XLED 1037
PR-8120

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the projector:

| Name	Quantity	Unit	Remark
G clamp	2	Pcs	
Ω clamp	2	Pcs	Optional
XLR cable	1	Pc	With Plug & Socket
Safety cord	1	Pc	
This manual	1	Pc	
Wireless Receiver's Antenna	1	pc	Mounted with its interface in a lighting fixture before use

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

DO NOT mount the projector directly onto inflammable surface

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is   5m.   5m

Avoid direct exposure to the light from the lamp. The light is harmful to the eye.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep a projector's optical system clean. Do not touch LED lens with bare hands.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.

LED lamps should be replaced if damaged or having reached life limit.

Exterior surface temperatures of the luminaire after 5 minutes operation is55℃, when steady state is achieved 70℃,

There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

Always disconnect a projector from the POWER when not in use or before cleaning or any maintenance work!

INSTALL THE PROJECTOR
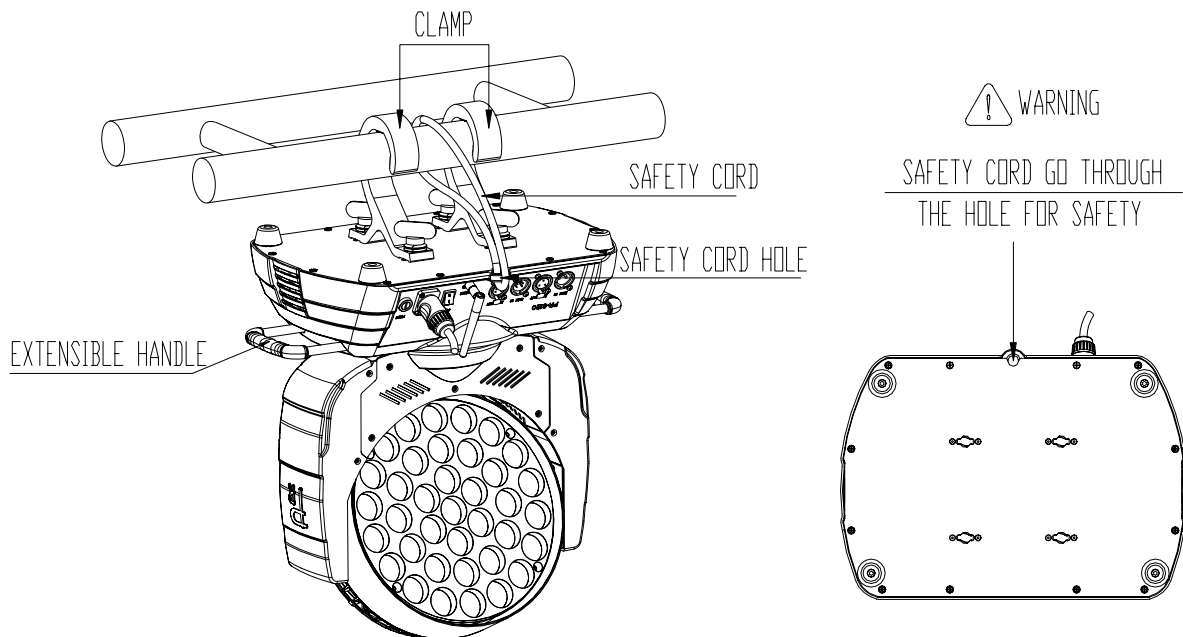
Take 2 clamps and 1 safety cord out from the package and mount 2 clamps on the underside of fixture with 4 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure that you are going to mount the projector is secure and is strong enough to support a weight of each projector.

WARNING:

1. **The projector MUST be lifted or carried by the HANDLES instead of clamps.**
2. **For safety the safety cord should afford 10 times of the unit's weight.**

POWER SUPPLY-MAINS

Connect the power cord as follows:
    L (live) =brown
    E (earth) =yellow/green
    N (neutral) =blue

Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

IMPORTANT
It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.

CONTROL CONNECTION

3-PIN

DMX OUT

DMX IN

DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+

5-PIN

DMX OUT

DMX IN

DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between controller and projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 3 pin XLR plugs and sockets. The XLR's are connected as shown in the figure above.
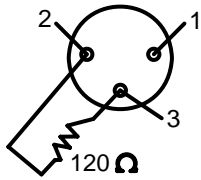
Note: care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The projector accepts digital control signals in protocol DMX512 (1990).
Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.

