

Ninja 7×15QC

USER GUIDE

10075 - November 2013 Version 1.1.3

1 - Safety information

Important safety information



This unit is intended for indoor use only. Do not use it in a wet, or extremely cold/hot locations. Failure to follow these safety instructions could result in fire, electric shock, injury, or damage to this product or other property.



Any maintenance procedure must be performed by a CONTEST authorised technical service. Basic cleaning operations must thoroughly follow our safety instructions.



This product contains non-isolated electrical components. Do not undertake any maintenance operation when it is switched on as it may result in electric shock.

Symbols used



This symbol signals an important safety precaution.



The WARNING symbol signals a risk to the user's physical integrity. The product may also be damaged.



The CAUTION symbol signals a risk of product deterioration.

Instructions and recommendations

1 - Please read carefully :

We strongly recommend to read carefully and understand the safety instructions before attempting to operate this unit.

2 - Please keep this manual:

We strongly recommend to keep this manual with the unit for future reference.

3 - Operate carefully this product :

We strongly recommend to take into consideration every safety instruction.

4 - Follow the instructions:

Please carefully follow each safety instruction to avoid any physical harm or property damage.

5 - Avoid water and wet locations :

Do not use this product in rain, or near washbasins or other wet locations.

6 - Installation:

We strongly encourage you to only use a fixation system or support recommended by the manufacturer or supplied with this product. Carefully follow the installation instructions and use the adequate tools.

Always ensure this unit is firmly fixed to avoid vibration and slipping while operating as it may result in physical injury.

7 - Ceiling or wall installation :

Please contact your local dealer before attempting any ceiling or wall installation.

8 - Ventilation :

The cooling vents ensure a safe use of this product, and avoid any overheating risk. Do not obstruct or cover these vents as it may result in overheating and potential physical injury or product damage. This product should never been operated in a closed non-ventilated area such as a flight case or a rack, unless cooling vents are provided for the purpose. **WARNING**: This unit contains no user-serviceable parts. Do not open the housing or attempt any maintenance by yourself. In the unlikely even your unit may require service, please contact your nearest dealer.







In order to avoid any electrical malfunction, please do not use any multi-socket, power cord extension or connecting system without making sure they are perfectly isolated and present no defect.

Warning

This product is equipped with Class 2 LEDs.

Please avoid looking directly at the beam as it may cause severe eve injuries.

Recycling your device



- As HITMUSIC is really involved in the environmental cause, we only commercialise clean, ROHS compliant products.
- When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

9 - Heat exposure:

Sustained contact or proximity with warm surfaces may cause overheating and product damages. Please keep this product away from any heat source such as a heaters, amplifiers, hot plates, etc...

10 - Electric power supply:

This product can only be operated according to a very specific voltage. These information are specified on the label located at the rear of the product.

11 - Power cords protection:

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at lugs, convenience receptacles and the point where they exit from the fixture.

12 - Cleaning precautions:

Unplug the product before attempting any cleaning operation. This product should be cleaned only with accessories recommended by the manufacturer. Use a damp cloth to clean the surface. Do not wash this product.

13 - Long periods of non use:

Disconnect the unit's main power during long periods of non use.

14 - Liquids or objects penetration :

Do not let any object penetrate this product as it may result in electric shock or fire. Never spill any liquid on this product as it may infiltrate the electronic components and result in electric shock or fire.

15 - This product should be serviced when:

Please contact the qualified service personnel if:

- The power cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the appliance.
- The appliance has been exposed to rain or water.
- The product does not appear to operate normally.
 The product has been damaged.

16 - Inspection/maintenance :

Please do not attempt any inspection or maintenance by yourself. Refer all servicing to qualified personnel.

17 - Operating environment :

17 - Operating environment : Ambient temperature and humidity: +5 - +35°C, relative humidity must be less than 85% (when cooling vents are not obstructed).

Do not operate this product in a non-ventilated, very humid or warm place.

2 - Introduction

Thank you for purchasing the Ninja-7x15QC moving head. You now have in your possession a high-quality, powerful and intelligent device absolutely perfect for parties, animations, live events...

