700/B **XS** **1200**

EXCESS

INTRODUCTION

Thank you for using the XS, our moving head fixture completely manufactured in light alloy and plastic material, with an optic system of incredible performance and a modern and reliable electronics, can be smartly used anywhere.
To make the most of its possibilites and for a correct functioning of this unit in the years to come, we suggest you to read carefully this manual before connecting or putting the spot into use. By doing so you will gain experience with its commands and connections and you will be easily able to use it.

YOUR REFERENCE

Always remember to give the serial number and to specify the model any time you address the seller for information or assistance.

BASIC KIT (all versions)

- Projector
- Power connector
- User's manual
- Studio Due warranty
- Metal fixing plate
- Lamp (upon request)

AVAILABLE VERSIONS
art. 03061: XS1200 • art. 0306: XS700/B

SAFETY INFORMATION

⚠ **WARNING**

**READ ALL CAUTIONS AND WARNINGS PRIOR TO OPERATE THIS EQUIPMENT.
INSTRUCTION TO PREVENT INJURY OR DAMAGE DUE TO ELECTRIC SHOCK, FIRE, MECHANICAL HAZARDS AND UV RADIATION HAZARDS.**

•PROTECTION AGAINST FIRE
1) This equipments are designed for use with the following lamps:
   HTI 1200 S XS (XS1200)
   HTI 700 DE XS (XS1200)
   HMP 575 DE XS (XS1200 and XS700/B)

USE COMPLETELY EQUIVALENT LAMPS ONLY!

2) Maintain minimum distance of 0.3 meter from walls or any other type of flammable surfaces.
3) Maintain minimum distance to lighted objects of 1.0 meter.
4) Replace fuses only with the specified type and rating.
5) Do not install the spot close to heat sources. Do not lay the connection cable on the spot when it is warm.

•PROTECTION AGAINST ELECTRIC SHOCK
1) This equipment must be earthed.
2) Class I equipment. The power supply cord includes a protective earthing conductor as part of the cord. See page 5, pict.1.
3) For connection to the mains supply proceed as pict.1 page 5.
4) Disconnect power before lamp's replacement or servicing as page 6 (service personnel).
5) Do not install the spot outdoor, directly exposed to the rain or moisture.

•PROTECTION AGAINST MECHANICAL HAZARDS
1) Use safety chain when fixing this equipment (page 4).
2) Hot lamp explosion hazard. Do not open the equipment for five minutes after switching off.
3) Equipment surface may reach temperature up to 85°C. Allow about five minutes before handling.
4) Replace the lamp if it is damaged or thermally deformed and, in any case, do not exceed the lamp's life.

•PROTECTION AGAINST UV RADIATION HAZARDS
1) Do not start on this equipment without lamp enclosure or if the protection screens, or ultraviolet screens are damaged.
2) The protection screens, the lenses, or the ultraviolet filters must be replaced if they are visibly damaged and their effectiveness has been reduced, for example, by cracks or deep scratches.
3) Do not look directly at the lamp while lamp is on.

XS 1200 TECHNICAL FEATURES

• LAMPS (OSRAM)

Lamps	HMI 1200W/S XS	HMI 700W/DE XS	HMP 575 DE XS
Colour temperature	6000° K	5.600° K	6.000° K
Lamp life	750 hours	500 hours	500 hours
Working voltage	95V	70V	90V
Working current	12.7A	10A	7.7A
Luminous flux	110.000 lm	56.000 lm	60.000 lm
Colour rendering index	(Ra) > 90	(Ra) > 85	(Ra) > 85

Remote lamp ON/OFF by DMX. Reset by DMX and/or panel
Automatic lamp re-strike
• PAN TILT
Movement: stepper motor 16 bit resolution:
460°, 360°, 180° Pan, 270°, 180° Tilt
Pan/Tilt excursion: 3 different by setting menu
Ramp: fast/slow by DMX
Encoder close loop with auto-repositioning
• COLORS
colors wheel A: 5 colors + 6 bicolors continuous position + rainbow
colors wheel B: 3 colors + 3 bicolors
2 conversion filters (similar to CTO and CTB)
• GOBOS
2 rotating indexable gobos wheels: 5 gobos + white (max gobo tickness 4mm)
3 static printed glass gobos
• DIMMER
100-60% electronic dimmer - 60-0% mechanical dimmer
• SHUTTER
Fast shutter with electronic dimmer function (-40% lamp power)
• STROBE
1-15 Flashes/sec.
• MOTORIZED ZOOM
continuous positioning (17°-27°)
• MOTORIZED FOCUS
1m-∞
• ROTATING PRISM
2 rotating prisms
• IRIS
continuous positioning
• FROST
2 frost filters +1 continuous frost
• SETTING
Built-in microprocessor with LED display and graphic LCD
• DISPLAY
graphic LCD with flip function (can be rotate through 180°)
• INPUT SIGNAL
DMX512-RS485 Opto-isolated
• LAMP SUPPLY
electronic ballast in 100Hz square wave with power lamp stabilizer
• POWER SUPPLY
electronic power factor corrector, 95÷260Vac, 47÷63Hz
• DMX CHANNELS (20 channels)

ch1	= iris	ch11	= focus
ch2	= color	ch12	= filters
ch3	= gobo A	ch13	= gobo B
ch4	= strobe/shutter	ch14	= gobo B pos.rot.
ch5	= pan coarse	ch15	= gobo A pos.rot.
ch6	= pan fine	ch16	= zoom
ch7	= tilt coarse	ch17	= glasses
ch8	= tilt fine	ch18	= frost
ch9	= dimmer	ch19	= prisms
ch10	= motor speed	ch20	= reset/lamp off/PT ramp

• AVAILABLE MODEL
03061: XS1200 electronic ballast

XS 700/B TECHNICAL FEATURES

• LAMP (OSRAM)

Lamps	HMP 575 DE XS
Colour temperature	6.000° K
Lamp life	750 hours
Working voltage	90V
Working current	7.7A
Luminous flux	60.000 lm
Colour rendering index	(Ra) > 85

Remote lamp ON/OFF by DMX. Reset by DMX and/or panel
Automatic lamp re-strike
• PAN TILT
Movement: stepper motor 16 bit resolution:
460°, 360°, 180° Pan, 270°, 180° Tilt
Pan/Tilt excursion: 3 different by setting menu
Ramp: fast/slow by DMX
Encoder close loop with auto-repositioning
• COLORS
colors wheel A: 5 colors + 2 bicolors continuous position + rainbow
colors wheel B: 2 colors + 1 bicolor + 2 color filters conversion (similar to CTO / CTB)
• GOBOS
1 rotating indexable gobos wheels: 5 gobos + white + rainbow (max gobo tickness 4mm)
1 static gobos wheels: 5 gobos + white (max gobo tickness 4mm)
3 static printed glass gobo
• DIMMER
0-100% mechanical dimmer - fast shutter
• STROBE
1-15 Flashes/sec.
• MOTORIZED ELECTRONIC ZOOM
continuous positioning (17°-27°)
• MOTORIZED ELECTRONIC FOCUS
1m-∞
• IRIS
continuous positioning
• ROTATING PRISM
• FROST 1 fixed medium frost
• SETTING
Built-in microprocessor with LED display
• DISPLAY
with flip function (can be rotate through 180°)
• INPUT SIGNAL
DMX512-RS485 Opto-isolated
• LAMP SUPPLY
electronic ballast in 100Hz square wave with power lamp stabilizer
• POWER SUPPLY
electronic power factor corrector, 95÷260Vac, 47÷63Hz
• DMX CHANNELS (17 channels)
ch1   = iris
ch2   = color
ch3   = gobo A
ch4   = strobe/shutter
ch5   = pan coarse
ch6   = pan fine
ch7   = tilt coarse
ch8   = tilt fine
ch9   = dimmer
ch10 = motor speed
ch11 = focus
ch12 = filters
ch13 = gobo B
ch14 = gobo B pos.rot.
ch15 = prism/frost + colors
ch16 = zoom
ch17 = reset/lamp off/PT ramp