DMX OUT   DMX IN DMX OUT   //   DMX IN

DMX IN

DMX CONTROLLER   XLR TERMINATOR

DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.

DMX TERMINATOR
CONNECTION
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.
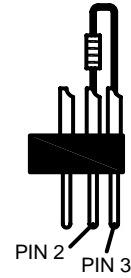
SETUP OPTIONS-PROJECTOR CONFIGURATION
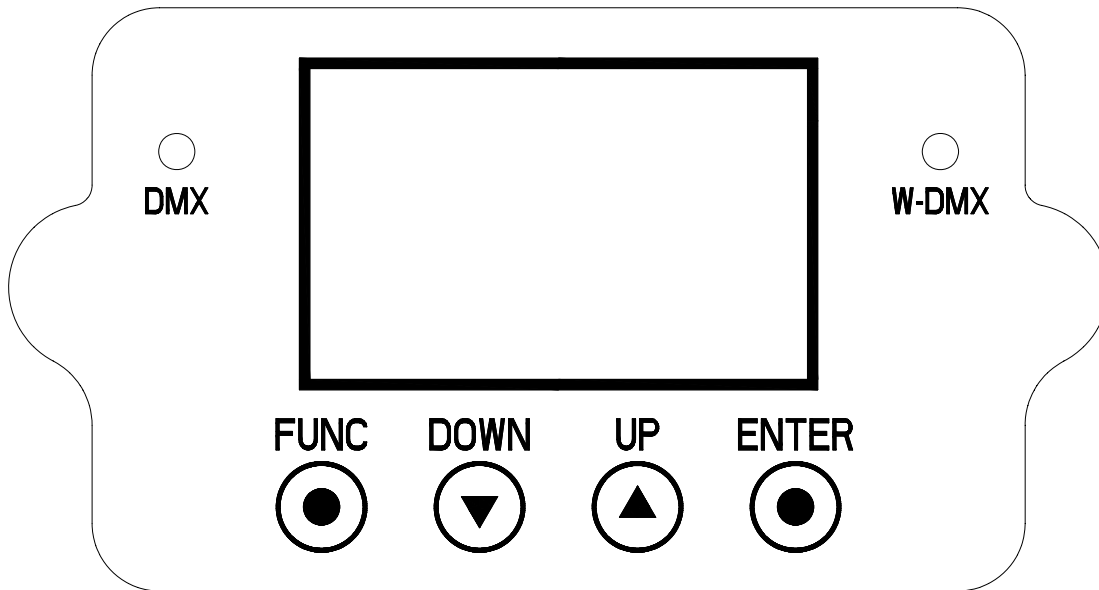
Projector configuration can be set conveniently via press button switch and LCD display.

To browse or change its setup options, Press button ENTER more than 3 seconds to unlock panel. Menu will be displayed on the screen, each menu has it own sub-menu. Each menu has specific function, Please refer to "Operation Menu" for details.

Press button UP or DOWN if you want to browse or change through the various Setup Options.

Press button ENTER to save your settings or enter the next menu.

Press button UP or DOWN to change values.(Add or subtract)

Press button FUNC, it will return to the upper menu one by one.

TO SET THE DMX START ADDRESS

Each projector must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The fixture have 2 DMX modes. There are standard mode and extended mode. For example standard mode has 17 channels, so set the No. 1 projector's address 001, No. 2 projector's address 018, No. 3 projector's address 035, No. 4 projector's address 052 and so on.

Launch the projector. Press button ENTER more than 3 seconds to unlock panel.

Press button ENTER to display **DMX address**;

Press button UP and DOWN, you can set the address;

Press button ENTER to confirm while Green Indication flashes, which means the projector has saved the Start Address automatically, when powered on next time, it will display the value saved last time.

Press button FUNC, it will return to the upper menu one by one.

OPERATION MENU

1st level	2nd level	3rd level	4th level
DMX Address	XXX （DMX address:1~496）		
Reset	Are You Sure		
Config Settings	DMX ChannelMode （Default：Standard）	Standard 17	
		Extended 26	
	Pan Tilt Swap （Default：OFF）	OFF	
		ON	
	Pan&Tilt Invert （Default：OFF）	OFF	
		ON	
	DMX Mode （Default：XLR First）	XLR First	
		XLR Only	
		Wireless Only	
		Wireless First	
		WirelessTo XLR	
	Unlink Wireless	YES	
	MasterSlaveSelec Default：Slave）	Slave	
		Master	
	Factory Settings	YES	
	Parameter Transmission	YES	
	Display Options	Language	Chinese
			English
		Display Mode	Off After Delay
			On Always
		Display Invert	OFF
			ON
		Display Contrast (Default:9)	0~18
Information	Fixture Hours	XXXX	
	Software Version	X.X.X	
Test Mode	Self Test	YES	

