The Setup

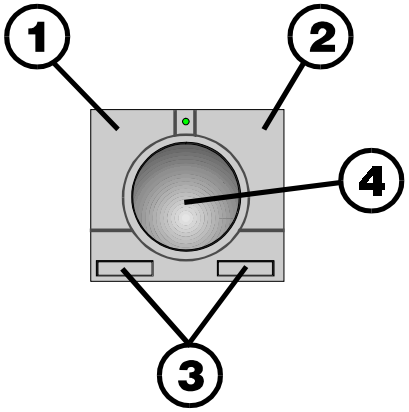
2.1 The setup is a program to :

- *Setup the fixtures (up to 140), their addresses and their protocol*
- *Repatch the fixture control channels*
- *Build up the stage, including the layout*
- *Select the working RGB-library (Lee™, Rosco™, Gam™)*
- *Print out the stage layout and fixture info*

2.2 The tracker ball

In the setup program, the tracker ball is used to :

- *Select items out of a list*
- *Draw lines for the stage layout*



1 *Left button. This button is mostly used as ENTER key. For the manual, we shall call it LMB (Left Mouse Button).*

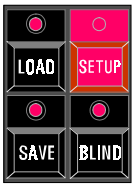
2 *Right button. This button is mostly used as ESCape button. For the manual, we shall call it RMB (Right Mouse Button).*

3 *These are the mid buttons of a normal mouse. They are unused in the setup.*

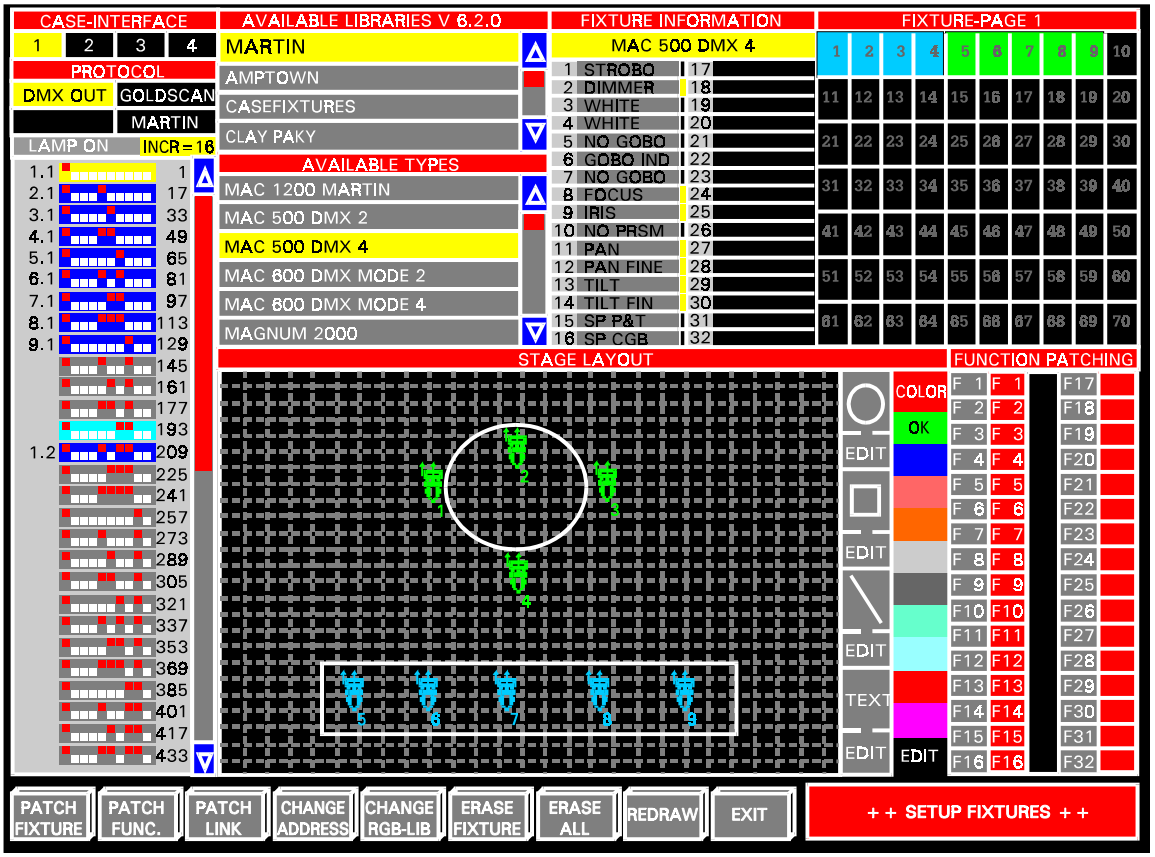
4 *The tracker ball itself. We shall call it Tball.*

