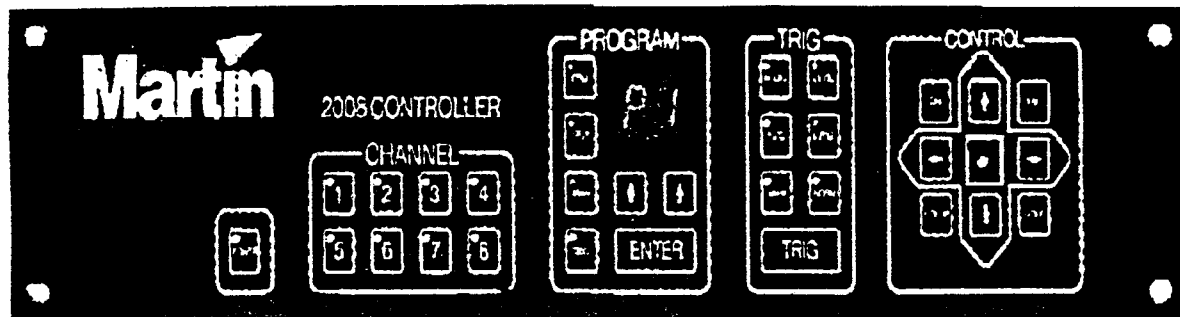# ROBOSCAN 20-08
EFFECTS PROJECTOR CONTROLLER

INSTALLATION AND OPERATING INSTRUCTIONS

Version 1:1

1. INTRODUCTION

Roboscan is a precision device and as such should be treated with respect when handling. The system has been designed to be upgradeable by means of updating the software in the projectors and controllers.For more information on how to obtain the updated software please read section 8.

To obtain the best effects, carefull consideration should be given to placement of the projectors.Generaly the best positions will be where the projected beam will be able to give the best room coverage.

When you see a word like this **PROG** it is a switch to be pressed at this part of the instruction. A list of these are shown in section 4.
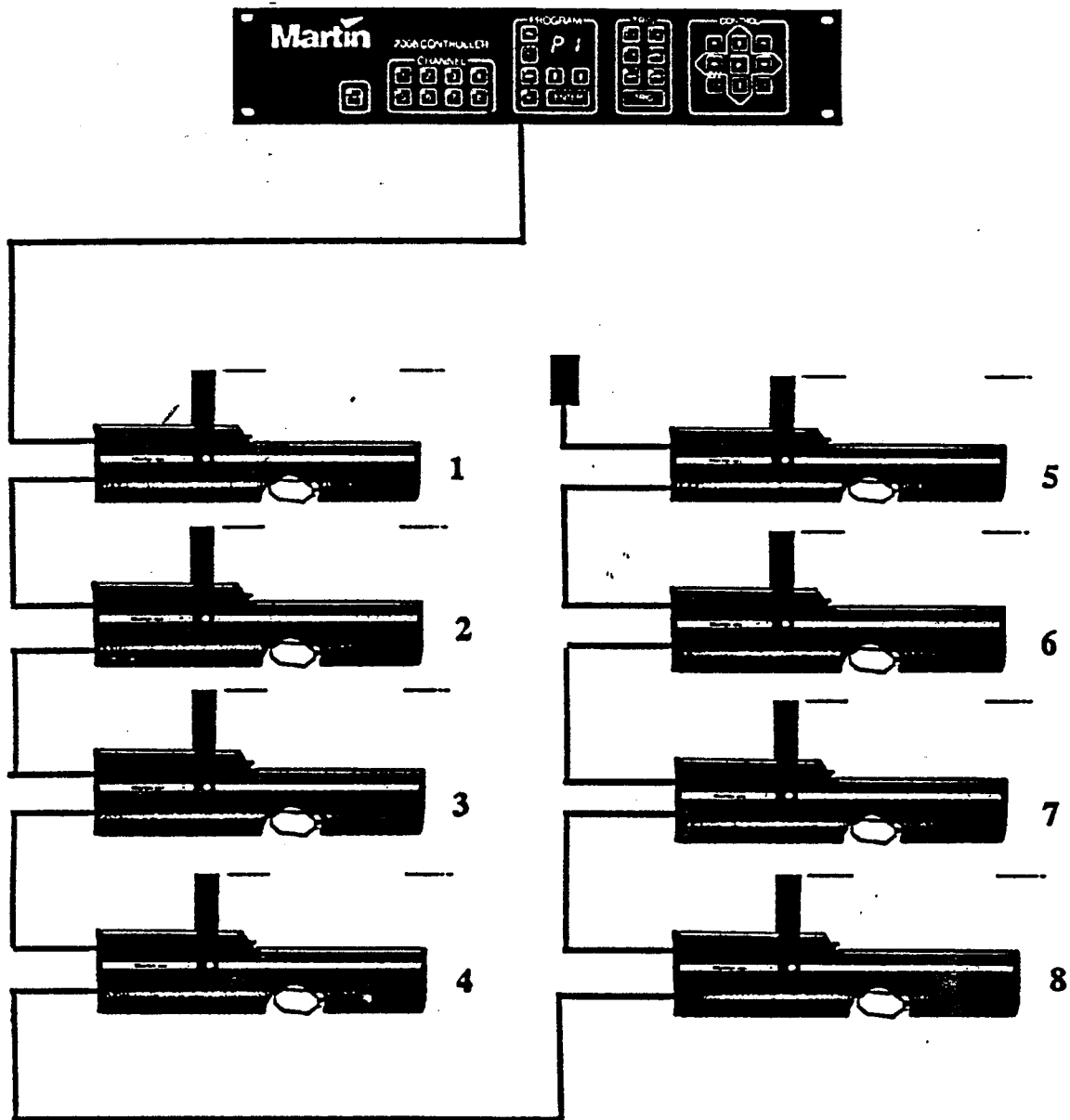
Replacement lamps are available from your dealer.