	LED Lamp	OFF	
		Red	
		Green	
		Blue	
		White	
		Color 1	
		Color 2	
		Color 3	
		Color 4	
		ON	
	ZOOM	0-255	
	Pan Positons	0-255	
	Tilt Positions	0-255	
Operation Mode	DMX Operation		
	Preset Memory		
	User 's Memory		
	Static Scene 1～16	CH1　Strobe	000-015(No Stroble)
			016-127(Pulse)
			128-255(Strobe)
		CH2　Red	0-255
		CH3　Green	0-255
		CH4　Blue	0-255
		CH5　Blue	0-255
		CH6　Zoom	0-255
		CH7　Pan Positons	0-255
		CH8　Tilt Positions	0-255
		CH9　Pan&Tilt Speeds	0-255
		CH10　Hold Time	0.1s~25s

Note:

1. There is only one Projector to be set as a Master in a signal Cable. If Master's functions used, Please disable DMX control signal.

2. When multiple projectors' work together in synchronous control state, Parameters can be transmitted from the master projector to the slave projectors such as DMX channel mode, Display setting status（Contrast setting excluded） and operation mode (User memory data is included). Before parameters transmitted, the projector which will send parameters should be set as a Master and others be as Slaves.

DMX PROTOCOL

Standard	Extended	Functions	DMX	Descriptions
1	1	Strobe	000-015	NO Strobe
			016-127	Pulse from slow to fast
			128-255	Strobe from slow to fast
2	2	Dimmer	000-255	Linear Dimming from dark to Bright
	3	Dimmer in 16 bit	000-255	Dimming in 16 bit precision
3	4	Color Temp	000	NO
			001-255	Linear Color Temp adjustment from low to high
4	5	Animation	000	NO
			001-255	Animation effects
5	6	Color Macro	000	NO
			001-031	Red
			032-063	Greeen
			064-095	Blue
			096-127	Color 1
			128-159	Color 2
			160-191	Color 3
			192-223	White
			224-255	Rainbow effects (Speed from slow to fast between 224 and 255 in DMX value)
6	7	Area 1 Red	000-255	Linear adjustment in Red from light to dark of Area 1
	8	Area 2 Red	000-255	Linear adjustment in Red from light to dark of Area 2
	9	Area 3 Red	000-255	Linear adjustment in Red from light to dark of Area 3
7	10	Area 1 Green	000-255	Linear adjustment in Green from light to dark of Area 1
	11	Area 2 Green	000-255	Linear adjustment in Green from light to dark of Area 2
	12	Area 3 Green	000-255	Linear adjustment in Green from light to dark of Area 3
8	13	Area 1 Blue	000-255	Linear adjustment in Blue from light to dark of Area 1
	14	Area 2 Blue	000-255	Linear adjustment in Blue from light to dark of Area 2
	15	Area 3 Blue	000-255	Linear adjustment in Blue from light to dark of Area 3
9	16	Area 1 White	000-255	Linear adjustment in White from light to dark of Area 1
	17	Area 2 White	000-255	Linear adjustment in White from light to dark of Area 2
	18	Area 3 White	000-255	Linear adjustment in White from light to dark of Area 3
10	19	Zoom	000-255	Linear Zooming (0%~100%)
11	20	Zoom in 16 bit	000-255	Zooming in 16 bit precision
12	21	Pan	000-255	Pan (0°~540°)
13	22	Pan in 16 bit	000-255	Pan in 16 bit Precision
14	23	Tilt	000-255	Tilt (0°~270°)
15	24	Tilt in 16 Bit	000-255	Tilt in 16 bit Precision
16	25	Pan & Tilt Speeds	000-255	Pan and Tilt Speeds from fast to slow
17	26	Control Function	000-049	Reserved
			050-255	Reset

Remarks: DMX Priority sequence from high to low: Macro, Animation, CT, single color dimming of RGBW.

