LXMH10003

7 X 15 W OSRAM 4-IN-1 LED MOVING HEAD

USER MANUAL

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1. Introduction

To all residents of the European Union

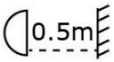
Important environmental information about this product

This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; it should be taken to a specialized company for recycling. This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules.

If in doubt, contact your local waste disposal authorities.

Thank you for choosing Luxibel®! Please read the manual thoroughly before bringing this device into service. If the device was damaged in transit, do not install or use it and contact your dealer.

2. Safety Instructions

	Be very careful during the installation: touching live wires can cause life-threatening electroshocks.
	Always disconnect mains power when device not in use or when servicing or maintenance activities are performed. Handle the power cord by the plug only.
	**Indoor use only.** Keep this device away from rain, moisture, splashing and dripping liquids. Never put objects filled with liquids on top of or close to the device.
	Keep this device away from children and unauthorized users.
	**Caution:** device heats up during use.
	**Do not stare directly at the light source**, as this may cause • epileptic seizure in sensitive people • temporarily loss of sight (flash blindness) • permanent (irreversible) eye damage.
	There are no user-serviceable parts inside the device. Refer to an authorized dealer for service and/or spare parts.
	Respect a minimum distance of 0.5 m between the device's light output and any illuminated surface.
	This is a Safety Class 1 device. It is therefore essential that the device be earthed. Have a qualified person carry out the electric connection.

- Make sure that the available voltage does not exceed the voltage stated in the specifications of this manual.
- Do not crimp the power cord and protect it against damage. Have an authorised dealer replace it if necessary.
- Use an appropriate safety cable to fix the device (e.g. VDLSC7N or VDLSC8N).
- Install the device at a minimal distance of 0.5 m from flammable and explosive objects or substances.
- The maximum ambient temperature is 40 °C. Do not operate the device at higher temperatures.

3. General Guidelines

Refer to the **Velleman® Service and Quality Warranty** on the last pages of this manual.

	Keep this device away from dust and extreme temperatures. Make sure the ventilation openings are clear at all times. For sufficient air circulation, leave at least 1" (± 2.5 cm) in front of the openings.
	Protect this device from shocks and abuse. Avoid brute force when operating the device.

- Familiarise yourself with the functions of the device before actually using it. Do not allow operation by unqualified people. Any damage that may occur will most probably be due to unprofessional use of the device.
- All modifications of the device are forbidden for safety reasons. Damage caused by user modifications to the device is not covered by the warranty.
- Only use the device for its intended purpose. All other uses may lead to short circuits, burns, electroshocks, lamp explosion, crash, etc. Using the device in an unauthorised way will void the warranty.
- Damage caused by disregard of certain guidelines in this manual is not covered by the warranty and the dealer will not accept responsibility for any ensuing defects or problems.
- Mechanical wear and LEDs are not covered by warranty.
- A qualified technician should install and service this device.
- Do not switch the device on immediately after it has been exposed to changes in temperature. Protect the device against damage by leaving it switched off until it has reached room temperature.
- This device is designed for professional use on stage, in discos, theatres, etc. The device should only be used indoors with an alternating current of 100-240 V~, 50/60 Hz.
- Lighting effects are not designed for permanent operation: regular operation breaks will prolong their lives.
- Use the original packaging if the device is to be transported.
- Product images are for illustrative purposes only.
- Keep this manual for future reference.

4. Features

- DMX channels: 19/50/18/20
- super-fast, smooth and silent movement
- 7 LEDs with pixel control
- RGBW four-colour mixing creates vivid, saturated and uniform colour effects
- pre-set colour temperature at 2700 K, 3200 K, 4200 K, 5600 K and 8000 K
- zoom from 10° to 60°
- full-range 0-100 % dimmer
- various strobe effects
- RDM (Remote Device Management) function to change DMX address, display flip, X/Y reverse…
- software upgrade via DMX
- adjustable sleep mode when DMX signal is lost
- temperature indication for base, arm and lamp
- fan speed changes automatically depending on temperature
- heat pipe for cooling
- W-DMX for wireless DMX transmission

