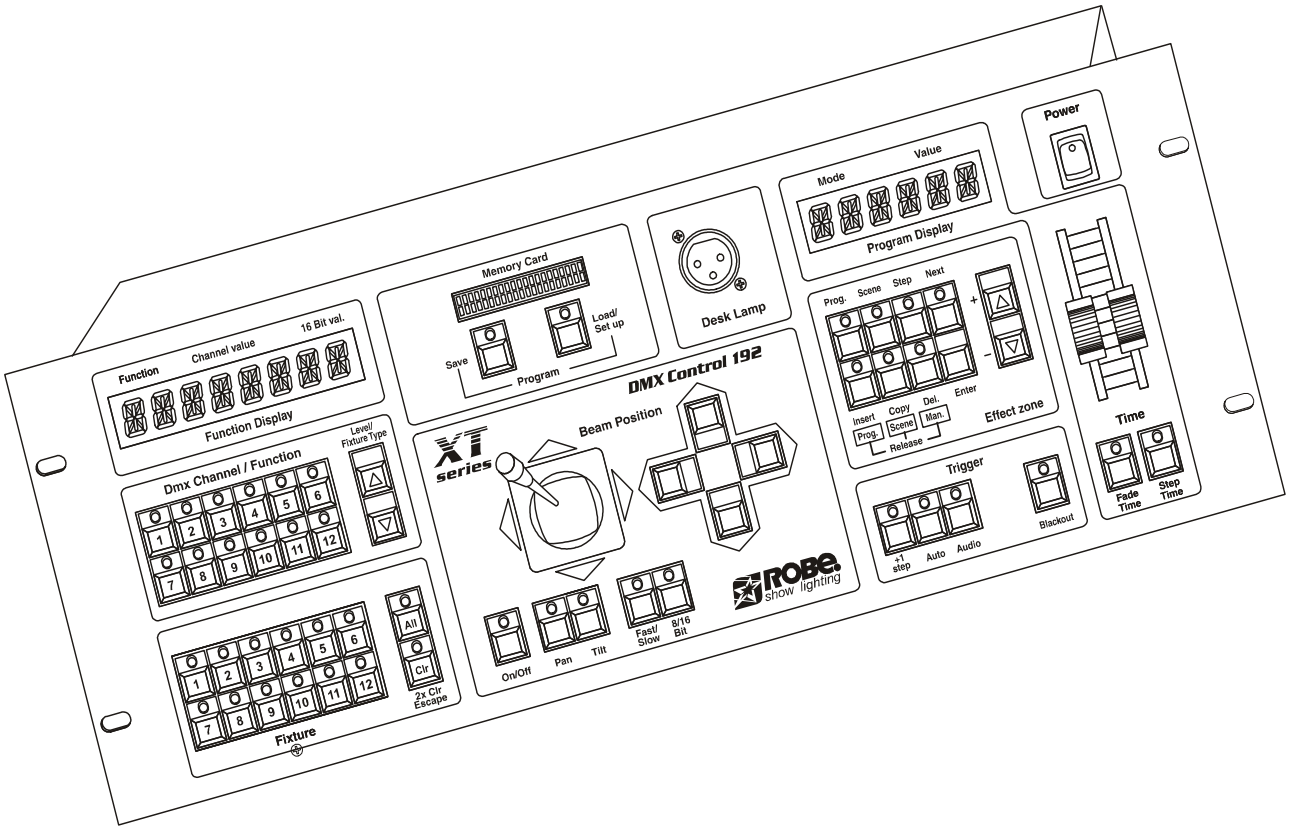
DMX Control 192



USER MANUAL

XT series

ROBE show lighting

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DMX CONTROL 192

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CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIAL START - UP!

1. Safety instructions

Every person involved with installation and maintenance of this device have to:
- be qualilfied
- follow the instructions of this manual

CAUTION!
Be careful with your operations. With a high voltage you can suffer a dangerous electric shock when touching the wires!

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Important:
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!

Always plug in the power plug least. The power-plug has to be accessable after installing the device.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

2. Operating determinations

This device was designed for indoor use only.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

When taking the device into operation, please make sure that the housing is closed firmly with all the necessary screws tightened up.

Do not shake the device. Avoid brute force when installing or operating the device.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture

or dust. There should not be any cables lying around. You endanger your own and the safety of others!

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

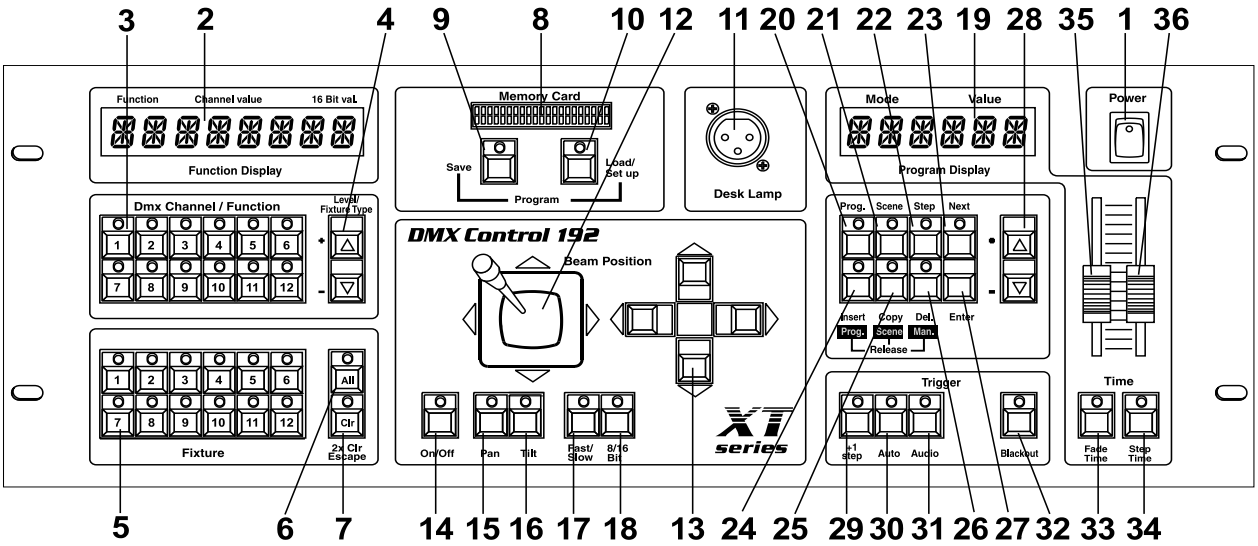
Please use the original packaging if the device is to be transported.

