

Manual of the Toddler

For software version V3.x

Introduction

The operation of the Toddler is based upon the methodology of lighting used in the theatres. This means that the lighting course is divided into separate lighting situations (= scenes). A scene is the result of the intensity adjustments of several sources of light. For this purpose the same amount of steering signals/channels are needed, which can be generated by a steering table as the Toddler. As a consequence the operation of the Toddler boils down to the adjustment of the channel intensities and its recording in the memory. The last one with the purpose of being able to recall or to play back these settings afterwards again.

Important things to know

Symbols used in the manual

Indications in this manual such as <.....> refer to operation organs as buttons and faders you can find on the Toddler. Cursive words refer to the text in the display of the Toddler. Words in capital letters refer usually to a mode of the Toddler.

Next and live

In the CHANNEL CONTROL and MEMORY PLAY mode the words *next* and *live* will often occur on the display of the Toddler. Those words refer to two work memories that play a roll with the creation and playing off of scenes. The content of *live* appears at the exit of the Toddler (=DMXout). The scene to be faded (played) hereafter is loaded in *next*. The work-memories *next* and *live* can be loaded with the existing scene-records or with *ZEROS* or *DMXin*. *ZEROS* is a programmed zero-scene and can serve as the starting point for the creation of a scene (see page 4). *DMXin* means the loading of information offered to the DMX input.

Master

The most right fader on the Toddler has a plural function:

1. Master, general level control when playing off out of the memory (MEMORY PLAY mode).
2. Level fader, for the selected channel in the CHANNEL CONTROL mode

The position of the fader is constantly recorded in the memory, so that it will be remembered automatically in case of a change of function. If the fader regains its former function, it will only be active if it retakes its former position again (led 'level picked up' than lights up).

Rapid scrolling

The speed of scrolling is raised by factor 10 when you first press the button of the desired scroll direction and then while keeping this button pressed you also press the other scroll-button.

Scene-name

With the Toddler a scene has a name. The scene-name is built up by a capital plus two figure symbols for example *E12*. The figure symbols do not necessarily refer to a play order. This method of naming eliminates the necessity of sub-numbers in case you want a new scene inserted in the list.

RESET ALL!, with
XXX_channels?

Reset all

It is possible to put the set-up into the default position and the remove the scene-list with the following actions: Push the <SET UP> button while putting the Toddler in operation. On the display the adjacent text will then appear. Now also a different number of channels can be chosen: 120, 240 or 512.

Memory will be
erased! Sure?

Pushing <RECORD/enter> will give the second display whereby <CANCEL> offers as yet the possibility to cancel the action. If again <RECORD/enter> is pressed the Toddler will start with the chosen number of channels and the default set up.

Memory capacity

The total number of scenes you can record depends on the number of channels you have chosen for (see text above). Default factory setting is 120 channels which gives 780 scene-memories. The possible ratio channel number/scene-memories are: 120/780, 240/420 or 512/210. If you have selected the record-display with <RECORD> the still available capacity of the memory can be considered. For this purpose you have to scroll to the beginning or end of the scene name-list and keep the scroll-button pressed. Line one of the display gives the text: *memory left xxx*.

Default scene attributes

When recording a scene, apart from the channel intensities, also the scene attributes are recorded with the default values. These default values are: fade-in=3[s], delay-in=0[s], fade-out=3[s], delay-out=0[s], autofollow=no, linked scene=none, and no return.

Preserving of settings

In general there is no need to confirm a setting with <RECORD/enter> in order to preserve it in the memory. Only options indicated with a ? should be confirmed with <RECORD/enter> or can be cancelled with <CANCEL>.

Crossfade and crossfader

A crossfade (in short a fade) is a gradual transition between 2 scenes. In case of a fade there will be channels of which the level will increase, decrease or remain unchanged. The result of all increases is called the fade in, that of the decreases the fade out. For a automatic crossfade (= autofade) you can set up a different time for the fade in and fade out. A crossfade can also be made manually with the <CROSSFADER>.