3 - Technical specifications

Light source

- 7x15W OSRAM LEDs
- 4-in-1: Red, Green, Blue and White within the same source
- Expected lifespan: 50.000 hours
- Low temperature, low power consumption, can be operated non-stop for many hours

Colours

- · Independent ring and center settings
- Colour macro
- Colour presets

Effects

- Adjustable strobe: 1-20 flashes per second
- Adjustable dimmer: 0-100%

Control

- Standard DMX-512
- 15-21 DMX channels
- Assignable patch to every channel
- 7 built-in programs accessible from the DMX and customisable
- · Built-in musical programs
- · Automatic detection of the DMX, slave or master mode
- Colour LCD drop-down menu to choose and assign the different modes
- Battery-operated memory system to address and choose modes without the 230V power supply
- . Compatible with RDM for console feedbacks

Movements

- 8 or 16 bits Pan and Tilt resolutions
- Ranges: Pan 540 or 630° Tilt 256°
- Adjustable speed via the DMX
- · Position memory and auto-repositioning

Optical

Beamwidth: 10° or 20°
Light output: 4400 lux at 5m

Additional characteristics

- Adjustable fan speed
- Power consumption : 130W max.
- Power supply: 100/240V, AC 50/60Hz
- Net weight : 5 kg

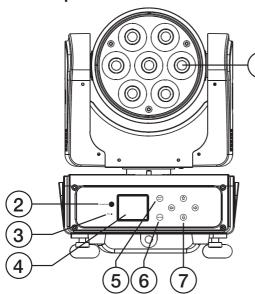
Package contents

- The Ninja-7x15QC moving head
- 1 Fixation bracket with Omega holders
- 1 Frost filter and 3 screws
- 1 spoiler and 3 screws
- The user guide

 ${\bf NOTE: The\ internal\ software\ can\ be\ updated\ via\ the\ DMX\ input\ and\ very\ specific\ tools.}$

This update can only be performed by a qualified technician.

4 - Description



- 1 Lens
- 2 DC switch button

Switches the menu on when the moving head is not plugged.

3 - MIC

Used for music-sensitive modes.

4 - Display

Allows you to visualise menus.

5 - MODE/ESC button

Enters/leaves menus.

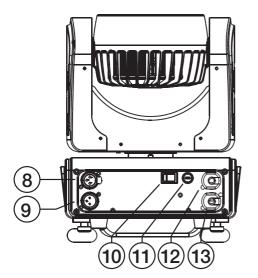
Allows you to browse through menus and change values.

6 - ENTER button

Selects functions and saves changes.

7 - Navigation buttons

Allow you to browse through menus and change values.



- 8 DMX output via 3-pin XLR
- 9 DMX input via 3-pin XLR
- 10 Power switch
- 11 Fuse

Fuse: T3.15A - 250V; 5 x 20 mm

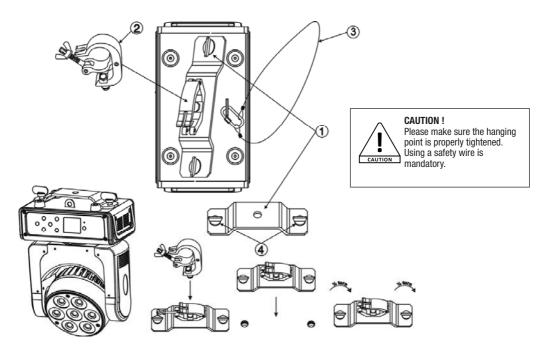
12 - Power input socket

Powercon@ Neutrik@

13 - Power output socket

Powercon@ Neutrik@

5 - Installing Quick-Lock fastening systems



The Ninja-7x15QC moving head is supplied with two Quick-Lock fastening systems. The example above indicates how to install the Omega holders.