Note : ***In the main program buttons 1 and 2 are used to set the Tball resolution and button 3 is an On/Off button. On new controllers, the Tball led will be activated if the Tball is active.***

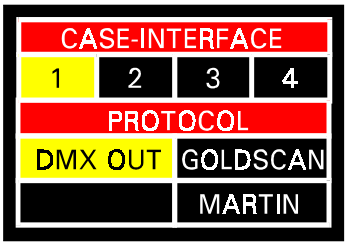
2.3 Entering the setup screen :



Pressing for at least 2 seconds *will enter the setup screen*



2.4 The Case interface window



The window shows the number of Case interfaces (highlighted gray) installed in the system, and the available protocols on each interface. The interface in use will be highlighted yellow.

The number of interfaces installed in the system, determines the number of channels. 1 interface means 512 channels, so if the 4 boxes are highlighted, the system has 2048 channels.

Each interface can have 4 different protocols (only 2 : DMX and Martin are standard installed, the rest should be ordered).

- *DMX out : standard build in on each interface*
- *Martin : Martin RS-485 protocol*
- *Goldscan : Clay Paky RS232 protocol*
- *other protocols like Dataflash, Colormag,....*

To see the protocols available on one of the four interfaces, select with the tracker ball the interface. The protocol in use will highlight yellow. ***All protocols available can run simultaneous****. It is possible to select 1 fixture on DMX and an other on Martin.*

On the system, there is also a DMX-IN input.

Important note : The DMX-IN input is available, as soon as a DMX signal is connected to the input. The signal will be mixed with the DMX-OUT signal of the first interface, by the principle of HIGHEST TAKE PRECEDENCE. *This means that, if the dmx channel value of a fixture channel, setup at the console, is* ***less than*** *the same dmx channel value of the dmx-in input, the dmx-in input value takes precedence on that channel.* ***DMX-IN channels can be switched off.***

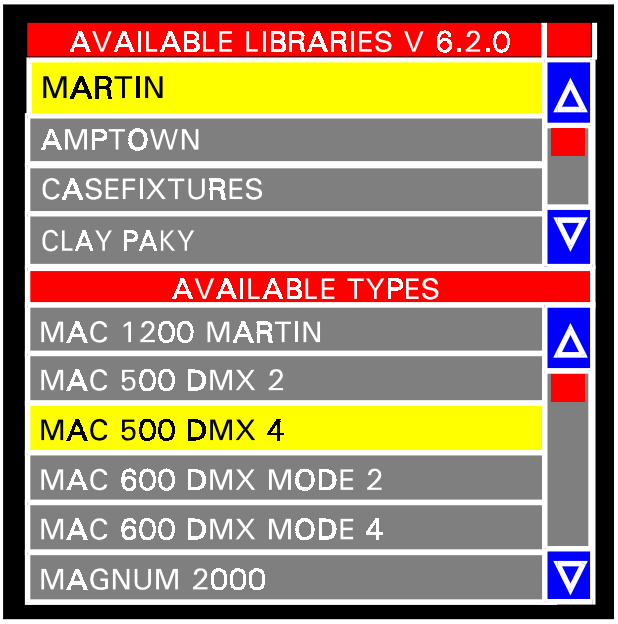
Martins MSD (show designer) can be connected on the DMX input to read out the DMX values of light-scenes you've created on the MSD. Remember to make first a memory with all values on zero before reading out the DMX input in the main program.