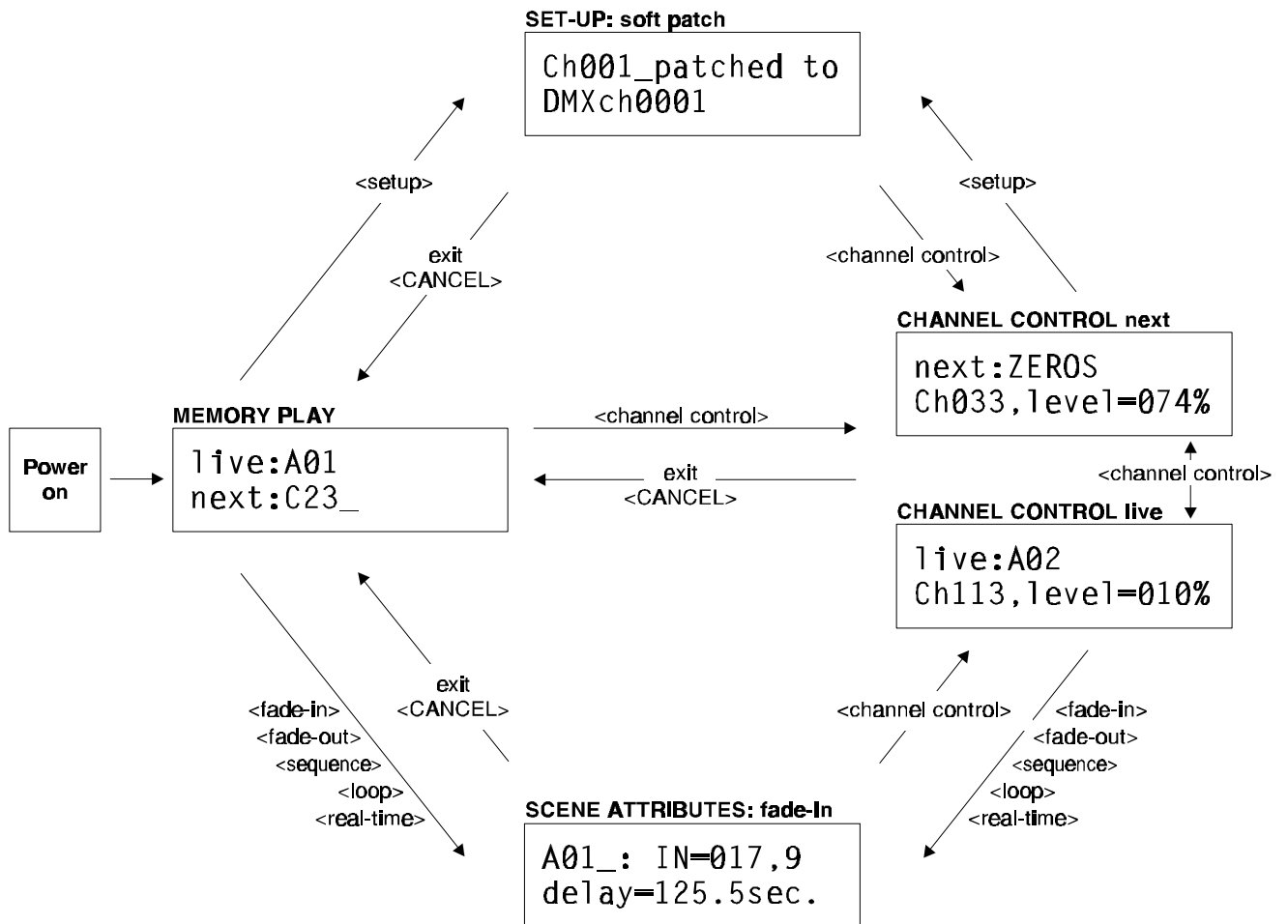
The crossfader consists of two parts (faders) and is only working in the MEMORY PLAY mode. Hereby one of the fader-LED's must be on. If that is not the case both the faders should be put in the same extreme position. The fader of which the led is on controls the fade-in. The other fader controls the fade-out. For example: In the case of a fade to a black-out (no lights on) the fader with the led on does not work. The fade is controlled completely by the fader of which the led is not on.

When a auto-crossfade (a automatic crossfade generated with a <GO>) is taking place, the crossfade can be taken over partially or completely with the crossfader. With a partial take over both faders are, when completing the auto-crossfade with <GO>, in general not in the same extreme position. In order to make the crossfader active again this should be done as yet.