Never put any liquids on the device or close to it. Should any liquid enter the device nevertheless, disconnect from mains immediately. Please let the device be checked by a qualified service technician before you operate it again. Any damages caused by liquids having entered the device are not subject to warranty!

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, electric shock, etc.

3. Description of the control elements



1 - POWER SWITCH

2 - FUNCTION-DISPLAY

The Function-display has different functions. Please refer to the explanations under "Operation".

3 - DMX CHANNEL/FUNCTION-BUTTONS 1-12

Every Function-button represents a DMX-channel of the respective projector to which it is assigned. Please take the DMX channel-occupation from the user manual of the respective projector.

4 - LEVEL/FIXTURE TYPE + - -BUTTONS

By pressing the Up/Down-buttons you can adjust the settings stepwise. By holding the button, you can quickly browse through the display.

5 - FIXTURE-BUTTONS

For selecting the desired projector(s).

6 - ALL-BUTTON

The button selects all similar type "Fixture".

7 - CLEAR-BUTTON

Clears all manual selections made with the FIXTURE TYPE (▲ ▼) – buttons.The LED of each individual fixture will be turned off.

CLEAR/CLEAR-function.This function allows the controller to return to its original setting when turned on, all displays are cleared, regardless of the function settings that you are currently using.

Press the CLEAR-BUTTON 2 times in sequence rapidly.All displays will show "---------".

8 - MEMORY CARD CONNECTOR

Plug the Memory Card in here.

9 - SAVE-BUTTON

The SAVE-BUTTON has the following functions:

"Save Data" for saving the settings and programs on the memory card. Please refer to the explanations under "Operating the memory card".
"Set Desk Lamp" for adjusting the desk lamp intensity. Please refer to the explanations under "Desk lamp".

10 - LOAD/SET UP-BUTTON
The LOAD BUTTON - has the following functions:
"Load Data" for loading data from the Memory Card into the memory of the controller.
"Change Device" for displaying the desired projectors and allows the inclusion of the 3 devices not contained in the library .
"Load Factory Setup" for setting the controller back to the factory setup. Caution: all data in the controller-memory will be lost.

11 - DESK LAMP CONNECTOR
An XLR-connector for mounting of a suitable desk lamp (12V).

12 - JOYSTICK
For manual control of the pan/tilt movement. The joystick has to be activated by pressing the ON/OFF-BUTTON,PAN-BUTTON and TILT-BUTTON. Otherwise, it has no function.

13 - DIRECTION-BUTTONS
For manual control of the pan/tilt movement. The buttons are for fine-adjusting the pan/tilt and are immediately ready for use. For the fine-mode in the 16-bit-mode, the 8/16 Bit-key has to be pressed (LED shines).

14 - ON/OFF-BUTTON
For activating the joystick.

15 - PAN-BUTTON
For activating the pan-movement of the joystick.

16 - TILT-BUTTON
For activating the tilt-movement of the joystick.

17 - FAST/SLOW-BUTTON
For adjusting the two speeds of movement.

18 - 8/16 BIT-BUTTON
For switching the pan/tilt-movement from 8 to 16 Bit resolution.

19 - PROGRAM-DISPLAY

20 - PROGRAM-BUTTON
This button in programming mode allows for the recording of projector movements which can be played back as required.

21 - SCENE-BUTTON
This button in programming mode allows for the recording of static projector scenes which can be played back as required.

22 - STEP-BUTTON
The button in programming mode allows for the recording of a program step which can be played back as required.

23 - NEXT-BUTTON
The button allows the selection of the next step in run mode.

24 - INSERT/PROG.RELEASE-BUTTON
Programing mode-iserting of a new step into existing program.Operating mode-stopping the output of the current program.

25 - COPY/SCENE RELEASE-BUTTON
Programming mode-copying of a current scene.Operating mode-stopping the output of the current program.

26 - DELETE/MAN.RELEASE.-BUTTON
Programming mode-deleting of a current scene.Operating mode- releasing the current selected projectors.

27 - ENTER-BUTTON
The button confirms the selection

28 - EFFECT+/- - BUTTONS
The buttons allow setting the values on the PROGRAM DISPLAY.

29 - +1 STEP-BUTTON
With this button , you can jump from one step to another. Caution: The +1STEP-BUTTON only works in the run-mode.

30 - AUTO-BUTTON
If the LED shines, the controller is in Auto-mode (normal operating mode without sound-control).

31 - AUDIO-BUTTON
If this LED shines the controller is in Audio-mode (operation with sound-control, the signal has to be connected on the rearpanel).

32 - BLACKOUT-BUTTON
The Blackout-function closes the light output of all connected projectors via the shutter. Please note that all other functions of the projectors are maintained and that the programs keep running.

Caution: The BLACKOUT-BUTTON has to be pressed (LED is off), as soon as a program is called up. Otherwise there will not be any light output.