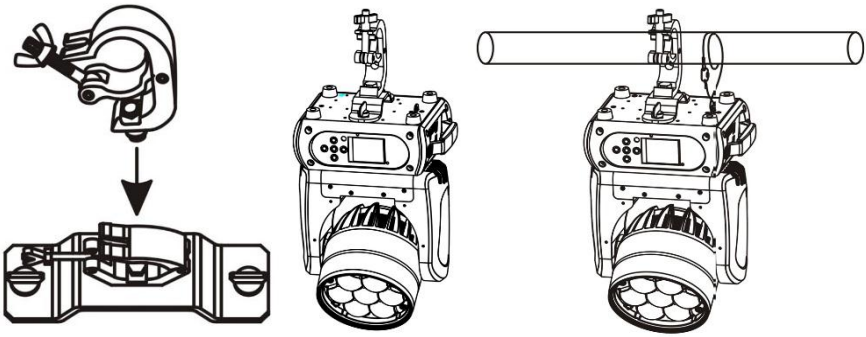
5. Mounting and Connection

Choose a suitable mounting spot. Mount the device in the desired angle using the included bracket. Connect the power cord to the mains. Disconnect after use.

5.1 Mounting the Device

- Have the device installed by a qualified person, respecting EN 60598-2-17 and all other applicable norms.
- The carrying construction must be able to support 10 times the weight of the device for 1 hour without deforming.
- The installation must always be secured with a secondary attachment e.g. a safety cable.
- Never stand directly below the device when it is being mounted, removed or serviced. Have a qualified technician check the device once a year and once before you bring it into service.
- Install the device in a location with few passers-by that is inaccessible to unauthorised persons.
- Overhead mounting requires extensive experience: calculating workload limits, determining the installation material to be used… Have the material and the device itself checked regularly. Do not attempt to install the device yourself if you lack these qualifications as improper installation may result in injuries.
- For truss mounting, use an appropriate clamp (not incl.) and fit an M10 bolt through the centre of the (folded) bracket.
- Adjust the desired inclination angle via the mounting bracket and tighten the bracket screws.
- Make sure there is no flammable material within a 0.5 m radius of the device.
- Have a qualified electrician carry out the electric connection.
- Connect the device to the mains with the power plug. All devices must be powered directly off a grounded switched circuit. Do not connect to a dimmer pack.
- The device has a power output to supply power to another device. When connecting several devices in a daisy chain via this output, make sure that the total current does not exceed the power line's nominal current. Use power cables with an adequate section.
- The installation has to be approved by an expert before the device is taken into service.

1. Install the clamp onto the Omega bracket.
2. Install the clamp-bracket assembly onto the device.
3. Install the assembly onto an appropriate truss and fasten. Secure with a secondary safety rope.



5.2 Connecting the Device

Power

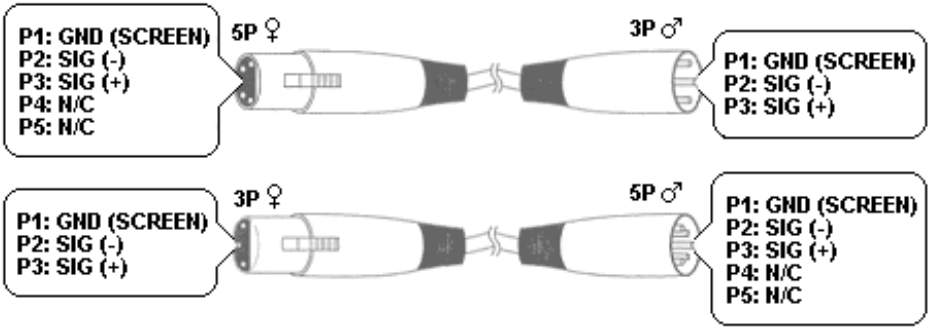
Connect the device to the mains with the power plug.
Power all devices directly off a grounded switched circuit.
Do not connect the device to a rheostat or dimmer circuit, even when using the rheostat or dimmer channel solely for 0 % to 100 % switching.

- Have a qualified electrician carry out the electric connection.

DMX-512 Connection

- When applicable, connect an XLR cable to the female XLR output of a controller (not incl.) and the other side to the male XLR input of the device. Multiple devices can be linked through serial linking. The linking cable shall be a dual core, screened cable with XLR input and output connectors.
- A DMX terminator is recommended for installations where the DMX cable has to run a long distance or is in an electrically noisy environment (e.g. discos). The terminator prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the chain.

How to turn the controller line from 3-pins into 5-pins (plug and socket).