INDICATION OF LED DIGITAL TUBE

LED Indications：

Green Indication	ON	DMX Signal OK
	OFF	NO DMX Signal
Blue Indication	ON	Wireless DMX Signal available
	Off	Not linked to any transmitter
	Flash	Lose link with a transmitter or being linked with one

Explanations for logo on top-right of the LCD display：

S	Slave
M	Master
D	DMX512 Mode
I	Preset Memory
U	User's Memory
T	Test Memory
Lock Logo	Buttons are Locked, buttons are unlocked and lock logo disappears after "Enter" button pressed more than 3 seconds

MAINTENANCE

To prolong a Projector's life, Regular maintenance should be done for its LED optical System to ensure that the system be in best operational condition. If the projector does not function, check the fuses on the power socket of the projector, if burned, they should only be replaced by fuses of the same specification. Should these be damaged call a qualified technician before replacement. The projector has thermal protection device that will switch off the projector in case of overheating, should this occur, check if the fans work normally or fan and fan shield are blocked by dust. If the projector not operational, call a qualified technician. After cleaned and repaired, the projector can be restarted.

Any maintenance work should only be carried out by qualified technicians.

KEEPING THE PROJECTOR CLEAN

It definitely necessary to keep a projector clean for its reliable use. Cooling fans and their shield should be cleaned every 15days. LED lamps' lens and cover should be cleaned regularly for optimized light output.

Cleaning frequency depends on how often a projector is used and its operational environment.   A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean t housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector can't be started	➢ Power Cable not connected well ➢ Power supply damaged or not connected well, a qualified Technician should be required ➢ Control board not connected well and a qualified Technician should be required.
The lamp can be started, but LED lamps are off and not controlled	➢ LED boards not connected properly, a qualified technician is needed
A projector's lamps are on but it doesn't respond to the controller	➢ Make sure that the projector's start address is correctly set ➢ Replace or repair the DMX cable.
The beam appears dim and its brightness slows sharply	➢ Ambient temperature too high which result in a projector overheating, necessary ventilating measures needed.

TECHNICAL DATA

VOLTAGES:

100V~240V AC，50/60Hz

POWER CONSUMPTION:

450W@220V

LED:

Model	CREE (MCE4CT)
Power consumption	10W(RGBW)
Quantity	37pcs
Manufacturers Rated LED Life	50000 Hours

COLOURS:

RGBW linear color mixing with Macro

COLOR TEMPERATURE CORRECTION

Linear color temperature correction from 2700K to 10000K

DIMMER:

0-100% linearly adjustable

STROBE:

Electronic Strobe 0 ~25F.P.S

PAN AND TILT

PAN(0°~540°) and TILT(0°~270) with Auto Position Correction Function

LIGHT ANGLE

Beam Angle(1/2 Maximum)	13°~52°
Light Spot Angle(1/10 Maximum)	27°~70°

CONTROL:

DMX512, 3 pins and 5 pins interfaces
RDM Control Protocol
17channels in standard mode, and 26 channels in extended mode
Master/Salve Synchronous Control Mode
Static Scene Mode
Single Mode
Self Test Mode

OTHER FUNCTIONS:

Pan & Tilt Speed adjustable
Auto speed adjustment of Fans

Auto Power-off @ high LED TEMP

Display's Brightness and Contrast adjustable

Lamp & Fixture use Time display

DMX512 Channel Value Display

Menu Invert Function

HOUSING:
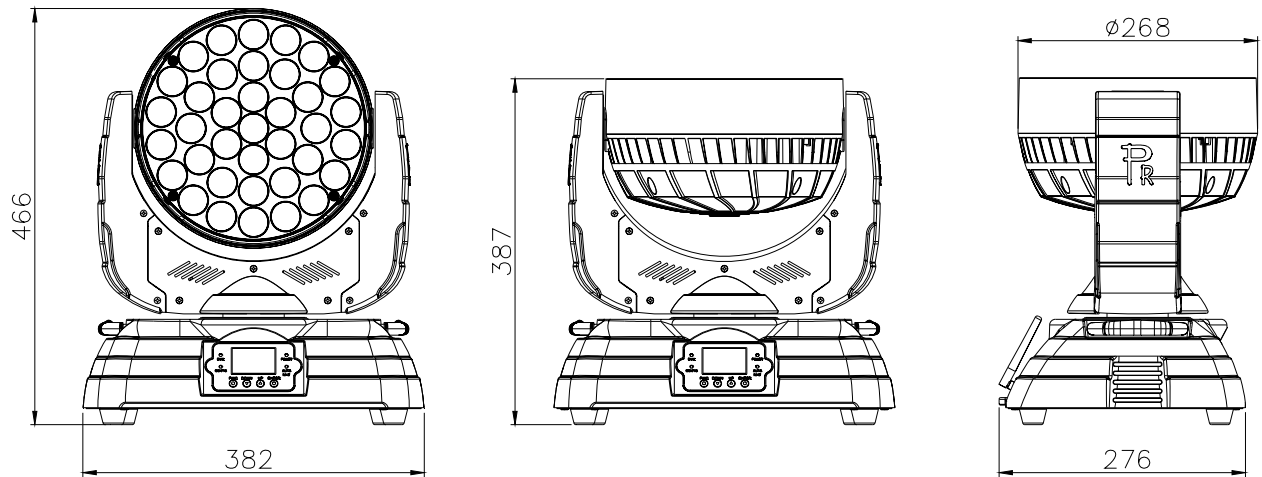
High temperature   ABS +die-casting aluminum, IP20