• AVAILABLE MODELS
0306:   XS700/B

STEP 1

STEP 2

STEP 3

0°
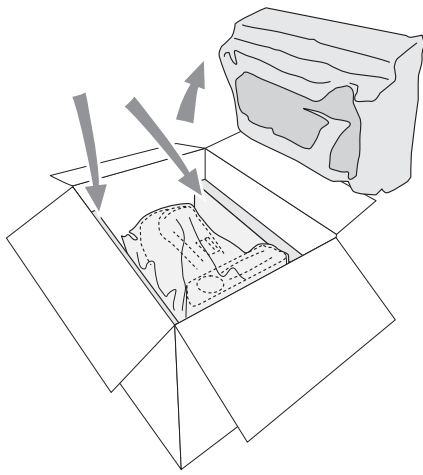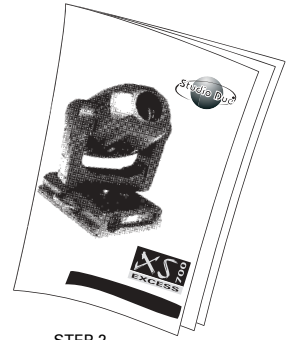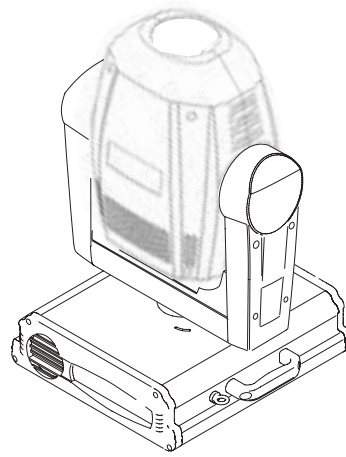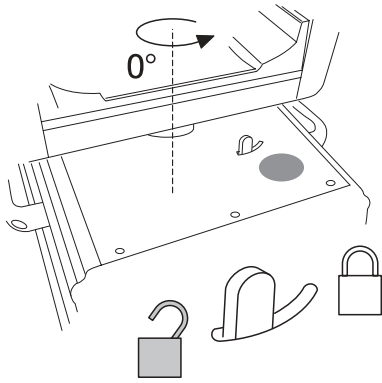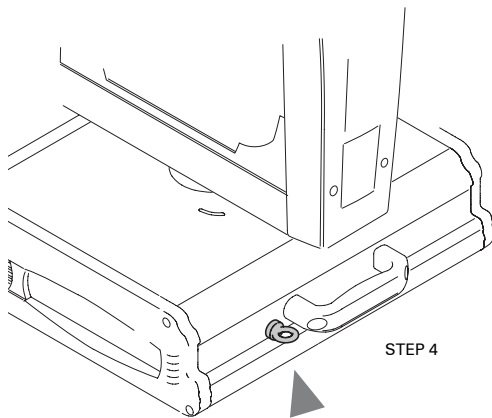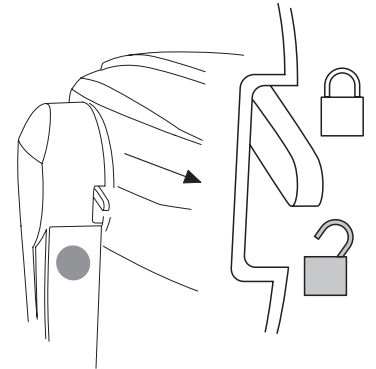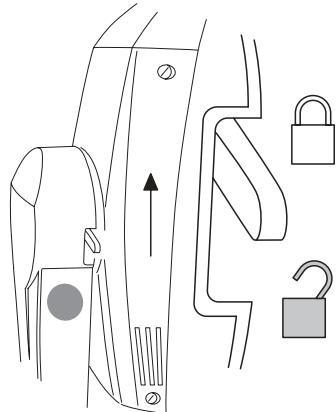
STEP 4
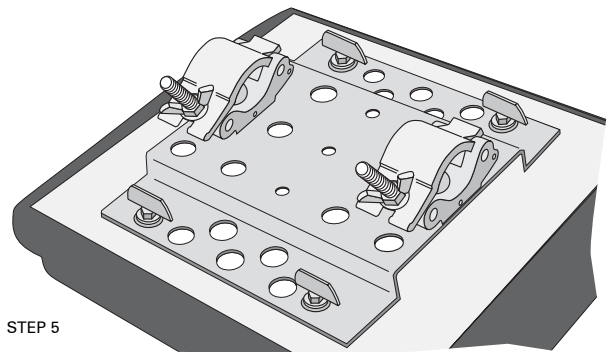
STEP 5
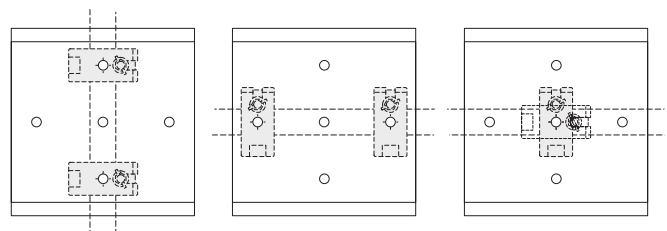
BEFORE USING

1) Open the top of the box, take out the foam protection and the sides polystyrene and put it on a flat plane to operate.
   Don't handle the fixture by taking it by the bracket or the head, but always by using the special handles on the base.
2) Read all cautions and warnings on the user's manual and particularly page 1 prior to install this equipment.
3) Release the Pan and Tilt lock mechanism. For your following requirement, lock the head in vertical or horizontal position.
4) For spot installation to a truss, check carefully that the security ring is well fixed with a chain to both truss and unit.
5) On the metal fixing plate (with 1/4 turn fasteners) you can rig the fixture with the aluminium clamps (optional).

⚠ WARNING

Check that the spot has not been damaged during transport.
If it has been damaged or it does not work, address the seller.
Whether the spot has been shipped to you directly, please contact the shipping company.
Only the consignee (person or company) can claim for these damages.

MAIN FUSE - 6X30 TYPE 12A T (XS700/B)
MAIN FUSE - 2X5X20 TYPE 10A T (XS1200)

POWER INPUT
L = LIVE (Brown)
N = NEUTRAL (Blue)
⏚ = EARTH (Green yellow)

CE **Studio Due**® XS1200 art. 03061
active Power Factor Corrector
Keep at least a distance of 0.3 mt between the apparatus
and inflammable surface nearby
Disconnect the unit from power before servicing

95-260 Vac; 17-7A; 50-60Hz   SN   QC

pict. 1/a

MAIN SUPPLY CONNECTION

⚠ **WARNING**   **The equipment must be earthed. If this rule is not followed, the warranty will be void.**

Read all cautions and warnings on page 1 prior to install this equipment. Particularly, read the follow:

Before connecting the equipment to the power system:
Make sure that the mains voltage and frequency are in the right range (pict.1/a)

- **tension from 95V to 260V**
- **frequency from 50Hz to 60Hz**

The power supply connection is shown in pict.1.

1) Do not install the spot close to heat sources. Do not lay the connection cable on the spot when it is warm.
2) This unit must be positioned as to allow its ventilation. Be careful not to occlude the in-out air grilles.
3) The unit must be positioned at least 30cm. from walls or other flammable surfaces.
4) External surface temperature:

- After 5 minutes work; Tc=65°C.
- Once the thermic balance has been obtained; Tc=85°C.

5) The protection screens, the lenses, or the ultraviolet filters must be replaced if they are visibly damaged and their effectiveness has been reduced, for example, by cracks or deep scratches.
6) Replace the lamp when the lamp life is exhausted (500....1000 hours) to avoid bad performances of the fixture or that the optic system is damaged by the lamp explosion (see "LAMP'S INSTALLATION" chapter).
7) Clean regularly the in-out air grilles, the lenses and the gobos (see "MAINTENANCE AND PERIODICAL CLEANING" chapter).
8) In case of installation of the spot to a truss, check carefully that the security ring is well fixed with a chain to both truss and unit. Do not handle the spot by taking it by the bracket, but always by the base with the special handles.
9) Do not install the spot outdoor, directly exposed to rain or moisture.

LAMP'S INSTALLATION OR REPLACEMENT

⚠ **WARNING**   **In case of replacement of the lamp or maintenance, do not open the fixture unless 5 minutes have passed from the switching off.**

1) Disconnect power before lamp's installation, replacement or servicing (service personnel). Wear gloves and goggles.
2) Unscrew the pawls (A) on the back of the head fixture. (pict.2)
3) Open the lamp's holder on the back of head fixture.
4) Insert the lamp into the lamp holder socket (pict.2a). **Don't touch the quarz bulb with fingers**. If this happens, clean the bulb before use with cloth and alcohol. Polish with a dry cloth.
5) **Taking care that the protuberance of the bulb is not set towars the mirror reflector and the condenser lens**.
5) Close the lamp holder; one security switch will prevent the switching on.