The DMX-IN input *can also be used to link the controller with another light controller. This is possible when you define the key window slave controller as a fixture with 17 channels on the master controller. This master controller can be any kind of light controller with a DMX output. The channels are :*

1 :	*Playback 1*	*Digital value : 0 - 255 or 0% - 100%*
2 :	*Playback 2*	*Digital value : 0 - 255 or 0% - 100%*
3 :	*Playback 3*	*Digital value : 0 - 255 or 0% - 100%*
4 :	*Playback 4*	*Digital value : 0 - 255 or 0% - 100%*
5 :	*Playback 5*	*Digital value : 0 - 255 or 0% - 100%*
6 :	*Playback 6*	*Digital value : 0 - 255 or 0% - 100%*
7 :	*Playback 7*	*Digital value : 0 - 255 or 0% - 100%*
8 :	*Playback 8*	*Digital value : 0 - 255 or 0% - 100%*
9 :	*Playback 9*	*Digital value : 0 - 255 or 0% - 100%*
10 :	*Playback 10*	*Digital value : 0 - 255 or 0% - 100%*
11 :	*Grandmaster*	*Digital value : 0 - 255 or 0% - 100%*
12 :	*Flash master*	*Digital value : 0 - 255 or 0% - 100%*
13 :	*Sub master1*	*Digital value : 0 - 255 or 0% - 100%*
14 :	*Sub master2*	*Digital value : 0 - 255 or 0% - 100%*
15 :	*Cuepage*	*Digital value : 0 - 255 or 0% - 100%*
16 :	*Cuenr*	*Digital value : 0 - 255 or 0% - 100%*
17 :	*Go button*	*Digital value : 0 - 255 or 0% - 100%*

So it will be possible to select playbacks, grandmaster, flash masters, sub-masters, cue-pages and cues on the master controller when the slave controller is a Case or Martin Case.

2.5 The library window



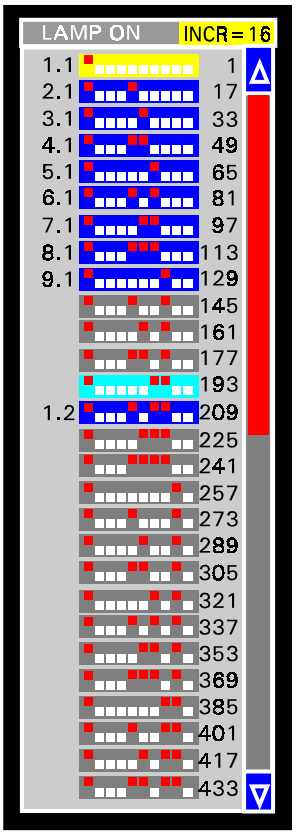
The fixture library contains the list of manufacturers and their fixtures, the console can address. When selecting one of the fixtures, the protocol in the interface window will automatic be selected. It is important to select the correct fixture, otherwise it is possible that the fixture will behave strange.

If the fixture, you have, is not listed, in most cases it is possible to address it by selecting a DIMMER 16 (dimmer with 16 channels) or a DIMMER 32 (32 channels).

Fixtures that are not listed, can be created, when you send all the fixture information and its channel information to R&D International.

To select a fixture out of the library, select with the LMB a menu name. To release the fixture, press the RMB.

2.6 Dipswitch window



Selecting a fixture out of the fixture library, will cause all the possible addresses and dipswitch combinations, of the chosen fixture, to appear in this window. To know the address of a fixture, run over the dipswitches with the Tball. When the address matches the address, set on the fixture, the fixture will respond with a white beam, no color, no gobo, pan and tilt on half their values. If the fixture has a LAMP ON function, the lamp on must be first selected if needed.

If the dipswitch is highlighted dark blue, the address is already in use by an other fixture. (The robot patch number(xx) and the pagenr(yy) of the robot that is using this address appears on the left of the switch(xx.yy)). If the dipswitch is highlighted light blue, the addresses, between the dipswitch address and the next dipswitch address, are partially in use by an other fixture. The light blue address is not selectable, but if you switch over to an address increment by 1, the not used addresses can be selected.

The Gray highlighted dipswitches are still available.