- 1 Attach Omega holders or hook clamps to the Quick-Lock systems.
- 2 Position your Omega Quick-Lock systems on top of the drilled holes located below the Ninja-7x15QC.
- 3 Rotate the Quick-Lock wing nuts a quarter turn.
- 1: Hook supports
- 2 : Hook



3: Safety cable

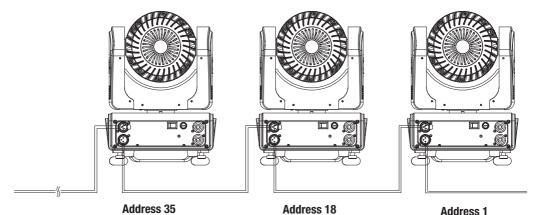
(The current legislation requires a double holding system for any device used in public places. This system must bear at least 10 time the weight of the device. This means the Ninja-7x15QC safety wire must be able to bear approximately 55 kg).

4: Quick-Lock wing nuts

6 - Cabling, addressing and daisy chaining

Connecting the DMX remote control:

Connect the female plug of your XLR cable to your DMX remote control XLR output, then connect your cable male output to the moving head. Daisy chain your moving heads with XLR cables.



DMX line termination

Remote control

Using a DMX line termination:

When long runs of cable are used (more than 100m), you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector. This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line.



Adressing the units:

Every unit must have a DMX address in order to respond to DMX signals. The address corresponds to the channel number on which the unit receives an incoming DMX signal sent by the DMX remote control. The DMX addressing can be performed by programming the channel number via the display located on the base of the unit.

You can either assign the same address to your units so they all react to the same signal, or assign a unique address per unit to control them independently.

In the example above, Ninja-7x15QC uses 17 channels.

You must skip 12 channels between each address you assign.

he address of the first unit will be 1, the second unit will be 18 (1+17), the third unit will be 35 (17+18) and so on.

NB: Once switched on, the Ninja-7x15QC automatically detects any incoming DMX signal, and the display indicates"A.001" (the unit DMX address). If the unit does not receive any DMX signal, the display will flash. In such a case, please make sure the cable is properly plugged into the DMX input of your moving head, your remote control is switched on and the cables used are not defective.

Daisy chaining:

The POWERCON® input/output system allows you to daisy chain several Ninja-7x15QC units.



Warning: You cannot use the same chain to supply more than 10 Ninja-7x15QC at 220V. When using a 11th moving head, please use a new power source.

7 - Menus

The Ninja-7x15QC features many menus allowing you to configure its every move and function.

Press MODE / ESC to access the main menu.

Use the navigation keys to browse through submenus. Then press ENTER to access a submenu.

Use the $\uparrow \uparrow$ and $\downarrow \uparrow$ navigation keys to change values.

Press **ENTER** to save changes.

Press MODE /ESC again to leave a submenu.

Please note:

- · Values in bold are the default values.
- In order to access menus (via the internal battery) when the moving head is turned off, press DC Switch and hold for more than 2 seconds. If the buttons are not used and remain inactive for 1 minute, the display will automatically turn off.
- When browsing through menus, values in blue are values currently in use. When entering a new value, it will be written in red until you save changes by pressing ENTER.

7.1 FUNCTION

This menu allows you to change the initial DMX address, visualise the DMX channels values and select an operating mode.

Submenus	Values	Description
Set DMX Address	From 001 - 496	Assigns a DMX address. The moving head automatically activates the DMX mode once the DMX address has been configured.
DMX Value	All, Chase speed, Color mode,	Allows you to visualise the DMX value of each channel.
Slave Mode	Slave1, Slave2, Slave3	Allows you to determine how the moving head will react when the slave mode is activated.
Auto Program	Alone, Master	Once the Automatic mode is activated, the moving head can operate by itself or as a Master unit.
Sound Control	Alone, Master	Once the Music-sensitive mode is activated, the moving head can operate by itself or as a Master unit.

7.2 INFORMATION

This menu allows you to visualise the moving head running time, its temperature, and the current version of the internal software.

Submenus	Values	Description
	Current Time	Current running time since the unit was last switched on.
	Total Run Time	Overall running time since the very first time the device was switched on.
Time Information	Last Run Time	Running time since the last running time reset.
	Last Run Password	Password allowing you to reset the Last Run Time.
	Clean Last Run	Allows you to reset the Last Run Time.
Temperature Info	Head Temperature	Temperature of the projector head (°C).
Software Version	V1.1.3 Current version of the internal software.	