PAWL (A) TO OPEN THE LAMP HOLDER

pict. 2

OK

OK
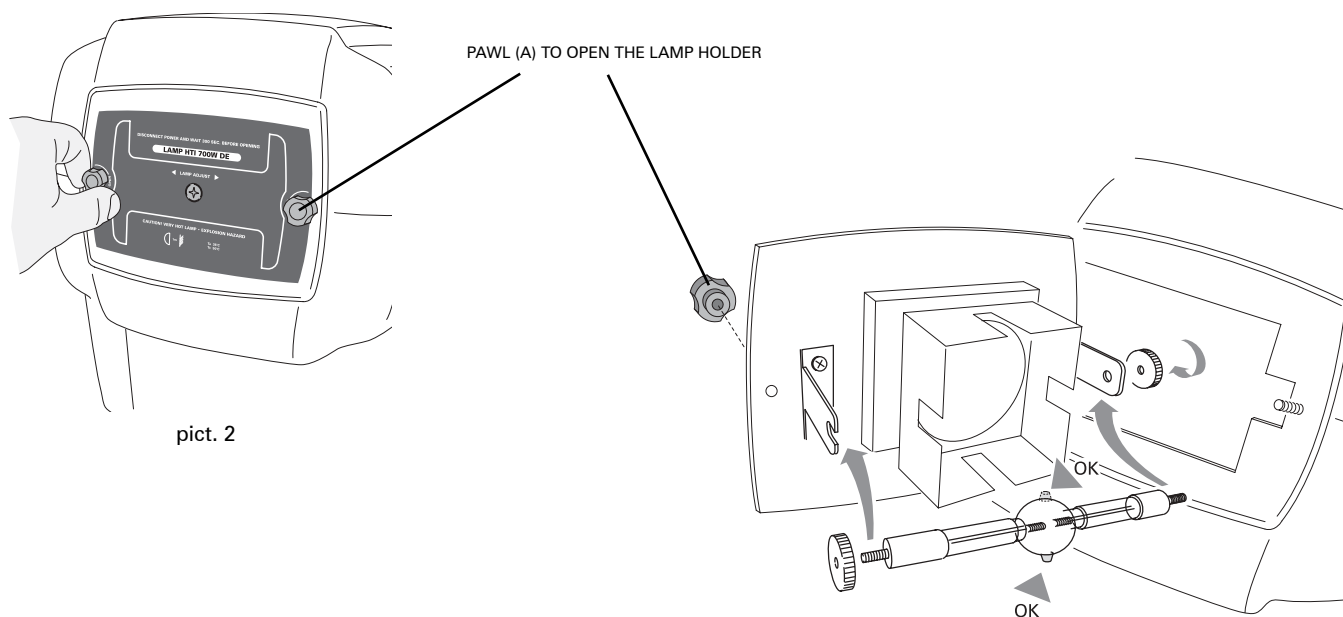
pict. 2a

LAMP ADJUST

Operate on the lamp setting nuts (lamp adjust) on the lamp holder (pict.3). So to have the maximum of the brightness and maximum uniformity of the glow discharge.

LAMP SETTING SCREW

pict.3
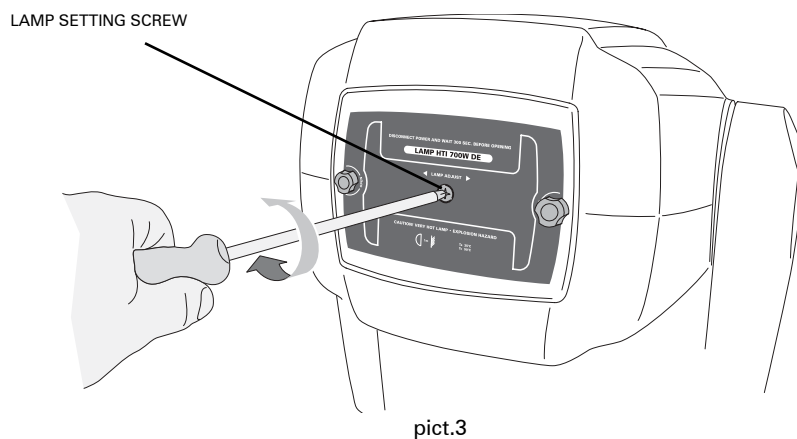
CONNECTION TO THE DMX SIGNAL

The connection of the DMX signal to the XS must be made by using the signal input XLR 5 pin or XLR3 pin connectors which are located on the rear panel of the XS. (pict.4)

The pin nomenclature of the connectors for the connection to the DMX signal is listed in the table. (pict.4/a)

In order to avoid any problem in the signal transmission, it is warmly suggested to use a cable for high speed data transmission.

The usage of a normal microphonic or audio cable is suggested only for lines max 100 mts long. The best performances are with microphonic cable of mm2x0.25 + ground or with cable for data transmission. If the lines have a total length over 150-200 mts it is suggested to use our DMX Repeater Amplifier.

pict. 4

DMX OUT

DMX IN
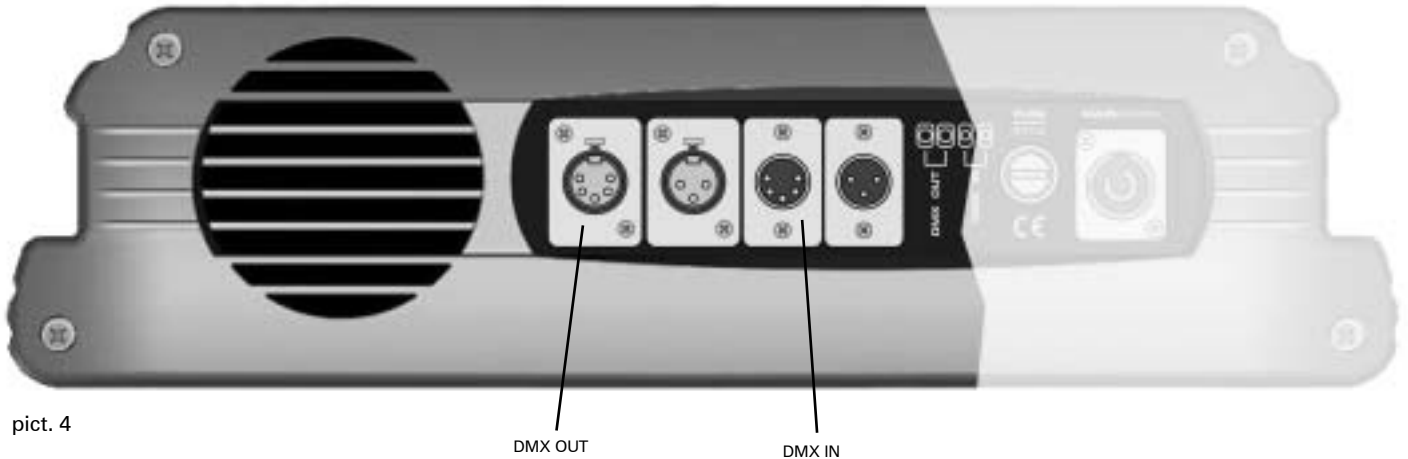
PIN	WIRE	SIGNAL
1	SHIELD	GROUND/RETURN/OV
2	INNER CONDUCTOR	DATA COMPLEMENT (-, INVERTED)
3	INNER CONDUCTOR	DATA TRUE (+, NON INVERTED)
4		N.C.
5		N.C.

pict. 4/a

DMX TERMINAL LINE   ⚠ WARNING

The wrong connection of the terminal line or its non-connection are probably the most frequent reasons for the defective functioning of the DMX line. The terminator is a resistor fitted between the two "data" lines (pins 2 and 3 of an XLR 5 or XLR 3 pin connector) at the end of the cable furthest from the transmitter. The terminator resistor should have the same value as the impedance of the connection cable.
We supply a terminal with a 100 Ohm resistor.
It is recommanded that all DMX 512 systems have the termination resistor at the and of the line.

SUMMARY OF THE PROGRAMMING FUNCTIONS OF THE XS1200
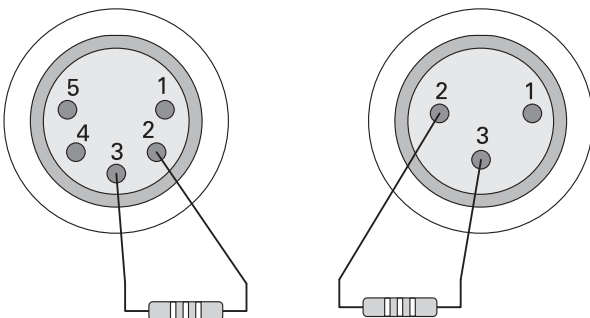
pict. 5

PRESS SIMULTANEOUSLY TO RESET THE FIXTURES

CONTROL PANEL OF THE XS 1200

To control the fixture, to setup it, to check the DMX line and the lamp, on the front panel of the fixture there are a graphic 128x64pixel lcd display, 3 led BCD display, 4 led and 4 keys.

The keys are used into dynamic menus. Their functions change with the working contest and their options are displayed in the external rows of the lcd display.

About some seconds after the switching on, the Studio Due's logo be shown on the display. Afterwards the standard specifications will appear:

Version	**1.00**	**the release of the firmware**
Serial	**10001**	**the serial number of the fixture**
DMX 001	**Next 021**	**the start DMX address of the fixture and the next DMX free address**
Lamp TENT 0	**1200W 92V**	**the tents to strikes the lamp and the working parameter of the lamp**
press any key		**press any key to select one of the available menus**
to reset the fixtures		**press simultaneously the two keys between the LCD display and the led BCD**

AVAILABLE MENUS

- **ADDRESS**   to assign the DMX-512 address
- **PAN-TILT**   to control the pan and tilt parametres
- **DIMM/SHUTT**   dimmer/shutter values
- **HRS COUNT**   lamp and fixtures counters
- **DISPLAY**   brightness and flip controls
- **UTILITY**   DMX values controls/language selections/reset
- **DMX SPEC**   remote reset/remote lamp switch off/ramp
- **SERVICE**   initialization of the fixture/calibration of the wheels
- **BALLAST**   parameters of the lamp/strikes control

To select any of the given options, press any key. The dynamic keys have the OK, ESC, Up and Down options.