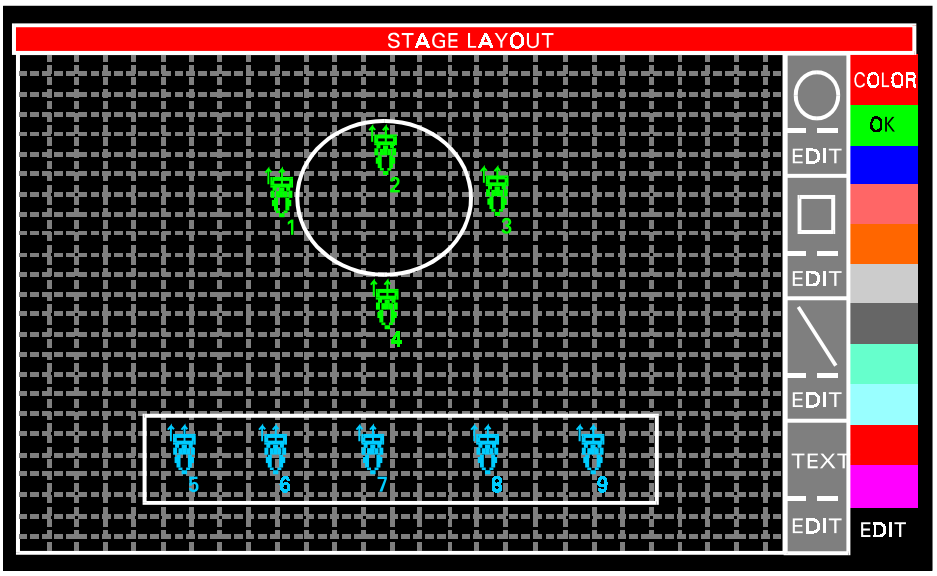
Note : Addresses already in use by one protocol, are still available in an other protocol. Addresses already in use by one interface, are still available in an other interface, if installed.

*To select an address, select the fixture in the fixture library. If you now run over the dipswitches (the address(es) you select will highlight yellow) with the Tball or with the **LAST, NEXT** or **PgUp, PgDn** keys, and one of the fixtures you've installed reacts with a white beam, no color, no gobo and pan/tilt on half their values (remember to select the lamp on first), then the address is correct. If the fixture reacts, but not correct, then you are near the address. You can now select the **INCR** box in the dipswitch window with the **+ key** on the keypad. Now the addresses will increment by **one,** and you can search the correct address. Some fixtures don't allow an increment by one (e.g. a Martin fixture when used on Martins RS-485 protocol).*

*If the address is correct, select the address with the **LMB** and put the fixture somewhere in the stage layout. If for placing the next fixture, the next address must be selected, press the NEXT key.*

With the FIXTURE PG1 and FIXTURE PG2 buttons, you can choose between the stage of fixtures 1-70 or fixtures 71-140. You can move a fixture placed on page 1 to page 2 by simply clicking on the fixture in page 1, then selecting with the buttons the other page and place it back on the stage in the new page.
*If you know the addresses of the fixtures by heart, it is easier to give in the value manually by pressing the **@** key on the keypad and its address value. Finish with the **RET** key.*

2.7 The stage layout window



All the fixtures, lines and texts placed on this screen, will appear also in the stage layout of the main program. There are 2 stage layouts (page 1 of fixtures 1-70 and page 2 of fixtures 71-140). ***Note : In previous software versions only 20 different types of fixtures could be selected. From version 6.2 it is increased to 40.***

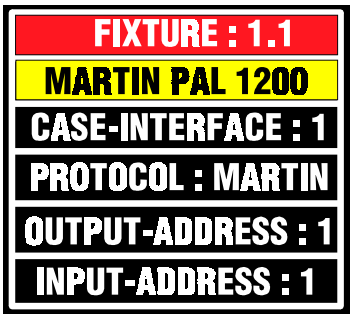
When a fixture is chosen, and its address is defined, it can be placed somewhere on the stage layout. To adapt the mirror motions to the Tball, (moving to the right on the Tball must result in the spot moving to the right) one can use the ***keypad*** *to position the fixture. Pan/Tilt motions of fixtures hanging upside down react totally different on the Tball. This can be checked with the Tball, because Pan/Tilt is now on the Tball. With the* ***keypad keys****, we can select 8 positions :*

- *Fixture hangs with mirror or head facing the ground :*
  - *Mirror is on top*
  - *Mirror is on bottom*
  - *Mirror is left*
  - *Mirror is right*
- *Fixture hangs with mirror or head facing the ceiling :*
  - *Mirror is on top*
  - *Mirror is on bottom*
  - *Mirror is left*
  - *Mirror is right*

Certain fixture channels like the knifes in Martins PAL1200 will be repatched, when you change the position of the PAL. This is useful when programming the knifes of all PALS (in different positions) together. If you select all PALS together in the main program and you change the position of 1 knife, the knifes of the other PALS will move in the same direction, so you don't have to program the knifes of the different PALS one by one.