6. Operation

The device can be used in the following modes:

- stand-alone mode
- master/slave mode
- with a DMX-512 controller.

6.1 Control Panel

Access the control panel functions using the four panel buttons located around the display:

Button	Function
MENU	• access the menu • return to a previous menu option
ENTER	• select menu option • store the current menu or option within the menu

Button	Function
UP	• scroll through the menu options in ascending order • increase value
DOWN	• scroll through the menu options in descending order • decrease value

Menu

Connect	DMX Address ①	XXX	DMX address setting
	Wireless①		Wireless Enabled
Light	Max Temperature ①	80~139℃, 90℃ /176~282℉, 194℉	Lamp off if temperature continuously over for 5 minutes
	Lamp Adjust ①	PAN……	Adjust value of each channels
Information	Time Info.	Current XXXX(Hours) Fixture Life XXXX(Hours)	Fixture boot time Fixture total run time
	Temperature	Near Lamp Temp (depends on fixture)	Temperature Sensors
	Fans Speed	Near Lamp Fan (depends on fixture)	Fan speed Sensors
	Channel Value	PAN……	Display value of channel
	Error Message	Pan,Tilt……	Error channels
	Fixture Model	xxxxxxxxxxxx	Display model brand and model

	Software Ver	1U01 V1.0.00 2U01 V1.0.00 :		Version of each IC
Set	Reset	All Pan&Tilt Others		Reset all Reset Pan&Tilt Reset Others
	Movment	Pan Reverse① Tilt Reverse① Pan Degree① Encoders① Pan/Tilt Mode①	ON/OFF ON/OFF 630/540 ON/OFF Stand/Smooth	Pan Reverse Tilt Reverse Choose Pan Degree Encoder wheel on/off Choose pan/tilt mode
	UI Set	Mic Sens. ③ No Signal① Temperature. C/F① Fans Mode① Hibernation① Backlight① Flip Display① Display Bright③ Brand Show① Key Lock① Language①	0~99%,60% Close/Hold/Auto/Music Fahrenheit /Celsius Auto Speed /High Speed OFF, 01M~99M, 15M 02~60m 02m ON/OFF 00~31 10 ON/OFF ON/OFF En/简/繁/Fr/Sp	Sensitivity of Mic Mode when no signal Temperature at ℃/℉ Fans mode Sleeping mode Show backlight time Display 180° reverse Display Brightness Show brand or not Key lock on/off Language Select

	Users	User Mode①	Standard Extended Basic-8bit Basic-16bit User	Standard mode Extended mode Basic-8bit mode Basic-16bit mode User program mode
		Edit User③	Max Channel = XX PAN = CH01 :	Edit users mode
	Calibration③	-Password- Pan..	=XXX =XXX	Password: 050 Calibrate channel value
	Fixture ID③	Name -Password- PID Code		Name Password: 050 Set PID of RDM
	Wireless Set ①	DMX On Cable Reset Connect	ON/OFF ON/OFF	DMX Send Out Reset Connect
	Reload Default	Basic Reload(①) Program Reload(②) ---Password--- Private Reload(③) All Reload	ON/OFF ON/OFF XXX ON/OFF ON/OFF	Basic Reload Program Reload Password: 050 Private Reload All Reload
Program	Play①	DMX Receive Slave Receive Sequence Music	Slave Receive 1,2,3 Master / Alone Master / Alone	DMX Receive Choose slave position Run Sequence Music mode

	Select Chase ②	Chase Part 1 Chase Part 2 Chase Part 3	Chase 1 ~ 8 Chase 1 Chase 1 ~ 8 Chase 2 Chase 1 ~ 8 Chase 3		Select and run auto program
	Edit Chase②	Chase 1 : Chase 8	Chase Test Step 01 Step 64	=SCxxx =SCxxx	Test Beginning scene Ending scene
	Edit Scenes②	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,…… --Fade Time-- --Secne Time-- DMX Input	=xxx =xxx =xxx	Input manual scene Modify manually fading time Modify manually scene time Input scene from exterior controller
	Scenes Record	ScXX=>ScXX			Auto Input scenes

Remarks

xxxx default setting
① basic relaod
② programme reload
③ private reload

6.2 Stand-Alone Mode

The device starts running in stand-alone mode after connection to the mains. This mode allows you to use the device without controller.