The global users interface

The users-scheme below shows the changes between the basic modes with the corresponding displays. The text between the symbols <.....> refers to the buttons you have to use to change between those modes.

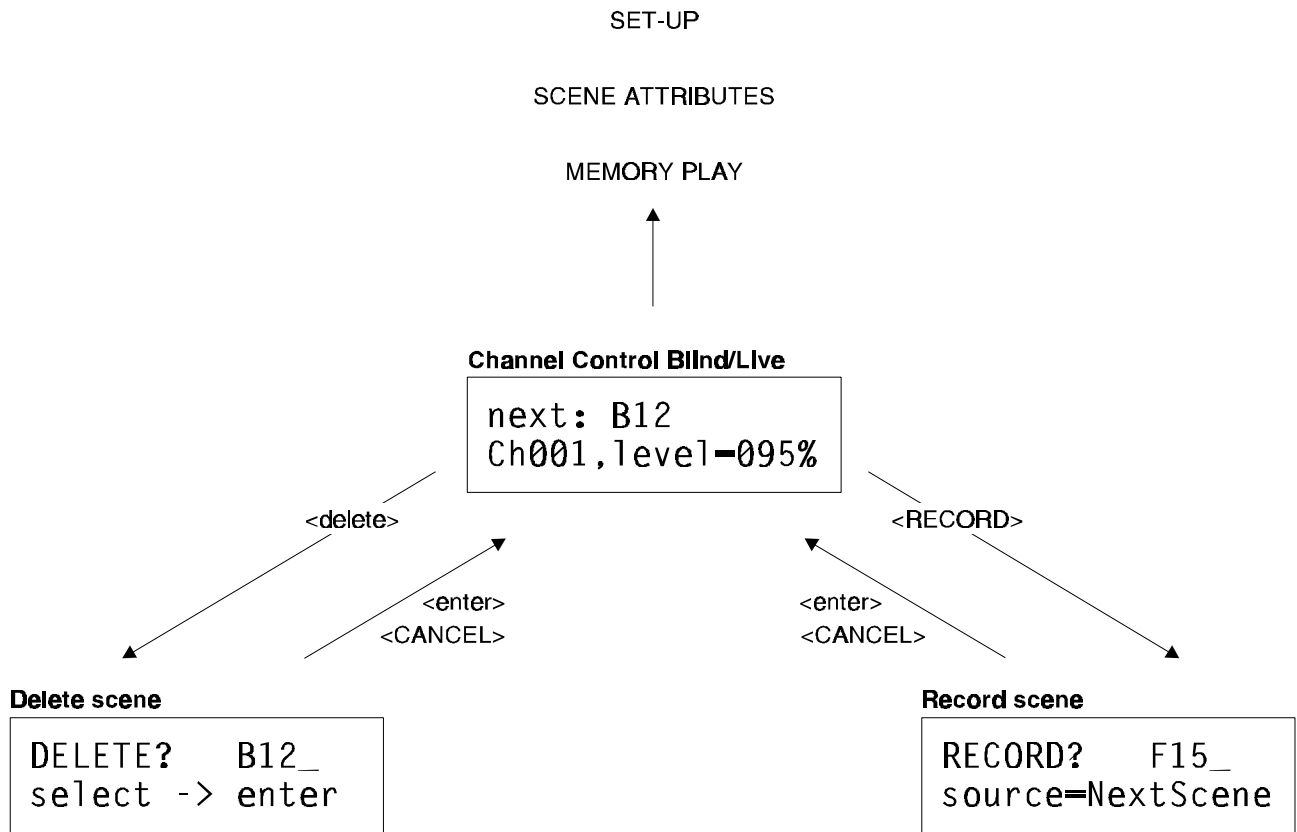
The basic modes are: CHANNEL CONTROL, MEMORY PLAY, SCENE ATTRIBUTES and SET-UP, and they will be described separately in the next chapters.



Remarks:

- The first mode after the power on is the MEMORY PLAY.
- The button <CANCEL/exit> brings the Toddler always back to mode MEMORY PLAY
- When there is still no record made, the only selection you can make for live/next is ZEROS of DMXin
- The display under SET-UP and SCENE ATTRIBUTES is one example of the possible displays you can get

Channel Control



In the CHANNEL CONTROL mode you can adjust the channel-intensity of *next* and *live*. You use this mode to create and record scenes or to modify existing scene-records. When you make or modify the scene in *next* (led next burns) you can't see it on the stage: this is called blind control. When led live burns every thing you do is direct visible, (if the MASTER is open): the scene is made or modified *live*.