If the LMB is pushed, the fixture is positioned. The numbers appearing next to the fixtures, determine the robot patch numbers.

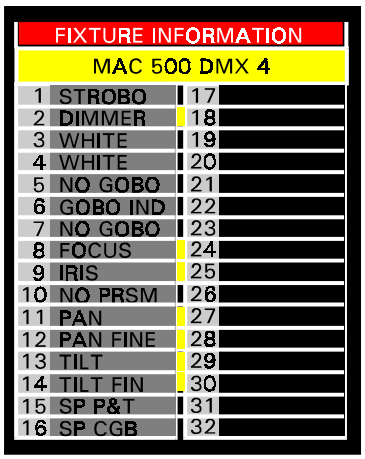
If you need some information of already placed fixtures, point to the fixture in the stage layout and press the LMB. A box with all the information will open next to the fixture and its dipswitch addresses will become yellow :



To draw circles, lines, boxes or texts in the stage layout screen, point to the symbol and select with the LMB. To delete a circle, line, box or text, point to its EDIT box, select with LAST NEXT the item and press the DEL key.

If one wishes to give a fixture, a box, a line a circle or a text, a color, select the EDIT in the color box, select the item and point to a color. Leave the edit mode with the RMB. ***You can also first point to the right color , before setting up fixtures, circles...***

2.8 Fixture information window

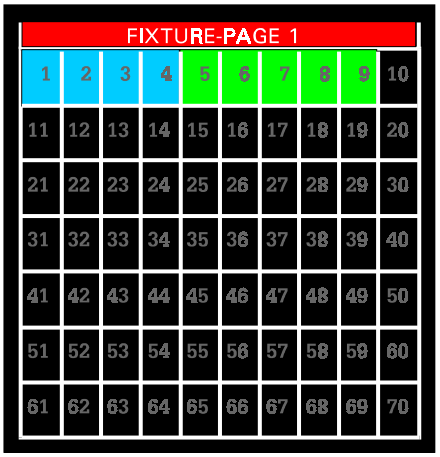


When a fixture is chosen out of the library, its channel information is shown in this window.

Behind each channel, there is a box that is highlighted or not. A channel with a highlighted box means that the channel can fade. Gobos for instance will not fade, they are set to fixed values.

In RGB fixtures, like the Martin Pal 1200, the RGB filters can fade, so there is the possibility to fade lots of colours when using in playbacks or sequences.

2.9 Fixture patching window



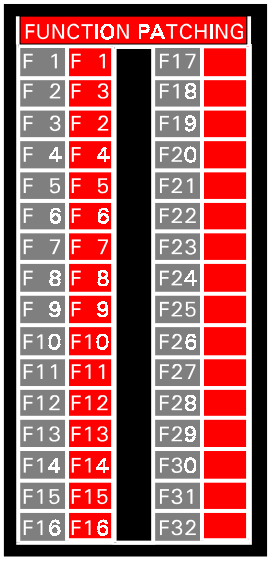
The window shows the fixtures, their patch numbers and their belonging color.

The screen, as shown here will also appear in the main program.

The console can handle up to 140 fixtures, 70 in each page.

In version 6.2, you can repatch fixtures by using 'drag and drop' with the Tball. Point to a number in this window with the Tball and press and hold LMB. Point now to a new number and release LMB. ***Note : the new number must be within the colored boxes.***

2.10 Function Patch window



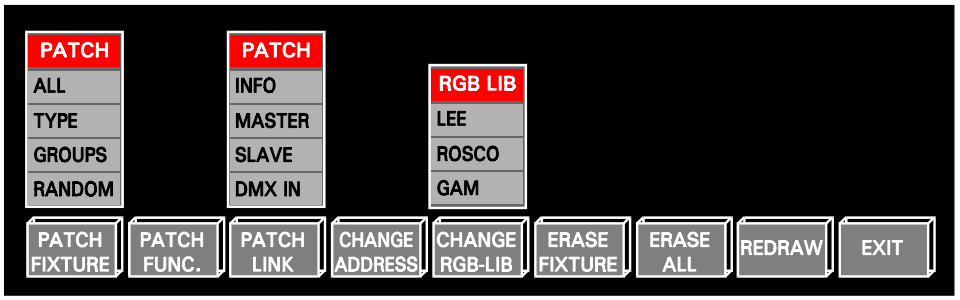
The screen shows the fixture functions and the repatched fixture functions. It has to be read out as follows :