7.3 PERSONALITY

This menu allows you to configure the moving head reactions, adjust the ventilation, customise the display and reset all functions to factory settings.

Submenus	Lower level menus	Values	Description
	Address via DMX	ON/OFF	Activates addressing via a DMX controller.
Status Setting	No DMX Mode	Close/ Hold /Auto/ Music	Configure the moving head reactions in case of DMX signal interruptions: • Close Shutter: The projector blacks-out • Hold: The projector holds onto the last information received • Auto Program: The projector activates the Auto mode via built-in programs • Music Control: The projector activates the Music-sensitive mode via built-in programs
	Pan Reverse	ON/ OFF	Reverses PAN movements.
	Tilt Reverse	ON/ OFF	Reverses TILT movements.
	Pan Degree	Pan 540 Pan 540-90 Offset Pan 630	Determine the PAN movement range: Pan540: 540° rotation (1,5 turn) Pan540-90 Offset: The projector rotates on a 540° angle but starts aligned with its base. Pan630: 630° rotation (1,75 turn)

	Tilt Degree	TILT 270 TILT 240	Determine the TILT movement range : • Tilt270 : 270° rotation • Tilt240 : 240° rotation
	Feedback	ON/OFF	The projector sends movement feedbacks
	Movement Speed	Speed 1 ~ 4	Determines the AUTO mode movement speed : 1 = fastest ; 4 = slowest
Status Setting	Mic Sensitivity	0 ~ 99%	Configures the internal mic sensitivity when using the music-sensitive mode
	Hibernation	OFF 01m ~99m (15m)	Sets a timer for the moving head to enter the sleep mode if no DMX signal has been received. The moving head will automatically resets when a DMX signal is detected again. The default value is 15 minutes.
	Service pass	Password = XXX	Password giving you access to the Service setting menu: 050
Service setting	RDM PID	XXXXXX	Unique identification code used for remote settings via the DMX network. The RDM protocol is made out of data packets transmitted via DMX signals. The RMD PID depends on the RDM compatible controller.
Fans Control	Auto High Low		Allows you to configure the cooling fan speeds. • Auto : The projector controls its fans speed according to its temperature. • High : Maximum fan speed. • Low : Decreases cooling speed. This is especially useful to reduce the noise when an installation requires silent devices.
	Shutoff time	02 ~60m (05m)	Timer after which the display shuts off when it remains inactive.
	Flip display	ON/ OFF	Rotates the display on a 180° angle.
Display setting	Key Lock	ON/ OFF	Locks the keyboard when it remains inactive for more than 15 seconds. They keyboard can be unlocked by holding the menu button for more than 3 seconds.
	Disp Flash	ON/ OFF	The display flashes when no DMX signal is detected.
Temperature C/F	Celsius / Fahrenheit		Allows you to choose which unit of temperature will be displayed.
Initial Status	Auto Program = XXX PAN = XXX etc		Allows you configure the initial state of each function when the projector is switched on.
Reset Default	ON/ OFF		Resets to factory settings. Note: user programs will be erased.

7.4 Reset Function

This menu allows you to reset the motors step-by-step (e.g. if positioning errors are detected).

Submenus	Description
Reset ALL	Resets all motors.
Reset Pan^Tilt	Resets PAN and TILT motors.

7.5 Effect Adjust

This menu allows you to test and manually control each function, and recalibrate PAN and TILT movements.

Submenus	Values	Description
Test Channel	AUTO PAN etc	Tests each function individually.
Manual Control	AUTO = XXX PAN = XXX etc	Controls each function manually.
	-Password-	Password to unlock calibration = 050
Calibration	PAN = XXX TILT = XXX	Allows you to set very precisely the initial PAN and TILT positions (after a reset or when the moving head is turned on).

7.6 User Mode Set

This menu allows you to choose one of the preset DMX modes (number of channels used) or edit your own patch (order and number of channels used).

Next chapter will detail more precisely functions assigned to each channel depending on the mode used.