33 - FADE TIME-BUTTON
The button activates the FADE TIME-SLIDER

34 - STEP TIME-BUTTON
The button activates the STEP TIME-SLIDER

35 - FADE TIME-SLIDER
The slider adjusts the fade time between the programs steps

36 - STEP TIME-SLIDER
The slider adjusts the hold time of the program steps

4. Installation

4.1.Sound-control

If the DMX CONTROL 192 is supposed to work via a soundsignal, connect the ¼" jack plug with the soundsignal of your headphones output or a second adjustable output (if existing) of your mixer, or with the loud-speaker output of your amplifier.

Tip:	Data +
Sleeve:	Ground

Caution: Never connect the sound input with the DMX-output, as this will destroy the electric (DMX-driver).

4.2.DMX-512 connection with the projectors

The DMX CONTROL 192 is equipped with 2 DMX-outputs. In this way, it is easier for you to connect the lighting effects.

Connect the DMX-output of the controller with the DMX-input of the nearest lighting effect. Splitting the DMX-line is not possible. Continue the DMX-line by connecting the DMX-output of the projector with the next DMX-input. Use a data line appropriate for RS-485, 250Kbaud data use or a shielded quality double-wire cable. As a plug contact use ¼" stereo jack-plugs or 3-pin XLR-connector, the terminals of which are as follows:

Tip:	Data +	PIN 1 - Ground
Ring:	Data -	PIN 2 - Data -
Sleeve:	Ground	PIN 3 - Data +

Caution: At the last projector, the DMX-cable has to be terminated with a 120 Ω resistor. Solder the resistance into a 3 pin XLR-connector and plug it in the DMX-output of the last projector.

4.3 Fixture addressing

Please note that the DMX CONTROL 192 assigns the DMX-starting addresses every 16 steps. You have to address every projector to the respective starting address. Otherwise, the channel assignment will not be correct. All projectors with the same starting address work synchronically.

Projector	Starting address	Projector	Starting adress
Projector 1	1	Projector 7	97
Projector 2	17	Projector 8	113
Projector 3	33	Projector 9	129
Projector 4	49	Projector 10	145
Projector 5	65	Projector 11	161
Projector 6	81	Projector 12	177

4.4 Connection to the mains

Connect the fixture to the mains with the power-plug.
The occupation of the connection-cables is as follows:

Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏚

The earth has to be connected!

4.5.Accessory included in the delivery

The delivery includes 1 controller and 1 memory card. The memory mard can be used for copying the internal memory (RAM) of the DMX CONTROLER 192 to the memory card and to safe the adjustements and programs externally (data backup). The controller can immediately be used, also if the memory card is not plugged in. Only mount the memory card when needed.

Caution: When you turn the device on, the controller is in blackout-mode (Blackout-LED on).

4.6.Desk lamp

If you wish, you can plug an appropriate desk lamp (12V DC) into the XLR3 socket on the top panel. The desk lamp intensity can be adjusted from 0-100%.The factory setup is 50%.
Description of the XLR3 socket: Pin 1=not connected
Pin 2=+12V DC adjustable
Pin 3=0V DC
Press the SAVE-button 2 times untill the Function and Program display shows "SET DESK LAMP".Press the ENTER-button and use the FADE TIME-slider to adjust the intensity of the lamp.Press the ENTER-button to confirm your selection.

5.Assigning the desired projectors

The factory setup determines all FIXTURE-buttons to the SPOT 250 XT. You can assign a FIXTURE-buttons to any other projector.

Selection a XT- projectors

1.Press the **LOAD/SET UP**-button below the memory card until the the displays show **"***SET DMX LINE***"**.
2.Press the **ETER**-button. The Fixture-button LED No. 1 will shine and the Function Display shows the current projector.
3.Select the desired XT-projector by pressing the LEVEL/FIXTURE TYPE (▲ ▼) buttons.

Overview over the available projectors:

NAME	DISPLAY	NAME	DISPLAY
Spot 150 XT	SPOT 150	DJ Scan 250 XT	DJ SC.250
Wash 150 XT	WASH 150	Scan 250 XT	SCAN 250
Spot 160 XT	SPOT 160	Scan 575 XT	SCAN 575
Spot 250 XT	SPOT 250	Scan 1200 XT	SCAN1200
Wash 250 XT	WASH 250	Ecolor 250 XT	ECOL. 250
MSZoom 250 XT	MSZom.250	Beam 250 XT	BEAM 250
Spot 575 XT	SPOT 575	User defined	SPOT 1
Wash 575 XT	WASH 575	User defined	SPOT 2
DJ Scan 150 XT	DJ SC.150	User defined	SPOT 3

4.Confirm the selection by pressing the **ENTER**-button.
The Fixture-button LED No. 2 will shine and the Function Display shows the current projector.
5.Repeat steps 3-4 to assign projectors 3 to 12 which you wish to control.
6.Press the LOAD/SET Up-button to terminate this procedure.Function and Program Display shows:" – – – – –".
It is advisable to keep similar fixtures on adjacent FIXTURE buttons.
NOTE: You may create new projector “personalities” which are not in the DMX CONTROL 192 library. To do this use the three fixture names SPOT 1, SPOT 2 and SPOT 3, assign a DMX address and then define the fixtures as described in article **Setting up the projectors not defined in the DMX CONTROL 192 library.**

5.1.Setting up the projectors defined in the DMX CONTROL 192 library

1.Press the **LOAD/SET UP**-button until the the display shows **"***CHANGE DEVICE***"**.
2.Press the **ENTER**-button. Press the LEVEL/FIXTURE TYPE (▲ ▼) – buttons until the required projector is displayed on the Function Display.
3.Press the **ENTER**-button.The Function Display shows the function of the first channel. The Program Display shows the current channel-number (**"***CHAN.01"*). Check the channel-occupation by pressing the **EFFECT** (▲ ▼) buttons. The displays show the channel number and the respective function(abbreviated).The LEDs of the Function buttons or joystick buttons shines if the function is assigned.