F1 F1 Channel 1 becomes Channel 1 (no changes)
F2 F3 Channel 2 becomes Channel 3 so the dimmer becomes channel 3
F3 F2 Channel 3 becomes channel 2, so color 1 will be on channel 2

Note : If a channel number is repatched, that channel number will be left empty, so one has to repatch an other channel number to this channel. All the channel numbers should appear also in the repatch column, otherwise, the program will give the error that the patching is not completed.

This function can be useful when you want the color-wheels, gobo-wheels etc... for each fixture appearing on the same control channel.

2.11 Command menu



Explanation (Setup fixtures) box

This box will show you what to do, or the explanation of the tracker ball buttons will be given. It will also give some additional dipswitch info when selecting a fixture.

LMB : Left upper trackball button
RMB : Right upper trackball button

Patch fixture

This function can be used to repatch the fixture numbers. When selecting this function, a box (All - Type - Groups - Random) will appear.

All : To repatch all fixture numbers beginning with the first selected type.
Type : To repatch only the fixture numbers within a chosen type.
Groups : To repatch entire groups of fixtures.
Random : To repatch all fixtures numbers at wish.

Usage :

Select one of the modes (All, Type, Groups, Random) with LMB. A box will appear with the fixture types. Select a type, then select a fixture in the stage layout screen. ***The first fixture that is selected will become number 1 when using the ALL or RANDOM mode. When using the TYPE mode the first fixture selected will have the first number of that type. When using the GROUPS mode, the first fixture of the first group selected will have number 1. When all fixtures are repatched, the utility is left automatically, pressing the RMB (esc) will disable the repatch .***

Note : There is no need to select the PATCH FIXTURE first. In the 'Fixture Patching' window, you can repatch fixtures by using 'drag and drop' with the Tball (see Fixture Patching window).

Patch Functions

To repatch the fixture channels as described in the function patch window.
Usage :

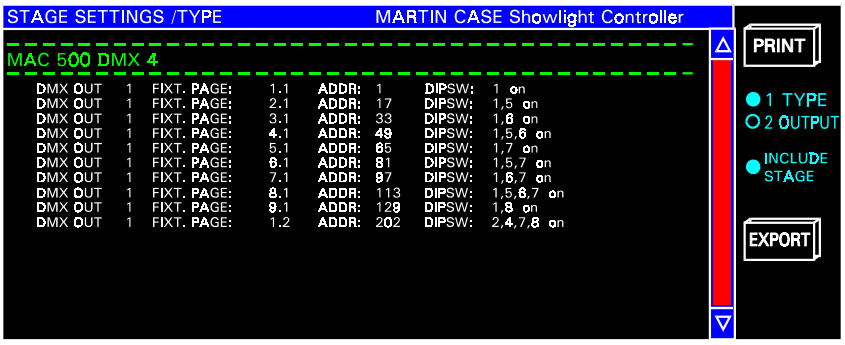
Select a fixture out of the fixture library. Select Patch function.
The explanation box will ask the function number.
Give a number + RETURN.
The explanation box will ask the number to patch to
Give a number + RETURN

Be sure no gaps are left in the function repatching as explained in the function repatch window.