Press the ESC key to go back to the main options without making any change; press OK to select the showed option, press Up or Down keys up to when the required one is shown

ADDRESS (to assign the first channel used by the fixture)
To select the DMX address press **OK**.
To modify the address press Down and Up buttons and, once the required address has been selected, press and press **OK** to confirm the inserted value. To go back to the options without making any change, press the **ESC** button.

PAN-TILT (to select pan and tilt inversion, resolution 8/16 bit, feedback)
To select the pan and tilt options press **OK**.
It is possible to select the pan inversion, the tilt inversion, the bit of resolution (8/16 bit), the degrees of the pan revolution (MIN/MED/MAX) , the degrees of the tilt revolution (MIN/MAX), the ramp (SLOW/FAST) and the swap between pan and tilt.
 It is possible to set 20 (16 bit) or 18 channels (8 bit).
It is also possible possible to set the speed of the ramp. You can set SLOW RAMP and FAST RAMP. The slow ramp is used when you want an extreme uniformity of the movements (live and television use), the fast ramp is used when the very fast movement is the most important thing (disco use or with a particularly music). To go back to the options without making any change, press the **ESC** button.

DIMM/SHUTT (to select dimmer mode, timeout)
To select the dimmer/shutter options press **OK**.
It is possible to select the dimmer mode (MOD1/MOD2) the shutter mode (MOD1/MOD2), the insertion of the shutter during the color change and the shutter change, the time-out when the DMX signal it is not present. To go back to the options without making any change, press the **ESC** button.

HRS COUNT (To visualize the values of the counters)
To visualise the number of hours of the fixture and of the lamp **OK**.
It is only possible to show the counters, all the keys is used to go back to the options without making any change.

DISPLAY (to flip the displays, to control the brightness)
To select the options of the display press **OK**.
It is possible to choice the FLIP option, the auto-shutdown of the display and to control the brightness of the control panel. To go back to the options without making any change, press the **OK** button.

UTILITY (to visualize the DMX values, to select the demo mode, to choiche the language)
To visualise the utilities, to choice the language, the demo mode and the test of the fixture press **OK**.
Use Down and Up buttons to change the mode and, once the required one has been selected, press and keep ENTER pressed up to when the display stops flashing (it flashes to indicate that the selected option is different from the pre-set one). It is possible to set: no (normal) normal pan, PI (pan inversion). To go back to the options without making any change, press the MENU button.

DMX SPEC (to activate/deactivate the reset of the fixture, the control of the lamp control and to selct the ramp by the DMX controller)
To choice the DMX options press OK.
It is possible to activate the remote reset of the fixture (Rese), the remote switch-off of the lamp and theremote selection of the ramp.
To go back to the options without making any change, press the **OK** button.

SERVICE (to calibration of the wheels)
To reset the counter of the lamp and to calibrate the wheels press OK.
The sub-menu will be showed: Format, reset lamps hours and calibration. The calibration has two possible choices: Calibrat 1 and Calibrat 2. Ref. to page 9 for details. The offset is the value added to the reset position of the wheel so to change the position of the wheel after the reset procedure. These values will be stored in the flash memory of the fixtures.
To go back to the options without making any change, press the MENU button.

BALLAST (to modify the options of the electronic ballast)
To verify the working parameters of the lamp and to change the type of the lamp press **OK**.
The showed parameters are: the voltage, the current, the PFC voltage, the effective power of the lamp, the number of the possible tentative to strike the lamp and the lamp's type.
In the advanced menu it is possible to modify the number of the strikes and the lamp's type.
To go back to the options without making any change, press the **OK** button.

Menu Options of the XS 1200 (LCD graphic display)

```
———— XS 1200 ————
Version                    1.00
Serial                     10001
DMX001                     Next 021
Lamp  TENT                 1200W  92V

Press any key
```

pict. 6

ADDRESS...
```
Chan DMX    01
Next Ch     021
Channels    20
```

PAN-TILT

Pan Inv	Y/N			
Tilt Inv	Y/N			
Resolution	8/16b			
Advanced	->	Range ->	PAN	MIN/MED/MAX
			TILT	MIN/MAX
		Feedback	Y/N	
		Swap	Y/N	
		Ramp	SLOW/FAST	

DIMM/SHUTT

Dimmer	MOD1/MOD2		
Shutter	MOD1/MOD2		
Rotation	MOD1/MOD2		
Advanced	->	Shutter COL	Y/N
		Shutter GOBO	Y/N
		Time-Out	Y/N
		Time.... ->	Time DMX
			3 Sec

HRS COUNT
```
Hours Counter
Lamp      0
Fixture   0
```

DISPLAY

Flip	Y/N		
Advanced	->	Auto Shut	Y/N
		Brightness ...	Brightness
			0 =============== MAX

UTILITY

DMX Rd/Wr ->		Parameters....	StCode ———-
			Channels ———-
			Time ——— ms
		Read....	001 : - - - IRIS
			002 : - - - COLOR
			......
			512 : - - -
		Write....	IRIS : - - -
			COLOR: - - -
			......
			RESET: - - -
Advanced ->		Demo ->	Mode DMX/DEMOX
		Speed …	Demo Speed
			01.0 sec
		Language	ENG/ITA
		Test	NO/YES
		Fixture Reset	

DMX SPEC
```
Reset       Y/N
Lamp Off    Y/N
Ramp Sel    Y/N
```

SERVICE

Format
Reset Lamps Hours
Calibration ->   Calibrat 1 ->   C/E Wheel
                                                                  Gobo Wheel
                                                                       Prism Wheel
                                    Calibrat 2 ->   Focus
                                                                Shutter
                                                                Iris
                                                                Frost   Calib YYYY
                                                                                              Offset   +127

BALLAST

Parameters …   V Lampd   V

                                   I Lampd   A

                                     V PFC   V

                                    Power   W

                                      Tent   Nr

                                      Lamp   xxxx

Advanced ->   Strikes …   Strikes Count

                                                                                                          Strikes   —-

                                      Lamp Type   ——-

NOTE

All the available lamp are:

- HMI 1200 S DE (Osram)
- HTI 700 DE (Osram)
- MSI 700 DE (Philips)
- HMP 575 DE - boosted to 700W (Osram)
- MSP 575 DE - boosted to 700W (Philips)

If on the ballast the power of 1200W is selected, the available lamp is only the lamp of 1200W:
- HMI 1200 S DE (Osram)

SUMMARY OF THE PROGRAMMING FUNCTIONS OF THE XS 700/B

Default message → CXXX (XXX= channel)
Press any key to access to the menu.
To select a menu and to change a numeric value press **UP** o **DOWN**.
To select a menu and to confirm the value/option selected press **ENTER**.
To go back to the options without making any change, press the **ESC** button.

Addr   *** DMX address value ***
          Addr   → XXX   (Starting DMX address)

PT →   *** Pan/Tilt ***
          Ipan   → Off/On   (Pan Inversion)
          Itilt   → Off/On   (Tilt Inversion)
          S-PT   → Off/On   (Swap Pan – Tilt)
          Prng   → High/Low/Mid   (Pan – Pan Range Max Excursion)
          Trng   → High/Low   (Tilt – Tilt Range Max Excursion)
          Fdbc   → Off/On   (Encoder Selected/Deselected)
          Reso   → 16-b/8-b   (Pan Tilt Resolution – 8/16 Bit)
          Ramp   → Fast/Slow   (Ramp select)

Effs →   *** Effects ***
          SH-C   → Off/On   (Shutter on color change)
          SH-G   → Off/On   (Shutter on gobo change)
          Dmmd   → Mod1/Mod2   (Dimmer 0 …255 Closed …Open / Open… Closed)
          Shmd   → Mod1/Mod2   (Ch strobe 255 shutter closed / strobe max.)

Hscn →   *** Counters ***
          Lhrs   → YYY   (YYY = Lamp's hours)
          Fhrs   → ZZZ   (ZZZ = Fixture's hours) + UP DOWN → Reset lamp's hours

Disp →   *** Display ***
          Flip   → Off/ON   (Flip display)
          Brgt   → br H   (H = Brightness level)
          Lshd   → Off/On   (Auto shutdown display and leds after 30sec)

Demo →   *** Demo ***
          Mode   → no/dm 1….dm n   (n = max number of games in memory)
          Spd   → AA"A   (AA"A = seconds delay time between scenes)

Dmsp →   *** DMX Special ***
          Rset   → Off/On   (reset of the fixture by DMX)
          Lamp   → Off/On   (shut-off the lamp by DMX)
          Ramp   → Off/On   (ramp's PAN/TILT selection by DMX)

Srvc →   *** Service ***
          Reset   → Reset of the fixture
          Test   → T-on   (Test of the fixture)
          ColC   → VVV   (VVV = Value of the calibration)
          …..
          Go2C   → VVV

XS 1200: USE IN DMX 512

If you want it is possible to choose a reduced resolution (8 bit) for the PAN/TILT motion of the XS 1200 by occupying 18 DMX channels, or a high resolution (16 bit) by occupying 20 channels.

8 or 16 BIT MODE SELECTION

From the main display, press a key, and use the **Up** and **Dn** keys up to when the option PAN/TILT is shown on the display, select it by pressing **OK** and the sub-menu will appear (Pan Inv, Tilt Inv, Resolution, Adavnced ->). With the Up and Down keys put in evidence the Resolution options, now press the SEL key. Choiche the 8b option and the press the ESC key for 8 bit performance To exit from the selected option without making any change press the **ESC** button.