Roboscan 10-04 uses Osram HLX 64653

Roboscan 10-05 uses a HTI 400/24

SYSTEM HARDWARE AND CONNECTIONS

20-08

Contained in the carton with the 20-08 controller are two items, one is the connecting lead between the 20-08 and the first Roboscan head and the other is a terminating plug to be fitted to the last Roboscan in the chain.

INSTALLATION PROCEDURE

The 20-08 controller is compatible with any standard 19 inch rack. The controller requires a depth of 14cm. Please refer to instructions that are included with the Roboscan heads for information on fitting and zero settings.

It is important that the zero settings are completed correctly, otherwise the projectors will not be able to syncronise in the manual mode.

Make sure that the supply voltage switch is set correctly for the country of opperation.

If the controller is going to be connected to a music source for sound activation, the input voltage is 775mv but can be run in the range of 10mv to 50v.

If the connecting lead from the 20-08 controller is not long enough to reach the first Roboscan, use an extension lead (Balanced microphone cable).

Pin 1- Screen, Pin 2- (+Red) Pin 3 (-Green)

DESCRIPTION OF KEYS

CHANNEL	STATUS	FUNCTION
1<>8	ON	IN OPPERATION
1<>8	OFF	UNDER MANUAL CONTROL
1<>8	FLASHING	STATIC
PROGRAM		
PRG	ON	SELECTED PROGRAM NUMBER
STEP	ON	DISPLAYS STEP NUMBER
MAN	ON	FULL MANUAL CONTROL
SEQ	ON	RUN PROGRAM
ENTER	-	ENTER PROGRAM NUMBER
LEFT ARROW	-	SELECT PROGRAM NUMBER -10'S
RIGHT ARROW	-	SELECT PROGRAM NUMBER-1'S
TRIG		
MUSIC	ON	PROGRAM WILL STEP TO MUSIC
LEVEL	ON	MUSIC STEP SENSITIVITY BETWEEN 1>10
AUTO	ON	ADJUSTABLE STEP SPEED
MAN	ON	MANUAL STEP
SUPER	ON	RUNS THROUGH ALL PROGRAMS
NORM	ON	RUNS PROGRAM SELECTED
TRIG	-	SETS TRIG SPEED OR MANUAL PAD
CONTROL		
SPEED	-	VARIES THE PAN AND TILT SPEED
CURSOR	-	DIRECTIONAL MOVEMENT
SHUT	-	LAMP ON/OFF SHUTTER SPEED ADJUST
COLOR	-	CHANGES THE COLOUR
GOBO	-	CHANGES THE PATTERN
IRIS	-	VARIES IRIS ON 10-12

DISPLAY MESSAGES

"pr" You have selected a program which exists in the memory, select sq to run, enter to edit or prg to delete.

"dE" Tou can now delete the selected program, press enter to cancel or both program arrows at the same time to delete.

"In" This means one of two things have occured:-

> Either the memory of the 20-08 has been erased due to battery back up failure. Switch the 20-08 off and then on.
> Or you have pressed the four direction keys simultaneously, you are now ready to delete all the memory, press enter to erase all porgrams you have put in or switch off and then on.

"E8" You have reached the limit of programs that can be stored. Press man to leave program mode. If you wish to continue programing you must delete another program.

"E7" You have reached the total number of steps that can be programmed. Press enter to return to step 1 . To continue programming you must delete a program.

"L0-L9" You are ready to set the input sensitivity for music trigger.

"=0" lamp satus off

"=F" Lamp status on

"=1:6 You have selected one of six shutter speeds.

"⌐ " You are entering the pan and tilt speed

" 8-1" You are now ready to select Pan and Tilt Speed.