Submenus	Values	Description
	Standard mode	This default mode uses 17 DMX channels with the most frequently used functions.
	Basic mode	Uses 15 channels, this is the simplest mode.
User Mode	Expert Mode	This mode uses 21 channels, and gives you access to very precise settings (16 bits).
	User Mode A	User Mode A
	User Mode B	User Mode B
	User Mode C	User Mode C

Edit User mode A	Max Channel = XX PAN = CHXX etc	User mode A editing: - Max Channel is the number of channels used PAN = CHXX is the channel used by the PAN function. When a function is moved to another channel, it will be replaced by the former function using the same channels.
Edit User mode B	Max Channel = XX PAN = CHXX etc	п
Edit User mode C	Max Channel = XX PAN = CHXX etc	ш

7.6 Edit Program

This menu allows you to select the programs assigned to each of the 3 program groups, edit the 10 built-in programs and edit the 250 scenes forming these programs.

The Ninja-7x15QC can be assigned to 3 different slave groups (via the Slave mode function in the Function menu).

The designated Master unit sends programs containing slave groups information.

Programs are sent in a loop as follows:



Slave units receive every program but only reacts to those assigned to their group. A unit assigned to the Slave 2 group will only react to the Auto Pro Part 2 program.

Submenus	Values		Description
Select Program	Auto Pro Part1 = Program 1 ~ 10 Program 1 Auto Pro Part2 = Program 1 ~ 10 Program 2 Auto Pro Part3 = Program 1 ~ 10 Program 3		Allows you to assign one of the 10 built-in programs to each Auto Pro Part X
Edit Program		• Pro Test • Step 01 ~ 64	Allows you to select the scenes assigned to each program. Press ENTER to assign one of the available scenes to each step. A single scene can be assigned to different steps. Assign the End scene to the last step of the program to set the end of the program. Use the Pro Test submenu to visualise the scenes assigned to the program you are currently editing.

Edit Scene	Scene 1 Scene 2 Scene 250	Auto Program, PAN, TILT Fine, Scene Time Fade Time Input By Out	This submenu allows you to edit one of the 250 scenes. Select a scene and press ENTER. Sélect each function (PAN, TILT,etc) and press ENTER, then assign a value included between 000 and 255 to each function. Then indicate the scene duration (in seconds) and the fade out duration. The Input By Out function allows you to receive a scene sent by a DMX controller.
Rec Controller	XXX - XXX		This submenu allows you to automatically record a scene sent by a DMX controller. You can store up to 250 scenes. Indicate the number of scenes you want to save, precising the opening and ending scenes. The opening scene selection uses the left and right arrow buttons. The ending scene selection uses the up and down arrow buttons. Press ENTER. The moving head now awaits incoming scenes from the DMX controller.

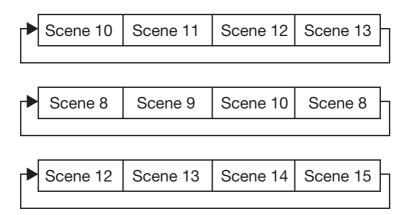
More details about program groups sequencing and scenes they include:

Example:

Program 2 includes scenes 10, 11, 12 and 13 Program 4 includes scenes 8, 9 and 10 Program 6 includes scenes 12, 13, 14 and 15

Auto Pro Part 1 is assigned to program 2 Auto Pro Part 2 is assigned to program 4 Auto Pro Part 3 is assigned to program 6

The 3 slave groups will run the programs according to the same number of steps as follows:



8 - Dmx channels and their functions

The Ninja-7x15QC moving head includes 3 preset DMX modes:

The Basic mode features 15 channels, the Standard mode features 17 channels and the Expert mode features 21 channels.

The following chart indicates DMX values of each channels.

Note: St = Standard, Ba = Basique et Ex = Expert.