The next instruction counts for both live and blind control: With <change item> you can change *live*: *Xxx*. As long as you haven't made any records, only *ZEROS* or *DMXin* can be selected. *Chxxx* is changeable with <select channel>. The MASTER fader <MASTER/level control> controls the *level=xxx%*. When led 'level pick up' is on the fader is active: in general the position of the fader differs from the level that is displayed for the selected channel. As long as this is the case the fader doesn't work: the fader has to pick up the already existing level, before it can determine the level of *live*.

With <force level> the level of *live/next* can be directly adjusted to the position of the fader. This makes it possible to give quickly the same level to a number of successive channels: just keep <force level> pushed while scrolling with <select channel>.

Record a Scene

For the creating of a scene you can use *ZEROS* or a existing scene as starting point. In the latest case the text *modi* (= modify) will be displayed as soon as a channel level is changed. With <RECORD/enter> you can record the result in the memory. In the blind control the result is recorded in *next* and in the live control in *live*. In the case an existing record is loaded in *live/next* and changed, the text *MODIFY?* will be displayed. Press again <RECORD/enter> and the change will be recorded. With <change item> the desired scene name can be selected. If the selected name is already used the word *MODIFY?* is displayed. Otherwise *RECORD?*. Is *ZEROS* the starting point for the creation of a scene, then the display will always give *RECORD?*. The suggested name follows on the name of the latest record and can be chosen differently. Confirm your choice with <RECORD/enter>. With <CANCEL> you can decide as yet not to record the modification or the scene.

A record of a new scene is placed on the end of the scene-list. See SEQUENCE on page 6 for changing this sequence.

Delete scene

In the CHANNEL CONTROL mode it also possible to delete a record out of the list. Push <delete>, the suggested scene can be changed with <change item> and be replaced with every scene in the list. Push on <RECORD/enter> to confirm or on <cancel>.

Memory Play

MEMORY PLAY is meant for the playing off of scene-records. With <change item> *next: Xxx* can be selected. As long as no scene-record is made, only the zero-scene *ZEROS* or *DMXin* can be selected.

MASTER control

In this situation the most right fader functions as MASTER, which means level control for all channels. Pay attention to the fact that the MASTER is active (led 'level picked up' is on) and open. See also page 1.

Record of DMX in or of the momentary result of a crossfade.

When during a crossfade the button <stop> is pressed the momentary result of that crossfade can be recorded: *source=crossfade*. When no crossfade is taking place, you can make a record of the information that the Toddler gets on its DMX input: *source=DMXin*. In both cases: Press <RECORD/enter> and select with <change item> the desired scene name. If the selected name has already been used the word *MODIFY?* is displayed. Otherwise *RECORD?*. Confirm your choice with <RECORD/enter>. With <CANCEL> you can decide as yet not to record the modification or the scene. A record of a new scene is placed at the end of the scene-list. See SEQUENCE on page 6 for changing the sequence.