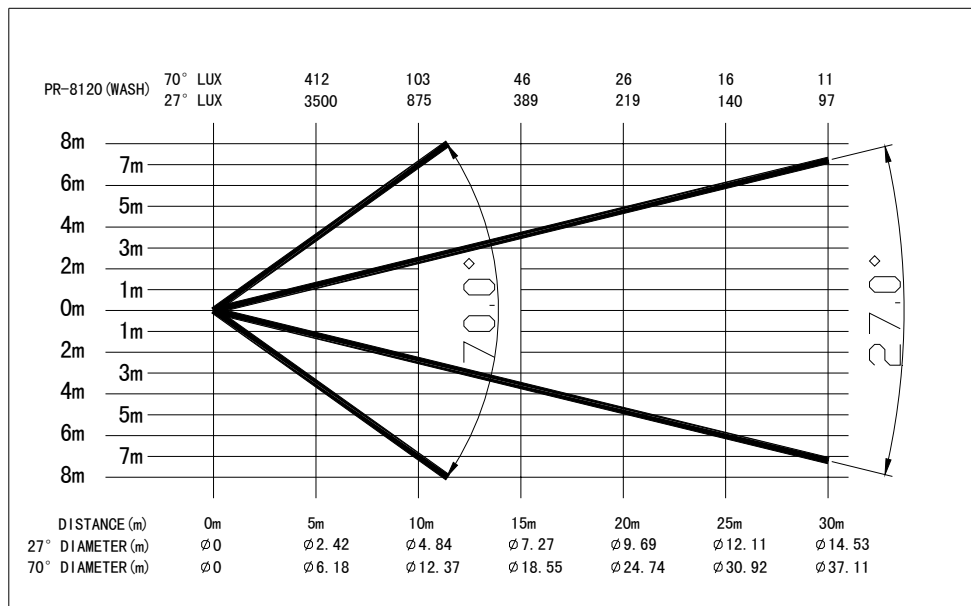**WORK ENVIRONMENT TEMPERATURE:**

-20°C~40°C

WEIGHT:

Net weight :12.85Kg   Gross Weight: 16.9 Kg

SIZE：

LIGHT OUTPUT:

PR-8120(WASH)		0m	5m	10m	15m	20m	25m	30m
70°	LUX		412	103	46	26	16	11
27°	LUX		3500	875	389	219	140	97

DISTANCE (m)	0m	5m	10m	15m	20m	25m	30m
27° DIAMETER (m)	Ø0	Ø2.42	Ø4.84	Ø7.27	Ø9.69	Ø12.11	Ø14.53
70° DIAMETER (m)	Ø0	Ø6.18	Ø12.37	Ø18.55	Ø24.74	Ø30.92	Ø37.11

COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
Wireless Antenna	W006503	1	A40501 360*360
Wireless Receiver	W006502	1	A40901G4
Fuse(VDE Certificate)	270041037	1	
Magnet Couple Board on the Right(with sockets)	230020113	2	
Belt	290151352	1	HTD447-3M, 8MM Wide
Belt	290151353	1	HTD342-3M ,8MM Wide
First Lens	070070052	37	
Second Lens	070070053	37	
Stepper Motors	030040162	4	20DAM10D2B-K(Portescap)
Stepper Motors	030040174	2	PAN/TILT
Cooling Fans	030060079	2	
PWM Speed variable Fan	030060074	1	
LED Lamp Board	230060118	1	
LCD Display	230060232	1	
LED Drive Board	230060259	1	
Pan/Tilt Control Board	230060257	1	Pan/Tilt Motors Control

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