NOTE: you will notice that the LEDs of the functions buttons (BLACKOUT,FADE TIME) will come on in association with the dimmer and blackout channels; this indicates that during the operation of the controller when the BLACKOUT-button is pressed both these two channels will be operated to ensure a blackout.
NOTE: you will notice that the LED of the FADE TIME- button will come on in association with the pan,tilt , pan/tilt fine and dimmer channels; this indicates that during the operation of the controller when these channels are used they will be subject to the setting determined by the **FADE TIME-** slider.

Example for the occupation of the function buttons (SPOT 250 XT):

Function/button	Function	DMX-channel
Pan	Pan-movement	1
Tilt	Tilt-movement	2
Pan + 8/16 Bit	Pan 16 Bit	3
Tilt + 8/16 Bit	Tilt 16 Bit	4

Function/button	Function	DMX-channel	Function/button	Function	DMX-channel
F1	Speed	5	F7	Rotating Gobo	11
F2	Power	6	F8	Gobo Rotation	12
F3	Colour	7	F9	No function	13
F4	No function	8	F10	Focus	14
F5	Effect-wheel	9	F11+Blackout	Shutter	15
F6	Prism-rotation	10	F12+Blackout +Fade Time	Dimmer	16

By pressing the **CLEAR**-button 2 times rapidly you can return the controler to its original state
If the channel-occupation is correct and the FUNCTION buttons are correct, press the **ENTER**-button.
Press the **LEVEL/FIXTURE TYPE (▲ ▼)**buttons and check(determine) the next projector.

5.2.Setting up the projectors not defined in the DMX CONTROL 192 library

1.Press the **LOAD/SET UP**-button until the the display shows **"***CHANGE DEVICE***"**.
2.Press the **ENTER**-button. Press the LEVEL/FIXTURE TYPE (▲ ▼) – buttons until the "*SPOT1 GENERIC*" is displayed on the Function and Program displays.
3.Press the **ENTER**-button.The Function Display shows the function of the first channel (abbreviations). The Program Display shows the current channel-number (**"***CHAN.01***"**).
4.You must now assign to each of the 16 channels the effect which each will control and the respective buttons and sliders which will operate them on the controller:
The **EFFECT** (▲ ▼) buttons select the channel number to which respective effects are assigned.
The **LEVEL/FIXTURE TYPE (▲ ▼)** buttons select the name of the function.
The **DMX CHANNEL/FUNCTION** buttons assign the 12 DMX CHANNEL buttons to 12 projector functions.
The **PAN-** button allows the pan movement of the projector to be assigned to the joystick.
The **8/16 BIT-** button allows a 16 bit pan/tilt movement to be assigned to the joystick.
The **TILT-** button allows the tilt movement of the projector to be assigned to the joystick..
The list of an abbreviations used for describing projector functions:

PAN= pan
TILT= tilt
F.PA.= fine pan
F. TIL.= fine tilt
COL.= colour
CO.1.= colour 1
CO.2.= colour 2
CO.3.= colour 3
C.– G.= colour/gobo
GOB.= gobo
S.GO.=static gobo selection
S.G1.
S.G2.
S.G3.
R.GO.=rotating gobo selection
R.G1.
R.G2.
R.G3.
R.PR.
R.CO.
ROT.= rotation
RO.1.
RO.2.
RO.3.
G.RO.= gobo rotation
P. R O.= prism rotation
E.RO.= effect rotation
C.RO.= colour rotation
EFF.= effects
EF1.= effects 1
EF2.= effects 2
EF3.= effects 3
SHU.= blackout
STR.= strobe
IRI.= iris
ZOM.= zoom
FOC.= focus
DIM.= dimmer
SPD.= speed
TIM.
PWR.= powering up
FAN.= fan
X1.
X2
X3.
X4.
X5.
X6.
Y1.
Y2.
Y3.
Y4.
Y5.
Y6.
F1.
F2.
F3.
F4.
F5.
F6.
F7.
F8.
F9.
F10.

F11.
F12.
FNC.= special function
CYA.= cyan
MAG.= magenta
YEL.= yellow
FRO.= frost
M.T.S.= motor speed

BEA.= beam
FILT.= filter
B.OU.= Blackout
GAM.= program selection
TRIG.= trigger
RES.= reset
MAC.=macros
C.SP.= colour speed

G.SP.= gobo speed
E.SP= effects speed
P.SP.
X.SP.= X-axis speed
Y.SP.= Y-axis speed
Z.SP
FLA.
FREE= no function

Press the ENTER-button to record the assigments you have made.
Note:You also have to determine which channel will have the blackout-function and which channel should react to the fade-time. It is important to adjust the fade-time function for the pan and tilt in order to control the speed of the movement during the program-run.

6. Manual control of the projectors

Manual mode allows you to directly control the functions of any projector connected to the controller.
In order to control each projector it is necessary to know what function each individual channel controls on the respective projectors.This data is in the instruction manual of each individual projector.

6.1.Reading out the functions and DMX-alues

The Function Display consists of 3 fields: Function, 8 Channel value and 16 Bit Value.
If the display shows **"------"** in the fields, the display is empty and no mode is active.
As soon as the fixture is selected and one FUNCTION-button is pressed, the Function Display shows the selected function under Function, the current DMX-value under Channel value and "--" under 16 Bit value.