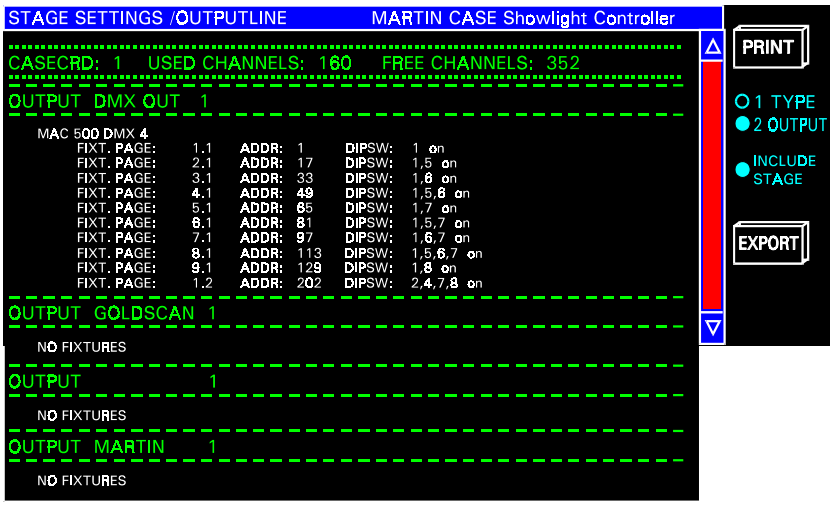
Patch link

We use this function when we want to print out fixture patch info and/or the stage layout. There are also the options to disable the DMX-IN channels for selected robots and we use it to link controllers via DMX.

Info *: Info is used to give you a detailed overview of the fixtures in use, their switch settings, the protocols in use and the fixture patching. All of this can be printed out when a laser printer is connected to the controller. Selecting info results in :*



Fixture info by type



Fixture info by output

Patch master : *When we click on this item, we can select if the Playbacks, masters or cues should be linked in automatic mode or in manual mode. In auto mode, the playbacks, masters and cues will be send to the slave controller when we select one of these functions on the master controller. In manual mode, we have to select those functions via the control channels of a fixture called Case slave console. In this case, we have to select the fixture and slide open its control channels (for playbacks and masters). The cuenr. and cuepage in manual mode will only be send to the slave controller as soon as channel 17 (the go button) is over 50%. So we can prepare a cuenr. in manual mode and activate it with the go button (channel 17). In auto mode, we don't need the control channels on the master controller because master and slave work parallel, a selected cue on the master will also be selected on the slave.*

Important note : On the master controller we always have to set the fixture called "Case slave console" and its dmx-address on the stage (see 2.5 to 2.8). We need to set up as many slave consoles on the master as there are linked to the master unless they all have the same DMX address.

Patch slave : *On the slave controller, the DMX-IN address must be set up by using this function. When we gave in the address, the controller will ask if the master controller handles its values proportional (percentage) or digital. In case of a master Case or Martin Case controller you have to select digital.*

Important note : The DMX-IN address on the slave controller and the DMX-OUT address on the master controller should match.

Patch DMX-IN : *If a DMX-IN signal is used at the DMX-IN input, this signal will be mixed with the DMX-OUT channels by the principle of Highest Take Precedence (see manual page 2-3). With this function, one can disable the DMX-IN channels for a selected fixture. When we select the function, the controller will ask to point at a fixture in the stage layout window.*

Note : When the linking of controllers is in use, the patch DMX-IN function is disabled.

Change address

To change an address of an already placed fixture.

Usage :

Select the Change address function
Point to a fixture out of the stage layout window
Press the LMB to go to the interface and dipswitch window

You can change addresses now. If you select an address already in use by an other fixture, the console will take it, but, if you leave the utility, there will be an error message.

Change RGB lib

To select one of the RGB libs (Lee™, Rosco™, Gam™) that will be used in the main program.
Usage :

Select the RGB lib function.
A box will appear with the libs to select.

Erase fixture

To delete an already placed fixture in the stage layout window.
Usage :

Select the Erase fixture function
Select the fixture in the stage layout window, to delete.
Press twice the LMB button.

Erase all

To delete the entire stage layout.
Usage :

Select the Erase all function
Press the LMB button and confirm with an other LMB push.

Redraw

To redraw the entire stage layout window.

Exit

To return to the main program and save the setup.
Usage :

Select the EXIT function by clicking with the T-ball on the function or by holding the SETUP key for a second.
Explanation box : 1=SAVE 2=NOT SAVE ESC=CANCEL

If you have added fixtures of a type that you have already used in the setup, the question "Scan xx is a new fixture. Select fixture to copy from..." will be asked. If you want to copy already programmed memories and preset values from another fixture of the same type, you can now select the fixture to copy from (their numbers will blink). If you don't want to copy the memories, thus start with new memories, press the ESC button.

Note : The automatic copy function is very useful for rental companies. You can prepare an entire show with only 1 fixture of every type you have. If on a show you use more fixtures of the same type, you only have to set them in the stage and change some addresses. When you leave the setup and you select the already programmed fixture to copy from, your show is programmed with the new fixtures. Now you just have to change some presets to make everything look nice.