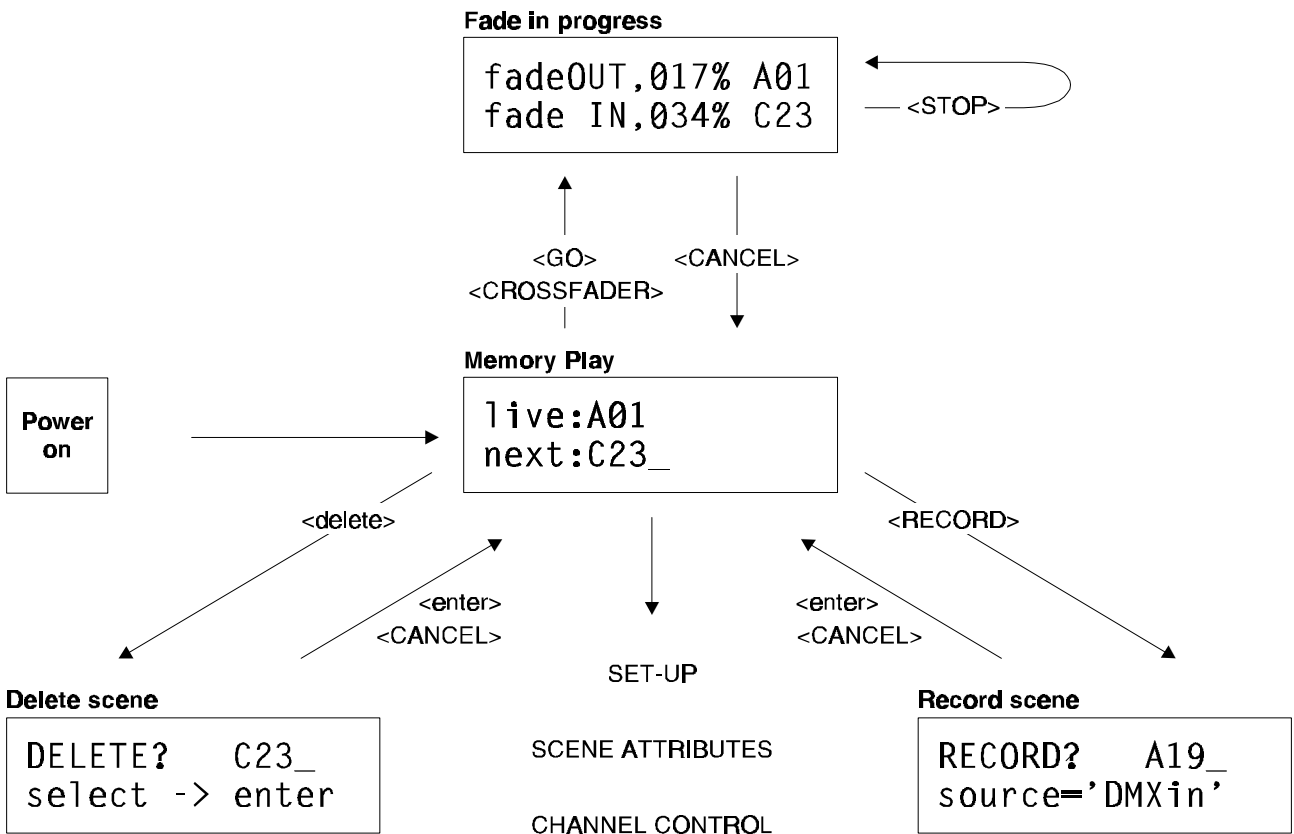
Delete scene

In the MEMORY PLAY mode it also possible to delete a record out of the list. Push <delete>, the suggested scene can be changed with <change item> and be replaced with every scene in the list. Push on <RECORD/enter> to confirm or on <cancel>.

Crossfade

With the <CROSSFADER> a gradual transition (=crossfade) is possible between the scene loaded in live and the scene loaded in next. The adjacent display shows which scenes are on and the progression of the fade. *ZER* refers to *ZEROS* and *DMX* refers to *DMXin*.

Button <GO> initiates an auto-crossfade in the programmed fade-times. <STOP> stops the progress of the auto-crossfade, <GO> makes the fade go again. With <CANCEL> the crossfade is cancelled. The result of the cancelled crossfade is then loaded in *live*. The display says *MIXEDscenes*. When you use <CANCEL> while making a crossfade manually the crossfader is deactivated and is put to work again only when you bring it into its most extreme position.



Scene Attributes

<Fade-in>

```
A12_: IN=012,5  
delay=015,5 sec.
```

Fade-in times

Maximum 800[s]. You can select only the existing records.
IN gives the time of the fade-in. *Delay* is the time between the GO-command and the beginning of the fade-in.

<Fade-out>

```
A12_: OUT=003,0  
delay=000,0 sec.
```

Fade-out times

The fade-out times are the same as the fade-in times as long as you haven't set up this separately. *OUT* is the time of the fade-out, meaning the time the previous scene disappears.

Delay is the time between the GO-command and the beginning of the fade-out.

<Sequence>

```
A32: autofollow=Y  
LinkedScene=A21
```

Sequence of playing

The scenes are automatically played in the order they have been recorded. For this a sequence list is being created in the memory. *Bgn* and *End* refer to the begin and the end of this list.