Modes / Channels		nnels	DMX values	Functions and effects
St	Ba	Ex		
_	_	4	8-bit PAN moven	nent
5	5	1	000 - 255	PAN movement
16		2	16-bit PAN move	ment
10			000 - 255	Very precise PAN movement settings
6	6	6 3	TILT movement	·
			000 - 255	TILT movement
17		4	16-bit TILT move	T
			000 - 255	Very precise TILT movement settings
				ents speed and reaction
			000 - 225	Fast to slow speed settings
7	7	5	226 - 235	Black out during movements
			236 - 245	Black-Out during wheels rotation
			246 - 255	No function
1	1		All LEDs red	
'	'		000 - 255	000 : Black out - 255 : red 100%
2	2		All LEDs green	
2	2	2	000 - 255	000 : Black out - 255 : green 100%
0		3	All LEDs blue	
3	3		000 - 255	000 : Black out - 255 : blue 100%
_			All LEDs white	
4	4		000 - 255	000 : Black out - 255 : white 100%
			Central LED red	
		13	000 - 255	000 : Black out - 255 : red 100%
			Central LED gree	en
		14	000 - 255	000 : Black out - 255 : green 100%
		45	Central LED blue	
		15	000 - 255	000 : Black out - 255 : blue 100%
		10	Central LED whi	te
		16	000 - 255	000 : Black out - 255 : white 100%
		17	Ring LEDs red	
		17	000 - 225	000 : Black out - 255 : red 100%

			Ring LEDs green			
		18	000 - 225	000 : Black out - 255 : green 100%		
			Ring LEDs blue			
		19	000 - 225	000 : Black out - 255 : blue 100%		
			Ring LEDs white			
		20	000 - 225	000 : Black out - 255 : white 100%		
			Shutter and Strob	8		
			000 - 031	LEDs off		
			032 - 063	No function, LEDs on		
			064 - 095	Slow to fast strobe		
8	8	6	096 - 127	No function, LEDs on		
			128 - 159	Slow to fast pulse effect		
			160 - 191	No function, LEDs on		
			192 - 223	Slow to fast random strobe		
			224 - 255	No function, LEDs off		
	_	_	Dimmer			
9	9	7	000 - 255	Intensity: 0 - 100%		
		8	Rainbow effect			
10	10		000 - 007	No function		
			008 - 255	Slow to fast Rainbow effect		
			Colour macros			
			000 - 010	No function		
			011 - 020	White 2700°K		
			021 - 030	White 3200°K		
			031 - 040	White 4300°K		
			041 - 050	White 5600°K		
11	11	9	051 - 060	White 6500°K		
''	''	11 9	061 - 070	White 8000°K		
			071 - 100	Blue / Red		
			101 - 130	Blue / Green		
			131 - 160	Green / Red		
			161 - 190	Red / Blue		
			191 - 220	Green / Blue		
			221 - 255	Red / Green		
			White balance*			
12	12	10	000 - 189	No function		
-	12 12	'-	14		190 - 254	New white balance
				255	White balance saving	

13	13	11	Patterns sequence	es
			000 - 010	No function
			011 - 040	Sequence 1
			041 - 070	Sequence 2
			071 - 100	Sequence 3
			101 - 130	Sequence 4
			131 - 160	Sequence 5
			161 - 190	Sequence 6
			191 - 220	Sequence 7
			221 - 255	Sequence 8
14	14	12	Patterns sequence speed	
			000 - 255	Fast to slow
15	15	21	Options and built-	in programs
			000 - 079	No function
			080 - 087	Resets all motors
			088 - 090	No function
			091 - 093	Activates the white balance saving
			094 - 099	No function
			100 - 119	Internal program 1 - Scenes 1 to 8
			120 - 139	Internal program 2 - Scenes 9 to 16
			140 - 159	Internal program 3 - Scenes 17 to 24
			160 - 179	Internal program 4 - Scenes 25 to 32
			180 - 199	Internal program 5 - Scenes 33 to 40
			200 - 219	Internal program 6 - Scenes 41 to 48
			220 - 239	Internal program 7 - Scenes 49 to 56
			240 - 255	Music-sensitive program - Program 1 scenes

*More details about white balancing (Channel 12 or 10 according to the DMX mode: Standard (St), Basic (Ba) or Expert (Ex))

The "White balance" function allows you to calibrate the colours of your moving head. This functions is used to set the max level for each shade of red, green, blue and white. This maximum level will then apply to every colour.