OPERATING MODES

MANUAL MODE

This is selected by pressing the `man` key in the program section.
Once in this mode you can move all or any of the projectors via the direction arrows
You can place any Projector into any position and de-select any unit from moving by pressing its `channel` button until the led is off.

You can also run the shutter in this mode.Select `shut` and the display will show =0 . this means that the lamp is now blacked out.Select `shut` again and the display shows =F the lamp will know be on. Press `shut` again and the display will change from 1to 6, this is the shutter speed for strobe effects,1 is fast and 6 is slow.PLEASE CHECK TO SEE IF YOUR PROJECTOR IS FITTED WITH A SHUTTER.

PROGRAM MODE

Select a program number from 10 to 99 . Press `prog` then select desired program number by pressing the `left arrow up` for increments of 10 units or the `right arrow up` for single increments.Once you have reached the desired number press enter. If there is no program with that number already the display will show 01 and you are ready to program your first step.If the display shows "pr" then there is already a program with this number.

Once in step 01 you move the projectors by means of the cursors.You do not have to move all the projectors at once.You can select the projectors that you wish to move by the channel switches.Once you have moved the projectors you can ghange `colour or gobo` by pessing the relevant button.If you are happy with your positions press `enter` You are now on step 2.
Continue with building steps until you are happy with the program.
Most light Jockeys use lots of programs of small numbers of steps, the reason for this is that it is much easier to run a preset pattern at the time you want than to wait for the same pattern to come around in a long program.

When you are happy with the program select `seq` to view the program.
If you decide that you do not wish to keep the program then select the program as before but this time press the two `up arrows` at the same time. This deletes the program.

EDIT MODE

This mode is used to change programs that are already entered.To enter the edit mode select a program in the normal way, once you have it running press `prog` and then `enter` you should now have step one showing on the display pannel.You can now edit any steps in the program. You move through the program by using the `left up arrow` and `right up arrow`
To vary the pan and tilt speed , you firstly go to the edit mode as described above, then find the step which you want to vary the speed in.Once you have reached the desired step press `speed` the display will show 7, to change the speed press `speed` again then press `enter` The shutter speed can be altered in the same way to give dramatic strobe effects by pressing `speed` although the display will show =0 for off,=F for on and 1-6 for shutter.

-6-

RUN MODES

To run a program, select the required number as described earlier and press ▮seq▮ Once you have the selected program ready to run you can use any of the following modes to operate the controller.

MANUAL TRIG MODE
This is the simple way to run a program. Press the ▮man▮ button, now press the ▮trig▮ button. Every time you press the ▮trig▮ button the program will be advanced one step. This will be indicated by the step display.

AUTO TRIG MODE
Press the ▮auto▮ button, the program will step through to a factory set speed. This speed can be changed by pressing the ▮trig▮ button twice. THE TIME GAP BETWEEN THE FIRST AND SECOND PRESS is the new speed setting.

MUSIC TRIG MODE
If you have a music signal connected as discribed earlier, once you have pressed this button the program will step through to the music pulse. If the sensitivity is to high or to low it can be adjusted by pressing the ▮level▮ control. The display shows a value of between 1 and 9. Press ▮up arrow right▮ to increase the level, when it reaches 9 it will revert back to 1

If music and auto mode are selected together then if the music input stops, the program will step through to the preset speed.

If you want to change programs whilst the controller is running a program, make sure that the step button is off and the program running is displayed. Select a new program and press ▮enter▮ as soon as you do this the running program will change to the new selected program.

When you are in any of the above modes , each of the eight channels has three operating conditions.
  1. Led off- - channel is following sequence of the selected program.
  2. Led on- - channel can be moved by cursor keys as a follow spot.
  3. led flashing- - channel is static.
Conition 1 is where the channel is following the selected program, condition two is used for using any number of channels as a follow spot whilst the remaining channels continue in the seq mode. Condition 3 is used for static effects, such as hitting a mirror ball or illuminating a designated area.

TRIG MODE

NORMAL TRIG MODE
When this button is lit the selected program will run in a loop.

SUPER TRIG MODE
When this button is lit the controller will run through all the programs in the 20-08 memory at random.

SOFTWARE UPDATES

The 20-08 controller is micro-processor based and as such means that future updates and improvements will become available for installation into your controller.
If you would like to recive information about software updates please fill in the section below. A news letter will be sent to you giving information about availability and benifits to your system.

Please send the completed form to:-

        MARTIN PROFFESIONAL A/S
        VEJLBJERGVEJ 16
        DK 8240 RISSKOV
        DENMARK

DATE: ....

DEALER...

SERIAL NUMBER:..

NAME:...

ADDRESS:...

....

....

....

....

....

COUNTRY:...