Autofollow=Y: means that the fade of the selected scene, in this case *A32*, automatically follows the previous scene. To create a loop (=chase) the *autofollow* has to be put on (=Y) for each scene in the loop. *LinkedScene=A21*: at the same time the fade to scene *A32* starts, another fade starts to *A21* (with its own fade-times). This linked fade can have a link also. It is possible to link to a 'deep' of 5. With <delete> you can delete an existing link: the display says *NO Linked Scene*.

```
SHIFTscene B22  
select next:A23
```

With *SHIFTscene* you can change the place of the scene in the sequence list. Scene *B22* is moved according to the scene chosen at *select next*. In this case the next scene is *A23*, so the sequence will be first *B22* and then *A23*.

What to do when you want to insert a just created new scene: Make a new scene and record it with a name, for example *B22*. This scene will be at the end of the

list. Go to the menu *SHIFTscene B22* (push twice on <sequence>) and select the desired next scene, in this case *select next: A23*. Now you are finished and *B22* is inserted before *A23*. You can leave this menu by pressing any other button.

```
SkipBetween Bgn  
select next:C25
```

With *SkipBetween* it is possible to skip several successive scenes in the list. Practically this scene-block is moved totally to the end of the list. In the displayed example all scenes between the *Bgn* (= begin of table) and *C25* are skipped, and *C25* will be the first scene in the list.

Be aware: On the moment you change the item at *select next*, this change is taking place immediately.

You can always get back the old situation by:

1. Select by *select next* the old original scene, without changing of course the above line of the display.
2. Replace the scene or sceneblock again, but now back.

When you are going to make (a lot of) changes in the list, it is recommended to write the scene list down on a paper,. Unfortunately with this software version of Toddler it is not yet possible to print the list. You can be informed about the software updates on our website: www.theater-technisch-lab.nl.

<Loop>

```
D32:jump to D01
loop number=inf
```

Set-up of loops or jumps

The automatic play of sequence, given in the sequence list, can be interrupted by the scene attribute *jump to* or *back to*. With *loop number* you can define the number of times of the jump or return. *Inf* refers to infinite. In this case after *D32*, *D01* will be played, and this will happen every time *D32* is faded out

(*loop number* is set to *inf*). When you want to create a automatic loop (chase) it is also necessary to put *autofollow* on for each scene in this loop. See for more information under sequence page 6.

<Real-time>

You can control fades through the use of a built-in real-time clock, a remote control or MIDI.

There are four displays available. Which display you get depends on the selection made under the *Special Control* item of the SET-UP. See page 9. In all situations you can use <delete> to make a setting undone.

```
Set01: Xxx in at
13:21 Friday
```

Clock, time/day

With *Set01* refers to setting 1. You can program 14 setting. *Xxx* is the scene to select. *13.21 Friday* is the moment on which the scene *Xxx* has to be activated. For example: Given that scene *Xxx* is the beginning of a loop, then on every Friday on 13.21 this loop will start.

```
Set01:Xxx in at
13:21 13-12-98
```

Clock, time/date

The same as above but now you can set a absolute time.

```
REMOTE button X
controlles Xxx
```

Toddler REMOTE

For this you need a REMOTE control with 7 buttons. You can select the button number (*button X*) and the scene you want to be controlled by this button (*controls Xxx*).

```
MIDI message XX
starts Xxx
```

MIDI

For this you need a message-list. Ask your supplier of the MIDI device. You can select the message number (*message XX*) and the scene to start (*starts Xxx*) with this message.

Toddler Set-up

<SET-UP>

```
Ch001_patched to
DMXch0170
```

Softpatch

The steering information for the dimmers appears on the DMX-output. The DMX signal consist for the Toddler of 512 information bytes (DMX channels). This display gives you the opportunity to patch a Toddler channel to a DMX channel. The default patch is Toddler *ch00x patched to DMXch00x*, with $x=1$ up to and including the channel number. Use <RECORD/enter> to record a selected patch and <delete> to undo an existing patch. During the scrolling of the item *DMXch* the scrolling will stop automatically by an existing patch of the selected Toddler channel.

<SET-UP>

```
PATCHshift=0230_
Reset PATCH ?
```

PATCHshift=xxx gives you the opportunity to shift the whole patch patron. In the example the patch patron will be shifted with 230, which means that the steering information of Toddler channel 1 will appear at DMX channel 231, channel 2 will appear at DMX channel 232 etc. When you select *Reset PATCH ?* and push <RECORD/enter> you will get back the default patch

situation (= *ch00x patched to DMXch00x*) with a zero *PATCHshift*.