1. Connect the device to the mains to switch it on.
2. Press MENU to enter the menu.
3. Select an option with UP or DOWN and press ENTER to confirm.

6.3 Master/Slave Mode

Notes

- The master/slave mode allows for connecting several devices to a single master device in a daisy chain.
- All slave devices will then work synchronously with the master device.
- Configure all slave units before connecting the master unit to the daisy chain.
- The maximum number of slave units you can connect to a master unit is 9.

Slave units:

1. Connect the DMX input from your slave device to the DMX output of the previous device in the chain.
2. Connect the slave device to the mains to switch it on.
3. Press MENU to enter the menu.
4. Select the slave mode with UP or DOWN and press ENTER to confirm.
5. Repeat these steps for all slave units.

Master unit

1. Connect the master device to the mains to switch it on.
2. Press MENU to enter the menu.
3. Select the master mode with UP or DOWN and press ENTER to confirm.
4. Set the master unit to work in one of the running modes.
5. Connect the master unit as the first unit in the chain by connecting the DMX output of the master device to the DMX input of the first slave unit.

6.4 DMX Mode

The DMX mode allows you to control the device with any universal DMX controller.

- All DMX-controlled devices need a digital start address so that the correct device responds to the signals. This digital start address is the channel number from which the device starts to "listen" to the DMX controller. The same starting address can be used for a whole group of devices or an individual address can be set for every device.
- When all devices have the same address, all the units will "listen" to the control signal on one particular channel. In other words: changing the settings of one channel will affect all devices simultaneously. If you set individual addresses, each device will "listen" to a separate channel number. Changing the settings of one channel will only affect the device in question.

To set the device to work with a DMX controller:

1. Press MENU to enter the menu.
2. Use UP and DOWN to select the user mode and press ENTER.
3. Press MENU until <DMX Address> is displayed and press ENTER.
4. Use UP and DOWN to set the DMX start address and press ENTER.

Start addresses

Use the table below to define the correct address. The table shows the settings for units 1 to 3. Apply the same principle for the other units. Example:

channel mode		1st unit	2nd unit	3rd unit	highest start address
20	start address	1	21 (1 + 20)	41 (21 + 20)	492
	channel	1 - 20	21 - 40	41 - 60	

DMX Channel Values

channel				function	from	to	description
St	Ex	B1	B2				
1	1	1	1	pan	0	255	pan coarse
	2		2	pan fine	0	255	
2	3	2	3	tilt	0	255	tilt coarse
	4		4	tilt fine	0	255	
3	5	3	5	movement speed	0	255	from fast to slow
	6			movement function	0	15	normal
					16	31	movement with back-out
					32	255	TBD
4	7			shutter function	0	15	normal shutter functions
					16	31	pulse effect forward
					32	17	pulse effect reverse
					48	63	random strobe
					64	255	TBD
5	8			shutter	normal shutter functions		
					0	31	close
					32	223	strobe rate from slow to fast
					224	255	open
					pulse effect forward		
					0	31	close
					32	223	strobe rate from slow to fast
					224	255	open
					pulse effect reverse		
					0	31	close
					32	223	strobe rate from slow to fast
					224	255	open
					random strobe		
					0	31	close
					32	223	strobe rate from slow to fast
					224	255	open
		4	6	shutter	0	31	shutter closed
					32	63	no function (shutter open)
					64	95	strobe from slow to fast
					96	127	no function (shutter open)
					128	159	pulse effect in sequences
					160	191	no function (shutter open)
					192	223	random strobe from slow to fast
					224	255	no function (shutter open)
6	9	5	7	dimmer	0	255	from 0-100 %
7	10	6	8	virtual colour function	0	15	on function
					16	31	CTC function
					32	47	forward spin
					48	63	reverse spin
					64	79	continuous
					80	111	colour bounce
					112	255	TBD