When set to work at 8 or 16 bit the XS 1200 needs 18 or 20 channels to control the following functions and the correspondence channel/function is listed below. The complete listing of the DMX values is shown on appendix, page 15.

8 BIT / 18 CHANNELS

Channel No.	Spot Function
ch1	iris
ch2	color
ch3	gobo A
ch4	strobe/shutter
ch5	pan coarse
ch6	tilt coarse
ch7	dimmer
ch8	motors speed
ch9	focus
ch10	filters
ch11	gobo B
ch12	gobo B post. rot.
ch13	gobo A pos. rot.
ch14	zoom
ch15	glasses
ch16	frost
ch17	prism
ch18	reset/lamp off/PT ramp

16 BIT / 20 CHANNELS

Channel No.	Spot Function
ch1	iris
ch2	color
ch3	gobo A
ch4	strobe/shutter
ch5	pan coarse
ch6	pan fine
ch7	tilt coarse
ch8	tilt fine
ch9	dimmer
ch10	motors speed
ch11	focus
ch12	filters
ch13	gobo B
ch14	gobo B post. rot.
ch15	gobo A pos. rot.
ch16	zoom
ch17	glasses
ch18	frost
ch19	prism
ch20	reset/lamp off/PT ramp

CHANNELS ASSIGNMENT IN DMX 512 (8 BIT)

ADDRESS SELECTION

From the main display, press a key, and use the **Up** and **Dn** keys up to when the option ADDRESS is shown on the display, select it by pressing **OK** and the sub-menu will appear (Chan DMX, Next Ch, Channels). Use the Up and Down keys up to when the correct Address is shown on the display. Once you have set the required number store it by pressing the **OK** button. To exit from the selected option without making any change press the **ESC** button.

The following picture shows the correct channels to be used to drive 4 XS (8 bit, 18 channels) in DMX 512 (pict. 7).

Spot n° 1	Spot n° 2	Spot n° 3	Spot n° 4
001	019	037	055
Channels 1-18	Channels 19-36	Channels 37-54	Channels 55-72

The following picture shows the correct channels to be used to drive 4 XS (16 bit, 20 channels) in DMX 512 (pict. 8).

Spot n° 1	Spot n° 2	Spot n° 3	Spot n° 4
001	021	041	061
Channels 1-20	Channels 21-40	Channels 41-60	Channels 61-80

XS 700/B: USE IN DMX 512

If you want it is possible to choose a reduced resolution (8 bit) for the PAN/TILT motion of the XS 700/B by occupying 15 DMX channels, or a high resolution (16 bit) by occupying 17 channels.

8 or 16 BIT MODE SELECTION

From the main display, press a key, and use the **Up** and **Dn** keys up to when the option PAN/TILT is shown on the display, select it by pressing **OK** and the sub-menu will appear (Pan Inv, Tilt Inv, Resolution, Adavnced ->). With the Up and Down keys put in evidence the Resolution options, now press the SEL key. Choiche the 8b option and the press the ESC key for 8 bit performance To exit from the selected option without making any change press the **ESC** button.

When set to work at 8 or 16 bit the XS 700/B needs 15 or 17 channels to control the following functions and the correspondence channel/function is listed below. The complete listing of the DMX values is shown on appendix, page 18.

8 BIT / 15 CHANNELS

Channel No.	Spot Function
ch1	iris
ch2	color
ch3	gobo A
ch4	strobe/shutter
ch5	pan coarse
ch6	tilt coarse
ch7	dimmer
ch8	motors speed
ch9	focus
ch10	filters
ch11	gobo B
ch12	gobo B post. rot.
ch13	prism/frost/colors
ch14	zoom
ch15	reset/lamp off/PT ramp

16 BIT / 17 CHANNELS

Channel No.	Spot Function
ch1	iris
ch2	color
ch3	gobo A
ch4	strobe/shutter
ch5	pan coarse
ch6	pan fine
ch7	tilt coarse
ch8	tilt fine
ch9	dimmer
ch10	motors speed
ch11	focus
ch12	filters
ch13	gobo B
ch14	gobo B post. rot.
ch15	prism/frost/colors
ch16	zoom
ch17	reset/lamp off/PT ramp

CHANNELS ASSIGNMENT IN DMX 512 (8 BIT)

ADDRESS SELECTION

From the main display, press a key, and use the **Up** and **Dn** keys up to when the option ADDRESS is shown on the display, select it by pressing **OK** and the sub-menu will appear (Chan DMX, Next Ch, Channels). Use the Up and Down keys up to when the correct Address is shown on the display. Once you have set the required number store it by pressing the **OK** button. To exit from the selected option without making any change press the **ESC** button.

The following picture shows the correct channels to be used to drive 4 XS (8 bit, 15 channels) in DMX 512 (pict. 7).

Spot n° 1	Spot n° 2	Spot n° 3	Spot n° 4
001	016	031	046
Channels 1-15	Channels 16-30	Channels 31-45	Channels 46-60

The following picture shows the correct channels to be used to drive 4 XS (16 bit, 17 channels) in DMX 512 (pict. 8).

Spot n° 1	Spot n° 2	Spot n° 3	Spot n° 4
001	018	035	052
Channels 1-17	Channels18-34	Channels 35-51	Channels 52-68

THE COMPLETE DMX VALUES LIST OF THE XS 1200 (art. 03061)

20 Channels - 16 bit

CHANNEL	FUNCTION	DESCRIPTION	DECIMAL	PERCENT
1	IRIS	**BEAM SIZE**		
		Min beam size	0	0%
		Max beam size	255	100%
2	COLOR	**COLOR WHEEL**		
		Full beam	0..8	0%..3%
		White/Green	12	4%
		Green	29..35	11%..13%
		Green/Magenta	46	18%
		Magenta	61..70	23%..27%
		Magenta/Yellow	81	31%
		Yellow	95..104	37%..40%
		Yellow/Red	116	45%
		Red	130..136	51%..53%
		Red/Cyan	149	58%
		Cyan	164..172	64%..67%
		Cyan/White	179	70%
		Rainbow Slow	180	71%
		Rainbow Mid1	196	76%
		Rainbow Mid2	212	83%
		Rainbow Mid3	228	89%
		Rainbow Fast	244	95%
3	GOBO A	**GOBO WHEEL**		
		Full Beam	0..44	0%..17%
		Gobo 1	45..89	18%..34%
		Gobo 2	90..134	35%..52%
		Gobo 3	135..179	53%..70%
		Gobo 4	180..224	71%..87%
		Gobo 5	225..255	88%..100%
4	STROBE/SHUTTER	**STROBE**		
		Full beam	0..9	0%..3%
		Continuos strobe	10..239	4%..93%
		Close	240..253	94%..100%
5	PAN COARSE	**COARSE POSITIONING** 450°/360°/180°	0..255	0%..100%
6	PAN FINE	**FINE POSITIONING**	0..255	0%..100%
7	TILT COARSE	**CORSE POSITIONING** 270°/180°	0..255	0%..100%
8	TILT FINE	**FINE POSITIONING**	0..255	0%..100%
9	DIMMER	**DIMMER 256 STEPS**		
		Close	0	0%
		Full beam	255	100%
10	MOTOR SPEED	**SPEED MOVEMENT**		
		Speed 1 (slow)	0..63	0%..24%
		Speed 2 (mid1)	64..127	25%..50%
		Speed 3 (mid2)	128..191	51%..74%
		Speed 4 (fast)	192..255	75%..100%
11	FOCUS	**256 STEPS** (proportional)		
		Min distance	0	0%
		Max distance	255	100%

Continue XS 1200 DMX listing: 20 Channels - 16 bit

CHANNEL	FUNCTION	DESCRIPTION	DECIMAL	PERCENT
12	FILTERS	White	0..41	0%..16%
		Red	42..83	17%..32%
		Light Blue	84..125	33%..49%
		Dark Blue	126..167	50%..65%
		Bicolor 1	168..209	66%..81%
		Bicolor 2	210..251	82%..98%
		Bicolor 3	252..255	99%..100%
13	GOBO B	**GOBO WHEEL**		
		Full Beam	0..44	0%..17%
		Gobo 1	45..89	18%..34%
		Gobo 2	90..134	35%..52%
		Gobo 3	135..179	53%..70%
		Gobo 4	180..224	71%..87%
		Gobo 5	225..255	88%..100%
14	GOBO B POS. ROT.	**POSITION-ROTATING**		
		Position (indexed)	0..149	0%..58%
		Rainbow slow (clockvise)	150..160	59%..62
		Rainbow mid1	161..171	63%..67%
		Rainbow mid2	172..182	68%..71%
		Rainbow mid3	183..193	72%..75%
		Rainbow fast	194..204	76%..80%
		Rainbow slow (anti-clockvise)	205..216	81%..84%
		Rainbow mid1	216..226	85%..88%
		Rainbow mid2	227..237	89%..92%
		Rainbow mid3	238..248	94%..97%
		Rainbow fast	249..255	98%..100%
15	GOBO A POS. ROT.	**POSITION-ROTATING**		
		Position (indexed)	0..149	0%..58%
		Rainbow slow (clockwise)	150..160	59%..62
		Rainbow mid1	161..171	63%..67%
		Rainbow mid2	172..182	68%..71%
		Rainbow mid3	183..193	72%..75%
		Rainbow fast	194..204	76%..80%
		Rainbow slow (anti-clockwise)	205..216	81%..84%
		Rainbow mid1	216..226	85%..88%
		Rainbow mid2	227..237	89%..92%
		Rainbow mid3	238..248	94%..97%
		Rainbow fast	249..255	98%..100%
16	ZOOM	**CONTINUOS POSITIONING**		
		17°	0	0%
		27°	255	100%
17	GLASSES	**FILTERS/GLASSES**		
		Normal	0..42	0%..16%
		Filter 1	43..85	17%..33%
		Filter 2	86..128	34%..50%
		Glass 1	129..171	51%..67%
		Glass 2	172..214	68%..83%
		Glass 3	215..255	84%..100%
18	FROST	Normal	0	0
		Full frost	200	78%
		Frost	201..224	79%..87%
		Fixed frost 1	225..249	88%..97%
		Fixed frost 2	250..255	98%..100%