<SET-UP>

```
control curve
Ch001_: Linear
```

Control Curve

The Toddler knows for each channel five different corrections for the fade behaviour. This gives you the opportunity to improve the dimming behaviour for different type of lamps. Options are: *Linear* = no correction, *40W* =low voltage glow-lamp, *600W* and *1kW*. There is also the possibility to select

NONdim. This setting gives a steering behaviour like a switch: on / off.

<SET-UP>

```
NONdim ON:50%_
all Ch.:Linear?
```

NONdim ON: xx% gives the opportunity to determine the switch moment in the fade, for all channels with a nondim setting. Default setting is *50%*. This means as *50%* of the fade is done, all those channels with a nondim setting will go from zero to 100%. With *all Ch.:Linear?* you can give all channels same correction at once: select the wished correction and push <RECORD/enter>.

<SET-UP>

```
DMXin -> Toddler
'MERGE with'
```

Determine the function of DMXin

'*MERGE with*': with this setting the DMXin signal of an other device will be merged with the steering signal of the Toddler, according to the principal the highest takes precedence.

```
DMXin -> Toddler
'as SCENE'
```

'*as SCENE*': with this setting the DMXin signal is like a scene which can be loaded in live or next and can be faded in or out. When the Toddler is used as a back-up for another steering table, this setting should be selected.

<SET-UP>

```
Ch001_ softfade?  
All fades normal
```

Soft fade

The minimal stepping size of a fade is default 1/255 (=8 bits) of the total change in value. A smaller stepping size can be set for the Toddler with *Chxxx softfade?* Push to confirm <RECORD/enter>. This makes the minimal stepping size for a fade of the selected channel, in this case *Ch001* 1/65535 (16 bits) of

the total change in value. *Ch001* is now automatically being patched on to two successive DMX channels, which makes the whole patch pattern move. A softfade can be undone by <delete> and the original patch table is being constructed. *All fades normal* refers to the fact that there are no softfades programmed. *Set all normal ?* gives you the opportunity to clear all the softfade settings with a push on <RECORD/enter>. Use softfade only in the case the controlled device can handle it.

<SET-UP>

```
Special Control=  
'None'
```

Special Control

You can use <GO> or the manual <crossfader> to start a fade of a scene. With this display you can select an other four ways of starting a fade of a scene.

The options are:

- 'None' for none
- *CLOCK, time/day*
- *CLOCK, time/date*
- *Toddler REMOTE*
- *MIDI*

Remark 1: See on page 7 under <real-time> for more about the way how to set up control by time, remote or MIDI

Remark 2: The use of an one folded external GO-button has to be considered apart from this.

<SET-UP>

```
Adjust: Friday  
13:48 13-12-98
```

Adjust clock

With this display it is possible to adjust the built-in clock.

<SET-UP>

```
CREATE: memory  
backup 1 ?
```

Memory Backup

It is possible to make 4 different copies (backups) of all the set-ups and scene-records (provided a solid state disk has been placed in the socket destined for this purpose). These copies are preserved in a not volatile memory and are numbered 1 up to and including 4. Select with the buttons <change item> the

desired number and confirm this choice by pushing <record>. During 5[s] the word 'busy' will appear after which the word 'done' will light up. In case the word 'failed' would appear a new attempt should be made. If this repeats itself, a part of the memory is no longer useful. Then another backupnumber should be chosen, whereby an other part of the memory is used. Once a backup has been made it is possible, in case of failure of the Toddler, to transfer the light program made, to another Toddler. Hereby the backup memory should only be taken from the socket and be transferred.

<SET-UP>

```
RESTORE memory  
from backup 1?
```

Memory Restore

It is possible to put back in the working memory of the Toddler a backup earlier made. Select with the button <change item> the desired backup-number and confirm this choice by pushing <record>. Then a warning signal will appear; the actual memory-contents, after again pushing <record>, will be replaced by

the contents of the selected backup. After this the Toddler will restart.

For more information about the Toddler (software up-dates, applications) visit our website: www.theater-technisch-lab.nl