6.2.Adjusting the DMXvalues

Press the FUNCTION-button of the desired control channel. The display shows the current DMX-value. Adjust the desired value via the LEVEL/FIXTURE TYPE (▲ ▼) – buttons. When you press the **+**-button, the DMX-value will be increased, if you press the **-**-button, it will be decreased. By pressing the respective button, you can quickly adjust the values.
Note:
Press the **+** and **–** buttons simultaneously: the displayed values will move to 128.
Hold down the **+** button and press the **-** button: the displayed values will move to 255 (maximum).
Hold down the **-** button and press the **+** button: the displayed values will move to 0 (minimum).
Please take the channel-occupation from the user manual of the respective projector.

6.3.Reading out the pan/tilt values

The current pan/tilt position can be read out on the Function Display as follows:
As soon as the **PAN**-button or one of the **DIRECTION**-buttons RIGHT or LEFT is pressed, the Function Display shows **"***PAN***"** under Function, the current 8 Bit DMX value under Channel value and the current 16 Bit DMX value under 16 Bit value.
As soon as the **TILT**-button or one of the **DIRECTION**-buttons UP or DOWN is pressed, the display shows **"***TILT***"** under Function, the current 8 Bit DMX value under Channel value and the current 16 Bit DMX value under 16 Bit value.
As soon as the PAN-button and the TILT-button are pressed at once or the DIRECTION-buttons RIGHT or LEFT and UP and DOWN are pressed, the display shows for example **"***P.131 T.128***"**, only the current 8 Bit DMX value is displayed.

6.4.Adjusting the pan/tilt-position via the joystick

Activate the joystick by pressing the **ON**/**OFF**-button (LED shines). Press the **PAN**-button or the **TILT**-button in order to control both directions.
Adjust the desired position via the joystick. The display shows the current 8 Bit DMX value.

6.5.Adjusting the pan/tilt-position via the DIRECTION-buttons

By pressing the desired **DIRECTION**-button, you can adjust the pan/tilt position step by step. By holding the respective button, you can make a smooth movement.

6.6.Adjusting the resolution of the pan/tilt-movement

You can adjust the resolution of the pan/tilt movement via the **8/16 BIT**-button from 8 Bit to 16 Bit. If the button is pressed, the controller is in 16 Bit-mode (high resolution). In this mode, the pan/tilt can exactly be positioned.

6.7.Adjusting the speed of the pan/tilt-movement

You can adjust the speed of the pan/tilt movement via the **FAST/SLOW**-button. If its LED is off, the pan/tilt movement is fast, if the LED shines, the pan/tilt movement is slow. This function is only available for the **DIRECTION**-buttons.

Option 1:

The **FAST/SLOW**-button is not pressed, its LED is off (Fast-mode). The **8/16 BIT**-button is not pressed, its LED is off (8 Bit-mode).
The pan/tilt position changes in 10-fold steps (e.g. 131, 141, 151 etc.).

Option 2:

The **FAST/SLOW**-button is pressed, its LED shines (Slow-mode). The **8/16 BIT**-button is not pressed, its LED is off (8 Bit-mode).
The pan/tilt position changes in 1-fold steps (e.g. 131, 132, 133 etc.).

Option 3:

The **FAST/SLOW**-button is not pressed, its LED is off (Fast-mode). The **8/16 BIT**-button is pressed, its LED shines (16 Bit-mode).
The pan/tilt position changes in 0.5-fold steps (e.g. 131; 131,5; 132 etc.).

Option 4:

The **FAST/SLOW**-button is pressed, its LED shines (Slow-mode). The **8/16 BIT**-button is pressed, its LED shines (16 Bit-mode).
The pan/tilt position changes in 0.01-fold steps (e.g. 131; 131,01; 131,02 etc.).

7.Programming

DMX CONTROL 192 is a programmable controller. It may be used in either manual mode or programmed mode to achieve the required outputs.
To program the controller, you must first develop your static scenes and then build these into a program.

7.1.Programming and modifying a lighting scene

Scenes are the building blocks used to build up programs.
Recording a scene means recording the positions and using effects which you have set your projectors to do.
Once you have recorded a scene, you may use it either individually or use it to build along with other scenes into a program.
DMX CONTROL 192 allows you to record up to 500 static scenes.
Note: remember that once you have set the level to turn on the lamp, you should ensure that it remains at this level to avoid problems such as the lamp going off or the projector resetting.
1.Press the CLEAR-button until the Function Display shows"--------"
2.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of the two buttons will flash, indicating the controller is in programming mode.
3.Press the SCENE-button.The displays show "*SELECT SCN.---*"
4.Press the **+** button and the displays will show"*SELECT SCN.001*".If the sign"001" flashs alternatively with "*EMP*" ,the scene is empty.Select the scene number 1-500 by pressing **+/-**buttons.
5.Press the ENTER-button,the sign "SELECT" will disappear and the scene is selected.
6.Press the FIXTURE-button 1-12 to select the projectors you wish to use in your scene.
7.Press the DMX CHANNEL/FUNCTION-button 1-12 to select the desired function and by the LEVEL/FIXTURE TYPE (▲ ▼)-buttons change the adjusted values(if you wish).
8.Press the COPY-button to move on to the next scene.The displays will show"*SELECT SCN.002*".If the sign"002" flashs alternatively with "*EMP*" ,the scene is empty.By pressing **+/-**buttons you can select another scene.
9.Press the ENTER-button an the scene will be recorded.
10.Repeat steps 6-9 to record up to 500 scenes.
11.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of these buttons will turn off, indicating the controller is no longer in programming mode.