CHANNEL	FUNCTION	DESCRIPTION	DECIMAL	PERCENT
19	**PRISM**	White	0..7	0%..2%
		Prism 1 on	8..12	3%..4%
		Rot. prism 1 slow (clockwise)	13..25	5%..9%
		Rot. prism 1 (mid 1)	26..38	10%..14%
		Rot. prism 1 (mid 2)	39..51	15%..20%
		Rot. prism 1 (fast)	52..64	21%..25%
		Prism 1 on	65..77	26%..30%
		Rot. prism 1 slow (anti-clockwise)	78..90	31%..35%
		Rot. prism 1 (mid 1)	91..103	36%..40%
		Rot. prism 1 (mid 2)	104..116	41%..45%
		Rot. prism 1 (fast)	117..127	46%..50%
		Prism 2 on	128..140	51%..55%
		Rot. prism 2 slow (clockwise)	141..153	56%..60%
		Rot. prism 2 (mid 1)	154..166	61%..65%
		Rot. prism 2 (mid 2)	167..179	66%..70%
		Rot. prism 2 (fast)	180..192	71%..75%
		Prism 2 on	193..205	76%..80%
		Rot. prism 2 slow (anti-clockwise)	206..218	81%..85%
		Rot. prism 2 (mid 1)	219..231	86%..90%
		Rot. prism 2 (mid 2)	232..244	91%..95%
		Rot. prism 2 (fast)	245..255	96%..100%
20	**RESET/LAMP/RAMP**	**DEFAULT VALUE**		
		Force ramp slow	00.16	0%..6%
		Force ramp fast	17..31	7%..12%
		Default value	32..63	13%..24%
		Reset	64..127	25%..49%
		Normal	128..191	50%..74%
		Lamp OFF	192..240	75%..94%
		Normal	241..250	95%..98%
			251..255	99%..100%

THE COMPLETE DMX VALUES LIST OF THE XS 700/B (art. 0306)

17 Channels - 16 bit

CHANNEL	FUNCTION	DESCRIPTION	DECIMAL	PERCENT
1	IRIS	**BEAM SIZE**		
		Min beam size	0	0%
		Max beam size	255	100%
2	COLOR	**COLOR WHEEL**		
		Full beam	0..8	0%..3%
		White/Green	12	4%
		Green	29..35	11%..13%
		Green/Magenta	46	18%
		Magenta	61..70	23%..27%
		Magenta/Yellow	81	31%
		Yellow	95..104	37%..40%
		Yellow/Red	116	45%
		Red	130..136	51%..53%
		Red/Cyan	149	58%
		Cyan	164..172	64%..67%
		Cyan/White	179	70%
		Rainbow Slow	180	71%
		Rainbow Mid1	196	76%
		Rainbow Mid2	212	83%
		Rainbow Mid3	228	89%
		Rainbow Fast	244	95%
3	GOBO A	**GOBO WHEEL**		
		Full Beam	0..44	0%..17%
		Gobo 1	45..89	18%..34%
		Gobo 2	90..134	35%..52%
		Gobo 3	135..179	53%..70%
		Gobo 4	180..224	71%..87%
		Gobo 5	225..255	88%..100%
4	STROBE/SHUTTER	**STROBE**		
		Full beam	0..9	0%..3%
		Continuos strobe	10..239	4%..93%
		Close	240..253	94%..100%
5	PAN COARSE	**COARSE POSITIONING** 450°/360°/180°	0..255	0%..100%
6	PAN FINE	**FINE POSITIONING**	0..255	0%..100%
7	TILT COARSE	**CORSE POSITIONING** 270°/180°	0..255	0%..100%
8	TILT FINE	**FINE POSITIONING**	0..255	0%..100%
9	DIMMER	**DIMMER 256 STEPS**		
		Close	0	0%
		Full beam	255	100%
10	MOTOR SPEED	**SPEED MOVEMENT**		
		Speed 1 (slow)	0..63	0%..24%
		Speed 2 (mid1)	64..127	25%..50%
		Speed 3 (mid2)	128..191	51%..74%
		Speed 4 (fast)	192..255	75%..100%
11	FOCUS	**256 STEPS** (proportional)		
		Min distance	0	0%
		Max distance	255	100%

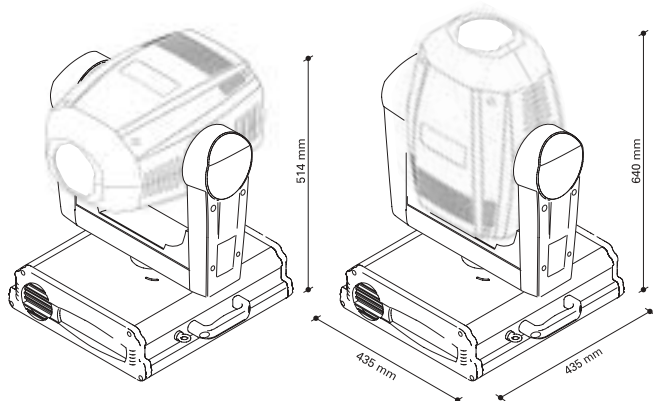| CHANNEL	FUNCTION	DESCRIPTION	DECIMAL	PERCENT
12	FILTERS	White	0..41	0%..16%
		Red	42..83	17%..32%
		Light Blue	84..125	33%..49%
		Dark Blue	126..167	50%..65%
		Bicolor 1	168..209	66%..81%
		Bicolor 2	210..251	82%..98%
		Bicolor 3	252..255	99%..100%
13	GOBO B	**GOBO WHEEL**		
		Full Beam	0..44	0%..17%
		Gobo 1	45..89	18%..34%
		Gobo 2	90..134	35%..52%
		Gobo 3	135..179	53%..70%
		Gobo 4	180..224	71%..87%
		Gobo 5	225..255	88%..100%
14	GOBO B POS. ROT.	**POSITION-ROTATING**		
		Position (indexed)	0..149	0%..58%
		Rainbow slow (clockvise)	150..160	59%..62
		Rainbow mid1	161..171	63%..67%
		Rainbow mid2	172..182	68%..71%
		Rainbow mid3	183..193	72%..75%
		Rainbow fast	194..204	76%..80%
		Rainbow slow (anti-clockvise)	205..216	81%..84%
		Rainbow mid1	216..226	85%..88%
		Rainbow mid2	227..237	89%..92%
		Rainbow mid3	238..248	94%..97%
		Rainbow fast	249..255	98%..100%
15	PRISM/FROST/COLORS	Full Beam	0..15	0%..5%
		Color 1	16..31	6%..12%
		Color 2	32..47	13%..18%
		Color 3	48..63	19%..24%
		Frost	64..79	25%..30%
		Prism on	80..127	31%..49%
		Rot. Prism speed (clockwise)	138..191	50%..74%
		Prism on	192..201	75%..78%
		Rot. Prism speed (anti-clockwise)	202..255	79%..100%\
16	ZOOM	**CONTINUOS POSITIONING**		
		17°	0	0%
		27°	255	100%
17	RESET/LAMP/RAMP	Default value	00.16	0%..6%
		Force ramp slow	17..31	7%..12%
		Force ramp fast	32..63	13%..24%
		Default value	64..127	25%..49%
		Reset	128..191	50%..74%
		Normal	192..240	75%..94%
		Lamp OFF	241..250	95%..98%
		Normal	251..255	99%..100%

MAINTENANCE AND CLEANING

It is recommended, to ensure the best performances of your fixture for a long time, to periodically clean the parts shown as follow. Excessive dust, smoke and moisture are cause of bad performances. Alwais take care that the air grid (on the back of the cover) are clean.
Prior to operate inside the fixture:

a) Disconnect power before head cover opening or servicing.
b) Don't open the head cover before five minutes after the switching off.
c) The parts shown in picts. 3 and 4 requiring monthly cleaning.
d) Follow the steps here below to operate the lenses cleaning.
e) For gobos substitution remove the spring clip (S) and remove the gobo.