8	11	7	9	virtual colour 1	CTC function		
					0	223	colour temp correction 2000>2700 K
					224	231	white 3200 K
					232	239	white 4200 K
					240	247	white 5600 K
					248	255	white 8000 K
					forward spin		
					0	255	rainbow effect from slow to fast
					reverse spin		
					0	255	rainbow effect from slow to fast
					continuous and colour bounce		
					0	0	black
					1	1	red
					2	2	green
					3	3	blue
					4	4	white
					5	46	R 0 %, G up, B 100 %, W 0 %
					47	88	R 0 %, G 100 %, B down, W 0 %
					89	130	R up, G 100 %, B 0 %, W 0 %
					131	172	R 100 %, G down, B 0 %, W 0 %
					173	214	R 100 %, G 0 %p, B up, W 0 %
					215	255	R down, G 0 %, B 100 %, W 0 %
9	12	8	10	virtual colour 2 (only on colour bounce)	colour bounce		
					0	0	black
					1	1	red
					2	2	green
					3	3	blue
					4	4	white
					5	46	R 0 %, G up, B 100 %, W 0 %
					47	88	R 0 %, G 100 %, B down, W 0 %
					89	130	R up, G 100 %, B 0 %, W 0 %
					131	172	R 100 %, G down, B 0 %, W 0 %
					173	214	R 100 %, G 0 %p, B up, W 0 %
					215	255	R down, G 0 %, B 100 %, W 0 %
10	13	9	11	red all	0	255	red from 0-100 %
11	14	10	12	green all	0	255	green from 0-100 %
12	15	11	13	blue all	0	255	blue from 0-100 %
13	16	12	14	white all	0	255	white from 0-100 %
14	17	13	15	zoom	0	255	zoom from small to big angle
15	18	14	16	foreground	0	15	no function
					16	255	foreground colour
16	19	15	17	background	0	15	no function
					16	255	background colour
17	20	16	18	pattern	0	15	on pattern
					16	31	pattern control
					32	255	pattern effect 1-14
18	21	17	19	pattern speed	pattern control		
					0	252	picture effect 1-250
					pattern effect		
					0	255	from slow to fast

				pattern byte 1	0	255	direct access to pattern of LED 1 + 2
				bit 0	0	1	bit 0 = LED 1 red switch
				bit 1	0	2	bit 1 = LED 1 green switch
				bit 2	0	4	bit 2 = LED 1 blue switch
				bit 3	0	8	bit 3 = LED 1 white switch
				bit 4	0	16	bit 4 = LED 2 red switch
				bit 5	0	32	bit 5 = LED 2 green switch
				bit 6	0	64	bit 6 = LED 2 blue switch
				bit 7	0	128	bit 7 = LED 2 white switch
				pattern byte 2	0	255	direct access to pattern of LED 3 + 4
				pattern byte 3	0	255	direct access to pattern of LED 5 + 6
				pattern byte 4	0	255	direct access to pattern of LED 7
	22			red pixel 1	0	127	LED off
					128	255	LED on
	23			green pixel 1	0	127	LED off
					128	255	LED on
	24			blue pixel 1	0	127	LED off
					128	255	LED on
	25			white pixel 1	0	127	LED off
					128	255	LED on
	…			…	…	…	…
					…	…	…
	46			red pixel 7	0	127	LED off
					128	255	LED on
	47			green pixel 7	0	127	LED off
					128	255	LED on
	48			blue pixel 7	0	127	LED off
					128	255	LED on
	49			white pixel 7	0	127	LED off
					128	255	LED on
19	50	18	20	control	0	7	normal
					8	15	reset all
					16	23	pan and tilt reset
					24	47	TBD
					48	55	other reset
					56	63	display off
					64	71	display on
					72	79	TBD
					80	87	TBD
					88	95	hibernation
					96	255	TBD

7. Unique Features

7.1 RDM

The Remote Device Management allows the user to control the device from a distance. Every single device features a unique RDM code. It is suggested not to change this code.

7.2 Software Upgrade

New software can be uploaded into the device through a DMX cable and an upgrade box. The upgrade box is not included. Please contact your dealer for more information.

7.3 Hibernation Mode

The device enters the hibernation mode if it is switched on but does not receive any DMX signal. The device will return to normal mode as soon as a DMX signal is received.

7.4 Reverse Display

Simultaneously hold the UP and DOWN buttons pressed for 3 seconds to flip the display.

8. Cleaning and Maintenance

- All screws should be tightened and free of corrosion.
- The housing, the lenses, the mounting supports and the installation location (e.g. ceiling, suspension, trussing) should not be deformed, modified or tampered with; e.g. do not drill extra holes in mounting supports, do not change the location of the connections…
- Mechanically moving parts must not show any signs of wear and tear.
- The electric power supply cables must not show any damage. Have a qualified technician maintain the device.
- Disconnect the device from the mains prior to maintenance activities. Let the device cool down.
- Wipe the device regularly with a moist, lint-free cloth. Do not use alcohol or solvents.
- Do not immerse the device in any liquid.
- There are no user-serviceable parts, apart from the fuse.
- Contact your dealer for spare parts if necessary.