7.2.Recording programs and steps

You can create up to 40 programs with a maximum of 99 steps each. Each step is selected from the previously recorded scenes .
Creating a program is simply a matter of assigning each step a previously recorded scene number.
Each program step has a dynamic part(fade time) and static part(step time):
Fade time-the time,during which effects move to the programmed position.
Step time-the time,during which effects last in the current step.
1.Press the CLEAR-button until the Function Display shows"--------".
2.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of the two buttons will flash, indicating the controller is in programming mode.
3.Press the PROGRAM-button.The displays show "*SELECT PROG.01*"
4.Pres the +- buttons in the Program section until you have selected the number of the program which you wish to create.
5.Press the ENTER-button,the displays will show"*SELECT STEP.01*".If the sign"01" flashs alternatively with "*--E*" ,the step is empty-no scene is associated with it.
6.Press the ENTER-button,the displays will show"*SELECT SCN.*---".
7.Select the scene number (1-500) which you wish to associate with this step by pressing +/--buttons.
8.Press the ENTER-button,to confirm your selection.The displays show "*SELECT TIME*".
9.Press the FADE TIME-button (the LED shines) and use the FADE TIME-slider to select the fade time (0,1-9,9s)
10.Press the STEP TIME-button (the LED shines) and use the STEP TIME-slider to select the step time (0,1-9,9s).
11.Press the ENTER-button to confirm your selection of the step.
12.Repeat the instructions 5-11 to record other program steps.In many cases, you may not wish to use all 99 steps in a loop,by simultaneously pressing the + and - buttons you may terminate a program.The Program Display will show "*E* "(the end of the program).
The number of steps in your program will be determined, therefore, by the position in which you place the E for the end of the program.
13.Repeat the instructions 2-12 for every program which you create.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of the two buttons will turn off, indicating the controller is not in programming mode.

8.Recall and run mode

The following instructions needed to recall and run previously recorded scanes and programs.

8.1.Recalling scenes

1.Press the CLEAR-button until the Function Display shows"--------".
2.Press the SCENE- button in the Effects zone.The displays will show "*SELECT R.SC.—-".*
3.Pres the **+/-** buttons in the Effect section until you have selected the number of the scene which you wish to view (e.g. R.SC.003).
4.Press the FIXTURE-buttons 1-12 to select the projectors (you can use the ALL-button or CLR-button) you wish to use in the selected scene.
5.Press the FADE TIME-button (the LED shines) and use the FADE TIME-slider to select the fade time (0,1-9,9s).
6.Press the ENTER-button promptly twice to confirm your selection of the scene.The sign"*R.SC.003*" will appear on the Program Display (R is flashing).
Note that the BLACKOUT LED is On on the BLACKOUT- button and that pressing the button will cause all active projectors to go into blackout mode.
7.Press the SCENE RELEASE-button (its LED is flashing whilst the scene is active) to end the selected scene.

NEXT-button
Using this button allows you to change from the active scene.Repeat steps 1 to 7 to activate a scene using your current projectors.
8.Press the NEXT-button in the Effects section.The button LED flashes and the displays show"*SEL. PROG. OR SCN.".*
Press the SCENE-button if you want to view another scene.
9.Pres the +- buttons in the Effect section until you have selected the number of the scene which you wish to use to replace the active ecene (e.g. *R.SC.006*).

10.Press the FIXTURE-buttons 1-12 to select the projectors (you can use the ALL-button or CLR-button) you wish to use in the selected scene.
11.Press the ENTER-button,the sign"*SELECT*" will disappear.

13.Press the FADE TIME- button to change the speed at which the projectors move or to activate the dimmer. Use the FADE TIME- slider to adjust the desired values on the Program Display.
14.Press the ENTER-button to confirm selection.The Program Display will show sign "*R.SC.006*" (R.is flashing). Repeat the steps 8-14 as many times as required in order to view the desired pre-recorded scenes.

8.2.Recalling programs

1.Press the CLEAR-button until the Function Display shows"--------".
2.Press the PROG.- button in the Effects zone.The displays will show "*SELECT R.PRG.—-".*
3.Pres the +- buttons in the Effect section until you have selected the number of the program which you wish to view (e.g. *R.PRG.008*).
4.Press the FIXTURE-buttons 1-12 to select the projectors (you can use the ALL-button or CLR-button) you wish to use in the selected scene.The LEDs at selected buttons will start flashing.
5.Press the ENTER-button,the sign"*SELECT*" will disappear and the LED of the STEP-button is On.Program Display shows "*STEP.01*", if the sign"01" flashs alternatively with "*--E*" ,the step is empty-no scene is associated with it.
6.Pres the +- buttons in the Effect section until you have selected the starting step for your program (e.g.*STEP.03*).
7.Press the FADE TIME- button and use the FADE TIME-slider to change the time the program takes to fade in and out of a scene or simply leave it at the speed which was set when the program was created.
8.Press the STEP TIME- button and use the STEP TIME-slider to change the hold time for each step or simply leave it at the speed which was adjusted when the program was created.
Note: The values on the STEP TIME-slider and FADE TIME-slider multiply the original step values.
For example: program step: original fade time = 1,2s ,original step time =8
FADE TIME-slider value=2 , STEP TIME-slider value=0,5
total program step times: fade time=2,4s , step time= 4s
9.Select the type of the advancement for your program in the Trigger section.You can choose from:
+1 STEP-button = manually at each press of the button; Fade Time is active.
AUTO-button = automatically, using the program timing.
AUDIO-button = in sound-to-light mode, following the beat of the music source inserted at the rear of the controller, fade time is active.
10.Press the ENTER-button to confirm your selection of the mode,the sign"*R.PRG.008*" will appear on the Program Display (R is flashing).

Note that the BLACKOUT LED is On on the BLACKOUT- button and that pressing the button will cause all active projectors to go into blackout mode.
You can change the fade and step time if you wish
11.Press the FADE TIME-button (the LED shines) and use the FADE TIME-slider to set the fade time (0,1-9,9s)
12.Press the STEP TIME-button (the LED shines) and use the STEP TIME-slider to select the step time (0,1-9,9s).
13.You can change the type of the trigger by using the 3 modes described above (+1STEP,AUTO,AUDIO buttons)
14.Press the PROG. RELEASE-button (its LED is flashing whilst the scene is active) to end the current running program.

