 'application guides'

- **To create a backup**

CREATE memory
backup1?

In the Spring there is room for two backups of the total memory-list plus all the other settings. Push [set up] until menu 7 appears, see the example. With [<<] or [>>] you can choose between backup1 of backup2. Push on [yes] to confirm. When the backup all ready exists the display says: "this deletes old backup! OKAY?" Push on [yes] to confirm, otherwise on [no].

- **To restore a backup**

RESTORE memory
backup2?

You can overwrite the total scene-list and all other settings of the Spring with a backup from memory. Push [set up] for set up-menu-8, see the example. With [<<] of [>>] you can choose if you want to restore backup1 of backup2. Push on [yes]. In this example the actual scene-list and all the others settings are being written over with the scene-list and settings of backup2.

If backup2 doesn't exist the display says: "Selected backup NOT exist! EXIT?". Push on [yes] if you want to leave the set up and on [no] if you want to make a different choice.

- **Total reset**

A total reset means: erase all scene memories, channel count=24, default fade time =3[s], remote=preset controller, soft

RESET ALL to
defaults?

patch is default for 24 channels and the proportional patch is set on 100% for all DMX channels. The procedure for a total reset is the following. Disconnect the Spring from mains. Press [Set up] and keep pressing while connecting the Spring with mains. The display shows:

Push [No] to abort any action or push [Yes] for a total reset.

Memory will be
overwrite! SURE?

If you push [Yes] the display shows a warning, see below. Again push [No] to abort any action or push [Yes] for a total reset. If you push [Yes] the display signs 'command in progress'. This can takes 30 seconds. After that the Spring is initiated again.

Layout of the front panel

Beneath you find the front panel of the SPRING. Fader buttons are not visible.

Spring-V2 24/48 digital channel control desk

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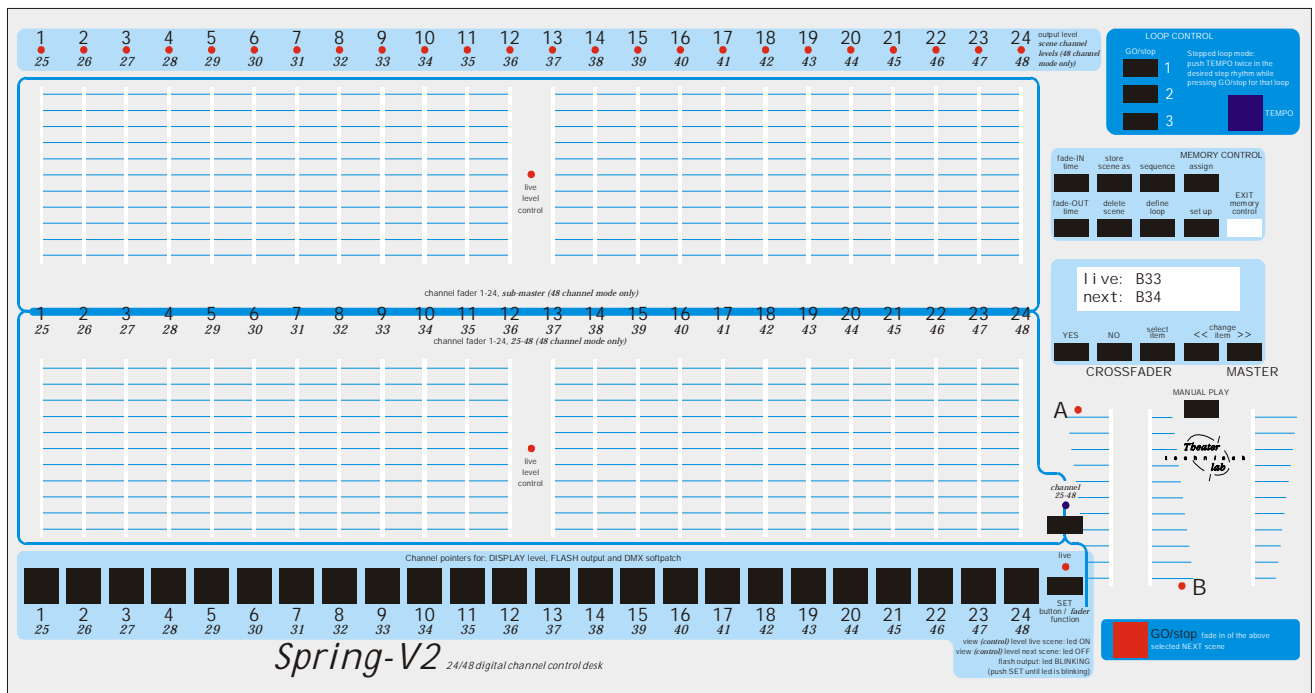
*
For more information about the remote preset controller, MIDI, the SPRING(software updates, application guides etc) you can visit our website: www.theater-technisch-lab.nl