STEP 1

STEP 2

ZOOM

STEP 4

GOBOS

GOBOS

FOCUS

STEP 3

SPRING (S)

STEP 5

514 mm

640 mm

435 mm

435 mm
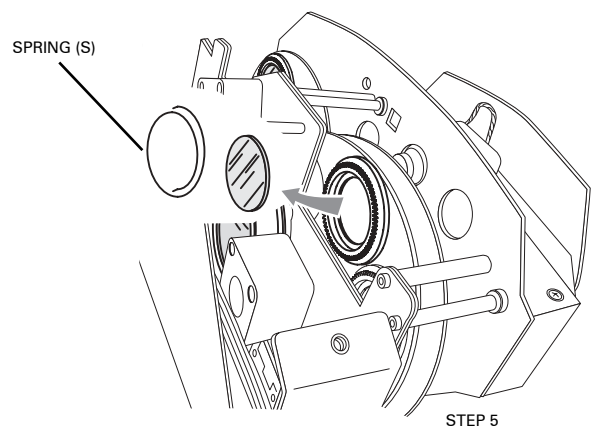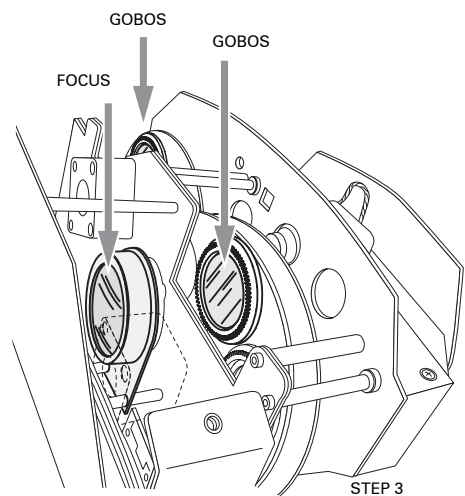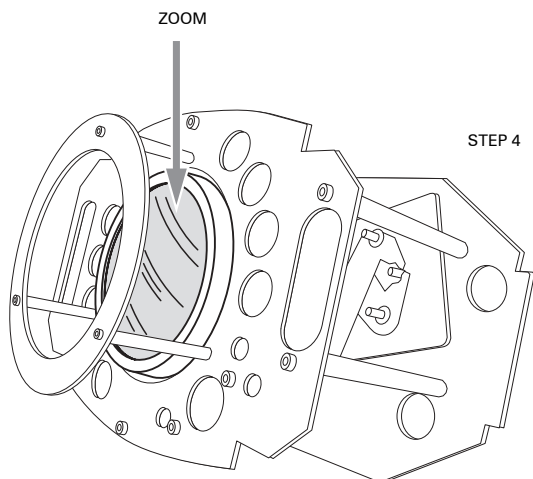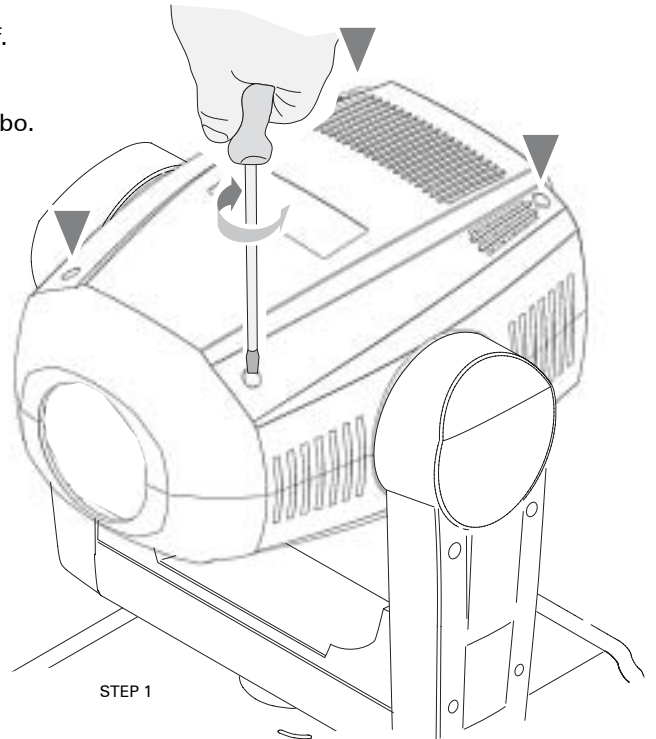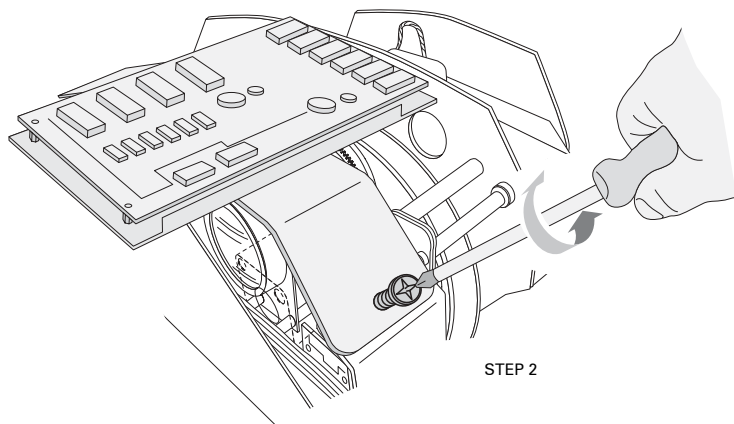
SPARE PARTS, TECHNICAL DRAWINGS and SCHEMATIC DIAGRAMS
PARTI DI RICAMBIO, DISEGNI TECNICI e SCHEMI ELETTRICI

XS 1200 SPARE PARTS	
SP1	BASE BOX
SP2	LATERAL COVER
SP3	HANDLES
SP5	SAFETY HOOK
SP7	UNSHAPED BASE COVER
SP8	SHAPED BASE COVER
SP9	THERMAL SWITCH
SP11	BALLAST COOLING PLATE
SP12	EB 700 BOARD
SP13	BRIDGE 700
SP14	PFC BOARD
SP15	MICROSWITCH
SP16	POWER BOARD 700
SP17	BUSH
SP18	PAN PIN
SP19	ROLLER BEARING
SP20	HUB
SP21	BELT 160XL
SP22	ROLLER BEARING
SP23	PAN LOCK
SP24	PAN STOP SPACER
SP25	PAN STOP
SP26	SPACER
SP27	SCREW
SP28	BEARING
SP30	PACKING RING
SP31	BASE FAN P.C.
SP32	FAN
SP33	PACKING RING
SP34	SPIRAL SPRING
SP35	PAN IDLERS
SP36	CIRCUIT PLATE
SP37	PT 700 BOARD
SP38	PAN CABLE SUPPORT
SP39	PROTECTION WIRE PLATE
SP40	PAN PLATE
SP41	NUT
SP42	LOWER PAN BUSH
SP43	SPACER
SP44	PULLEY
SP45	MOTOR
SP46	ENCODER SUPPORT
SP47	ENCODER 250 P.C.
SP48	ENCODER 50/1
SP49	PAN FLYWHEEL

SP60	BRACKET
SP61A	LATERAL BRACKET
SP61	LATERAL BRACKET
SP62	ADHESIVE
SP63	TILT CROWN
SP64	CROWN SUPPORT
SP65	GEAR
SP66	FIXING FLANGE
SP67	BEARING
SP68	TILT HUB
SP69	WIRE PROTECTION
SP70	PULLEY
SP71	TILT FLYWHEEL
SP72	SPRING
SP73	TILT IDLERS
SP74	BEARING
SP75	MICROSWITCH
SP76	BELT 250XL037
SP77	SPACER
SP78	WIRE CLIP
SP80	PACKING RING
SP81	MOTOR
SP83	HUB
SP84	ENCODER 50/1
SP85	HUB
SP86	BEARING
SP87	FIXING FLANGE
SP88	TILT GEAR
SP89	ENCODER 250 BOARD
SP90	CROWN SUPPORT
SP93	TILT STOP
SP94	PACKING RING
SP95	BAKELITE PLATE
SP96	IG7 EB BOARD
SP97	ENCODER SUPPORT PLATE
SP105	LOWER COVER PLATE
SP106	BASE LATERAL COVER
SP107	LATERAL BASE
SP108	LATERAL BASE
SP109	PANEL ADHESIVE
SP110	DISPLAY ADHESIVE
SP111	FIXING PLATE
SP112	PIN
SP112/a	RETAINER
SP113	PIN LOCK
SP114	FAN