NEXT-button
Using this button allows you to change the active program or temporarily put an additional scene to the current state.Repeat steps 1 to 13 to activate a program using your current projectors.

14.Press the NEXT-button in the Effects section.The button LED flashes and the displays show"*SEL. PROG. OR SCN.".*
15.Press the SCENE-button if you want to use a scene or the PROGRAM-button if you wish to change the current program.The scenes can be transfered to other projectors not included in the current program and the effects superimposed onto the current program.
16.Pres the + button or -button in the Effect section until you have selected the number of the scene or program which you wish to use in place or to superimpose over the active (e.g. *R.PRG.010*).
17.Press the FIXTURE-buttons 1-12 to select the projectors (you can use the ALL-button or CLR-button) you wish to use in the next scene or program (LEDs On).
18.Press the ENTER-button,the sign"*SELECT*" will disappear.
19.Press the FADE TIME- button to change the speed at which the projectors move or to activate the dimmer. Use the FADE TIME- slider to adjust the desired values on the Program Display.
20.Press the ENTER-button to confirm selection.The Program Display will show sign "*R.PRG.010*" (R.is flashing). Repeat the steps 13-20 as many times as required.
Note that since you currently have both a scene and a program active, the LEDs for the respective PROGRAM RELEASE- button and SCENE RELEASE- button flash and you can end each of the two independently of the other.

9.Manual control of the projectors if the scene or program is active

Any projector can be operated manually whilst either a scene or a program is currently active.
When a scene or program is running, press the relative FIXTURE-button 1-12 of the projectors you wish to control manually, and proceed as described in section **Manual control of the projectors.**
Manually selected projector will repond to your direct movement commands from the controller, and will also respond to its other parameters to the currently active scene or program.
When you take manual control of a projector the LED relative to the MANUAL RELEASE- button will begin to flash.
To return the projectors to the control of the active scene or program press the MANUAL RELEASE-button.

10.Modifying a created program

You can modify previously recorded programs or scenes using the INSERT-button and DELETE-button.

INSERT-button

By this function you can insert a step into a previously recorded program.
1.Press the CLEAR-button until the Function Display shows"--------".
2.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of these two buttons will flash, indicating the controller is in programming mode.
3.Press the PROGRAM-button.The displays show "*SELECT PROG.01*"
4.Press the +/-buttons in the Effects section until you reach the program you wish to change (e.g. *SELECT PROG.04"*)
5.Press the ENTER-button ,the displays show "*SELECT STEP.01*"
6.Pres the +/- buttons in the Program section until reach the step prior to the one where you wish to insert your new step (eg. *SELECT STEP.05* - the previous step 5 becomes step 6).
7.Press the INSERT-button (its LED is on).
8.Press the ENTER-button.
9.Press the SCENE-button to select scene you wish to associate with the step (its LED is on)
10.Pres the +- buttons in the Effects section until you reach the scene which you wish to insert (eg. *SELECT SCN.005*).
11.Press the ENTER-button,to confirm selection.The displays show"*SELECT TIME*".
12.Press the FADE TIME- button and use the FADE TIME-slider to adjust the fade time that you wish to use between the new step and the following step.
13.Press the STEP TIME-button and use the STEP TIME-slider to adjust step time for the new step.
14.Press the ENTER-button to insert the new step in the program.
15.Simultaneously press the LOAD/SET UP and SAVE buttons to exit the programming mode.

DELETE-button

By this function you can delete a step from the program.
1.Press the CLEAR-button until the Function Display shows"--------".
2.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of these two buttons will flash, indicating the controller is in programming mode.
3.Press the PROGRAM-button.The displays show "*SELECT PROG.01*"
4.Press the +-buttons in the Effects section until you reach the program you wish to change (e.g. *SELECT PROG.04*).
5.Press the ENTER-button ,the displays show "*SELECT STEP.01*"
6.Pres the +- buttons in the Program section until you reach the step you wish to remove from the program eg. *SELECT STEP.05* (the previous step 5 becomes step 4).
7.Press the DEL-button (its LED is on).
8.Press the ENTER-button.This program step is permanetly deleted.
9.Simultaneously press the LOAD/SET UP and SAVE buttons to exit the programming mode.

Once created program, you can overwrite step by step or cut down.
For example,you want to cut down the program 11 at step 10:
1.Press the CLEAR-button until the Function Display shows"————".
2.Simultaneously press the LOAD/SET UP and SAVE buttons, the LEDs of these two buttons will flash, indicating the controller is in programming mode.

3.Press the PROGRAM-button.The displays show „*SELECT PROG.01*“
4.Press the +- buttons in the Effect zone until you reach the program you wish to change (e.g. *SELECT PROG.11*).
5.Press the ENTER-button ,the displays show „*SELECT STEP.01*“
6.Pres the +- buttons in the Effect zone until you reach the step you wish to stop the program
eg. *SELECT STEP.10* .
7.Press the DEL-button (its LED is on).
8. Simultaneously press + - buttons for short time.(DEL-button LED is off)The program is finished at this step.The character “E” is blinking.
Note:The following steps 11,12,13....are existed(if were created) but the step 10 is “stopper”- character “E”.
If you press ENTER-button and assign the certain scene to the step 10,you can continue on step 11,12...
In fact, you don´t delete the next steps,only assign the “stopper”.
9.Simultaneously press the LOAD/SET UP and SAVE buttons to exit the programming mode.