To do so, proceed as follows (the steps order is very important):

- 1 Set channel 12 (St or Ba modes) or 10 (Ex mode) between 190 and 254 (New white balance).
- 2 Set your white balance by indicating the maximum level of RGBW colours, using channels 1 to 4 (St or Ba modes) or 13 to 20 (Ex mode).
- 3 Activitate the function by setting channel 15 (St or Ba modes) or 21 (Ex mode) between 091 and 093 (Activation of the White balance saving).
- 4 Save changes by setting channel 12 (St or Ba modes) or 10 (Ex mode) on 255 (White balance saving), LEDs will flash to indicate changes have properly been saved.

Caution:

This setting applies to every colour function. For instance: if you set the white balance with a low level of blue, the macros, patterns and internal programs will take this maximum blue level into account. If your white balance does not use the central LED, each function mentioned precedently will ignore the central LED.

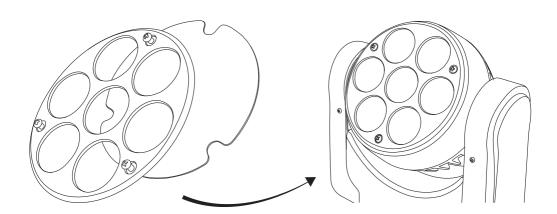
To go back to the initial situation, you must modify back your white balance and set every colour at 100% or activate the "Reset Default" function in the Personality menu.

9 - Accessories

The Ninja-7x15QC moving head is supplied with two accessories allowing you to optimise and adapt its light output:

9.1 FROST filter

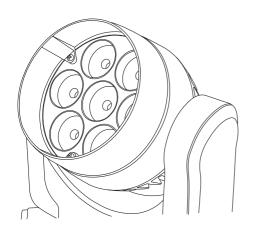
The Frost filter allows you to increase the beam aperture angle by 10°, to spread colours on wider areas. **Installing the Frost filter**: position the filter behind the filter holder, and use the 3 supplied screws as shown below. Photometric datas with Frost filter are avalaible on the next page.



9.2 Spoiler

The spoiler decreases the beam angle by 1°, creating a very pure beam effect.

Installing the spoiler: use the 3 supplied screws to tighten the spoiler to the head of the projector as shown below.

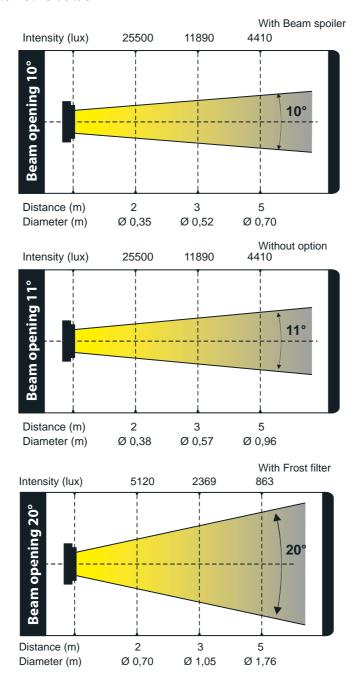




When using the spoiler you must set the TILT movement range on 240° or the spoiler will abut against the base of the moving head.
This can be configured in the PERSONALITY > Status setting > Tilt Degree menu.
The default TILT movement settings is set on 240°.

When using both the Frost filter and the spoiler, it is crucial to parameter the automatic modes speed on 2, 3 or 4. This can be configured in the PERSONALITY > Status setting > Movement speed menu.

10 - Photometric datas



11 - Error messages

Once switched on the unit will launch an initialisation. The display will indicate "Error channel is XX" if a problem occurs with one or several channels. The XX variable may correspond to 1,2,3,4,5, or 6 since these are movement-dedicated channels.

Errors may have various origins. Sensors are used to set the motors in their default position.

Either the magnetic sensors are defective, or the magnets have been displaced.

Problems might also come from a defective motor or the motor electronic management.

In any case, please write down the error displayed and contact your retailer to launch a maintenance procedure.

Do NOT attempt to repair it by yourself as only Contest-approved technicians are allowed to perform maintenance operations.

12 - Dimensions