Replacing the Fuse

Only replace the fuse by a fuse of the same type and rating.

1. Before replacing the fuse, unplug the mains lead.
2. Unscrew the fuse holder with an appropriate screwdriver.
3. Remove the old fuse and install the new fuse in the fuse holder.
4. Place the fuse holder back in the housing and tighten it.

9. Technical Specifications

power supply ..... 100-240 V~, 50/60 Hz
power consumption ..... 125 W
dimensions ..... 249 x 179 x 369 mm
weight ..... 6 kg
fuse ..... T2 A, 250 V
source
- light source ..... 7x 15 W 4-in-1 LEDs
- LED life ..... 60.000 h
- luminous flux ..... 3500 lm, 9700 lux @ 3 m
- control ..... remote on/off via DMX
- ballast ..... switching-mode power supply

optical system
- beam angle ..... 6° to 60°

X/Y
- pan ..... 630° (1.45 sec) or 540°(1.2 sec)
- tilt ..... 265° (0.72 sec)
- 16-bit resolution
- auto repositioning
- 3-phase motor for fast and quiet movement

display
- 2.4" LCD display with English/Chinese/French/Spanish menu
- auto lock
- flipped display

Use this device with original accessories only. Velleman nv cannot be held responsible in the event of damage or injury resulting from (incorrect) use of this device. For more info concerning this product and the latest version of this manual, please visit our website www.luxibel.com. The information in this manual is subject to change without prior notice.

Velleman® Service and Quality Warranty

Since its foundation in 1972, Velleman® acquired extensive experience in the electronics world and currently distributes its products in over 85 countries.

All our products fulfil strict quality requirements and legal stipulations in the EU. In order to ensure the quality, our products regularly go through an extra quality check, both by an internal quality department and by specialized external organisations. If, all precautionary measures notwithstanding, problems should occur, please make appeal to our warranty (see guarantee conditions).

General Warranty Conditions Concerning Consumer Products (for EU):

• All consumer products are subject to a 24-month warranty on production flaws and defective material as from the original date of purchase.

• Velleman® can decide to replace an article with an equivalent article, or to refund the retail value totally or partially when the complaint is valid and a free repair or replacement of the article is impossible, or if the expenses are out of proportion.

You will be delivered a replacing article or a refund at the value of 100% of the purchase price in case of a flaw occurred in the first year after the date of purchase and delivery, or a replacing article at 50% of the purchase price or a refund at the value of 50% of the retail value in case of a flaw occurred in the second year after the date of purchase and delivery.

• **Not covered by warranty:**

- all direct or indirect damage caused after delivery to the article (e.g. by oxidation, shocks, falls, dust, dirt, humidity...), and by the article, as well as its contents (e.g. data loss), compensation for loss of profits;

- consumable goods, parts or accessories that are subject to an aging process during normal use, such as batteries (rechargeable, non-rechargeable, built-in or replaceable), lamps, rubber parts, drive belts... (unlimited list);

- flaws resulting from fire, water damage, lightning, accident, natural disaster, etc....;

- flaws caused deliberately, negligently or resulting from improper handling, negligent maintenance, abusive use or use contrary to the manufacturer's instructions;

- damage caused by a commercial, professional or collective use of the article (the warranty validity will be reduced to six (6) months when the article is used professionally);

- damage resulting from an inappropriate packing and shipping of the article;

- all damage caused by modification, repair or alteration performed by a third party without written permission by Velleman®.

• Articles to be repaired must be delivered to your Velleman® dealer, solidly packed (preferably in the original packaging), and be completed with the original receipt of purchase and a clear flaw description.

• Hint: In order to save on cost and time, please reread the manual and check if the flaw is caused by obvious causes prior to presenting the article for repair. Note that returning a non-defective article can also involve handling costs.

• Repairs occurring after warranty expiration are subject to shipping costs.

• The above conditions are without prejudice to all commercial warranties.

The above enumeration is subject to modification according to the article (see article's manual).

Made in PRC
Imported by Velleman nv
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