SP115	DMX BOARD	
SP116	MAIN FILTER BOARD	
SP117	FUSEHOLDER	
SP118	POWER INPUT CONNECTOR	
SP119	3 PIN MALE CONNECTOR	
SP120	3 PIN FEMALE CONNECTOR	
SP121	5 PIN MALE CONNECTOR	
SP122	5 PIN FEMALE CONNECTOR	
SP141	FRONTAL PANEL	
SP142	SPACER	
SP144	SCREW	
SP146	ZOOM SLIDE	
SP147	ZOOM GUIDE BUSHING	
SP148	BLOCK	
SP148A	SPACER	
SP149	ZOOM 700	
SP150	LENS PLATE SUPPORT	
SP151	LENS	
SP152	GASKET	
SP154	LENSHOLDER	
SP155	HUB	
SP157	SPRING	
SP158	PIN	
SP159	MOTOR	
SP160	FLYWHEEL	
SP161	MOTOR	
SP162	P.C. ZOOM CONNECTER	
SP163	MOTORHOLDER PANEL	
SP164	SPACER	
SP165	LOWER FROST BLADE	
SP166	UPPER FROST BLADE	
SP167	HUB	
SP168	BUSH	
SP169	BEARING	
SP170	GEAR	
SP171	PULLEY	
SP172	BELT MXL	
SP173	GEAR	
SP174	HUB	
SP175	FROST GLASS	
SP176	PRISM	
SP177	PRISM	
SP178	LENS	
SP179	PRISM WHEEL	
S181	GLASS WHEEL	
SP189	SHUTTER BLADE	
SP190	HUB	
SP191	MOTOR PLATE	
SP193	SUPPORT PLATE	
SP194	P.C. BOARD 700 HMB1	
SP195	MOTOR	
SP196	SHUTTER-ZOOM PANEL	
SP197	TILT PLATE	
SP198	BLOCK	
SP199	GEAR	
SP200	BRIDGE SUPPORT	
SP201	PULLEY	
SP202	BELT MXL	
SP204	MOTOR	

SP205	MOTOR
SP206	MOTOR
SP208	ZOOM FLYWHEEL
SP209	PACKING RING
SP210	ELEC. BOARD SUPPORT PLATE
SP212	BRIDGE SUPPORT
SP213	GOBO HOLDER
SP214	SPIRAL SPRING
SP215	ELECTRONIC BOARD
SP225	BEARING
SP226	BEARING HOLDER
SP227	BLOCK PLATE
SP228	BLOCK
SP230	FLANGE
SP231	LENS
SP232	GASKET
SP233	LENS HOLDER
SP234	SCREW
SP235	SCREW
SP236	SPACER
SP237	MOTOR
SP238	P.C. SENSOR
SP239	SPIRAL SPRING
SP240	FLYWHEEL
SP241	SPACER
SP242	MOTOR
SP244	MOTOR
SP245	GOBO PANEL
SP246	HUB
SP247	SHAPED RESET GOBO
SP249	MOTOR
SP251	P.C. SENSOR (DOWN)
SP253	P.C. SENSOR (UP)
SP254	MOTOR
SP255	IRIS HUB
SP256	BACK GEAR
SP258	PULLEY SUPPORT
SP259	UNSHAPED RESET GOBO
SP260	STOP IRIS HUB
SP261	BEARING HOLDER
SP262	BEARING HOLDER
SP263	BEARING
SP264	PULLEY
SP265	PULLEY
SP266	BELT MXL
SP267	IRIS
SP268	PULLEY
SP269	BELT MXL
SP270	BEARING
SP271	GEAR
SP272	SPIRAL SPRING
SP273	GOBO WHEEL
SP274	GEAR
SP276	BEARING
SP277	BEARING SUPPORT
SP278	BELT MXL
SP279	PULLEY
SP280	GOBO WHEEL
SP281	GLASS WHEEL

SP282	GEAR
SP284	WHEEL
SP285	HUB
SP287	COLOUR WHEEL
SP295	PACKING RING
SP296	SENSOR (DOWN)
SP297	PULLEY
SP298	BELT MXL
SP299	GEAR
SP300	BEARING
SP301	GEAR
SP302	BELT MXL
SP303	PULLEY
SP304	BEARING
SP305	HUB
SP306	MOTOR PANLE
SP307	SPACER
SP308	SPACER
SP309	MOTOR
SP310	MOTOR
SP312	PACKING RING
SP313	FAN PANEL
SP314	FAN
SP315	FAN DIAPHRAGM
SP316	PACKING RING
SP317	SPACER
SP318	LENS
SP319	SUPPORT FLANGE
SP320	ALUMINIUM SUPPORT LENS
SP321	LENS
SP322	LENSHOLDER PLATE
SP330	BARN DOOR
SP332	SUPPORT PLATE
SP333	REAR GROUP ASSEMBLE
SP334	SUPPORT PLATE****
SP335	FIXING BRACKET
SP337	BARN DOOR
SP338	P.C FAN CONNECTER
SP339	THERMAL SWITCH
SP340	MICROSWITCH
SP341	PACKING RING
Sè342	LAMP HOLDER
SP343	LAMP HOLDER
SP344	BARN DOOR
SP346	MORROR REFLECTOR
SP347	MIRROR SUPPORT PLATE
SP348	MIRROR
SP349	SPIRAL SPRING
SP350	INSULATOR
SP351	LAMP HOLDER
SP352	LAMP CABLES
SP353	BACK LAMP PANEL
SP355	POMMEL
SP356	HUB
SP357	PLASTIC HEAD COVER
SP358	SCREW
SP358A	SPIRAL SPRING
SP359	ADHESIVE
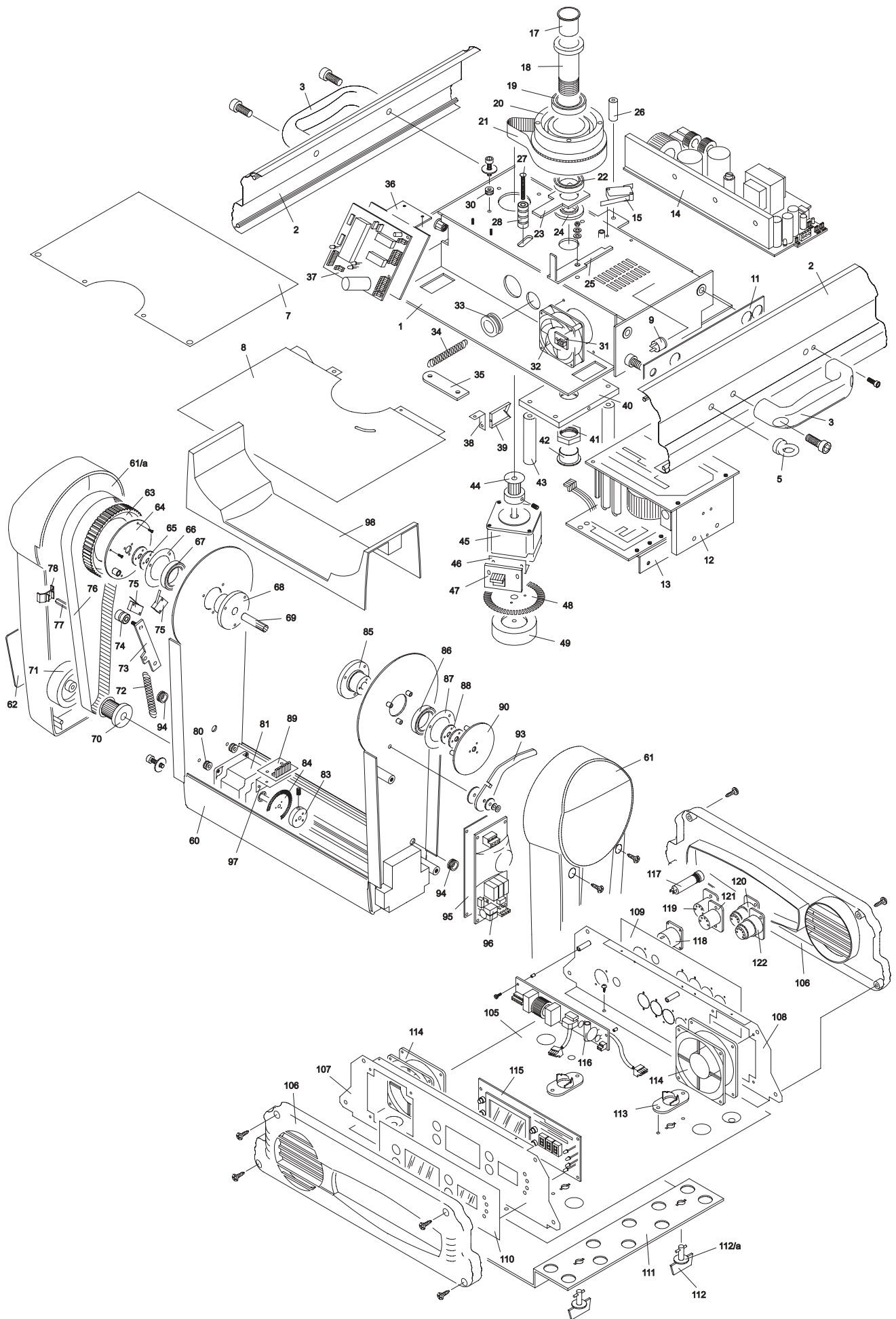
TD • XS1200 Electr. (base)

TD • XS1200 Electr. (head)

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PROVISIONAL

TD • XS700/B (base)

PROVISIONAL

TD • XS700/B (head)