11.Operating the memory card

Unpack the Memory Card and plug it into the connector on the top panel.
Important shows should always be saved on the memory card. Only in this way you can avoid that data is lost due to misuse or accidental deletion. The capacity of the memory card (1 Mb) is enough to save all 500 scenes and the program data.

11.1.Saving data to the memory card

Caution: If you save data on the memory card, all data that has been saved on the memory card before will be lost.
Press the SAVE-button until the display shows **"***Save Data***"**. Press the ENTER-button and hold it for approx. 5 seconds. The controller saves the data on the memory card,the SAVE-led will flash and the displays will go off . The operation takes approx. 10-15 seconds.

11.2.Loading data from the memory card into the controller- memory

Caution: If you load data into the controller-memory, all data (except factory setup) that has been in the memory before will be lost.
1.Press the LOAD/SET UP-button until the display shows **"***LOAD DATA***"**.
2.Press the ENTER-button and hold it for approx. 5 seconds. The controller loads the data into the controller-memory. The displays will go off.
The operation takes approx. 10-15 seconds.

12.Returning to the factory setup

Caution:The operation described below will permanently erase all settings which have been set by the operator, you should save the controller memory contents to the memory card before you make a reset.
If you have important show data in controller memory,it is absolutely necessary to save data on the memory card (backup)!
1.Press the **LOAD**/**SET UP**-button until the displays show **"***LOAD FAC. SETUP***"**.
2. Press the **ENTER**-button and **All**-button together hold it for approx. 5 seconds until the contents of the memory are reseted.

13. Technical specifications

Power supply:	115V, 200-230V AC, 50/60Hz ~
Fuse:	0,063A@230V
Fuse:	0,120A@120V
Power consumption:	15 VA
Number of control channels:	192
Sound input:	¼” mono Jack
Audio-sensitivity:	0.5 - 2 V
DMX 512-output:	via two 3-pin XLR-connectors
Recordable programs:	40 with up to 99 steps each
Recordable scenes:	500
Controller RAM:	1Mb
Memory card:	1Mb
Dimensions (LxWxH):	483 x 176 x 70 mm
Weight:	2 kg

14.Cleaning and maintenance

DANGER!
Disconnect from the mains before starting any maintenance work

There are no servicable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.
Never use solvents or aggressive detergents in order to clean the device! Rather use a soft damp cloth.

15. Projector library

Manufacturer	Name	Name in the controller	Mode	Channels
	User defined	SPOT 1	-	-
	User defined	SPOT 2	-	-
	User defined	SPOT 3	-	-
ROBE show lighting	Spot 150 XT	SPOT 150	Mode 1	8
ROBE show lighting	Wash 150 XT	WASH 150	Mode 1	8
ROBE show lighting	Recessed Wash 150	RWASH 150	Mode 1	8
ROBE show lighting	Spot 160 XT	SPOT160	Mode 1	9
ROBE show lighting	Recessed Spot 170	RSPOT 170	Mode 1	12
ROBE show lighting	ColorSpot 170 AT	CSP170AT	Mode 1	12
ROBE show lighting	Spot 250 XT	SPOT 250	Mode 1	16
ROBE show lighting	Wash 250 XT	WASH 250	Mode 1	16
ROBE show lighting	ColorSpot 250 AT	CSP250AT	Mode 4	16
ROBE show lighting	MSZoom 250 XT	MSZoom. 250	Mode 1	16
ROBE show lighting	Image Spot 250 AT	ISP250AT	16 bit	10
ROBE show lighting	Spot 575 XT	SPOT 575	Mode 1	16
ROBE show lighting	Wash 575 XT	WASH 575	Mode 1	16
ROBE show lighting	DJ Scan 150 XT	DJ SC. 150	-	4
ROBE show lighting	DJ Roller 150 XT	DJ RO.150	-	4
ROBE show lighting	DJ Scan 250 XT	DJ SC. 250	-	6
ROBE show lighting	DJ Roller 250 XT	DJ RO.250	-	6
ROBE show lighting	Scan 250 XT	SCAN 250	Mode 1	16
ROBE show lighting	Scan 575 XT	SCAN 575	Mode 1	16
ROBE show lighting	Scan 1200 XT	SCAN 1200	Mode 1	16
ROBE show lighting	Dominator 1200 XT	DOMINATOR	-	12
ROBE show lighting	ColorMix150 AT Profile	CM150ATP	-	4
ROBE show lighting	ColorMix150 AT Wash	CM150ATW	-	3
ROBE show lighting	ColorMix 240 AT	CMX240AT	Mode 2	8
ROBE show lighting	ColorMix 250 AT	CMX250AT	Mode 2	10
ROBE show lighting	ColorMix 550 AT	CMX550AT	Mode 2	8
ROBE show lighting	ColorMix 575 AT	CMX575AT	Mode 2	11
ROBE show lighting	ClubScan 150 CT	CSC.150CT	-	6
ROBE show lighting	ClubRoller 250 CT	CR. 150CT	-	6
ROBE show lighting	ClubScan 250 CT	CSC.250CT	-	6
ROBE show lighting	ClubRoller 250 CT	CR. 250CT	-	6
ROBE show lighting	ClubSpot 250 CT	CSP. 250CT	16 bit	10
ROBE show lighting	ClubWash 250 CT	CWA. 250CT	16 bit	10
ROBE show lighting	Ecolor 250 XT	ECOL.250	-	6
ROBE show lighting	Beam 250 XT	BEAM 250	-	4
ROBE show lighting	Funky	FUNKY	-	3
ROBE show lighting	Fusion	FUSION	-	3
ROBE show lighting	HipHop	HIP HOP	-	4

16. Appendix

We believe you will enjoy your DMX CONTROL 192. We assure you will enjoy this product for years if you follow the instructions given in this manual.
If you have any questions and comments, please do not hesitate to contact us.