tarm
®

professional luminaires
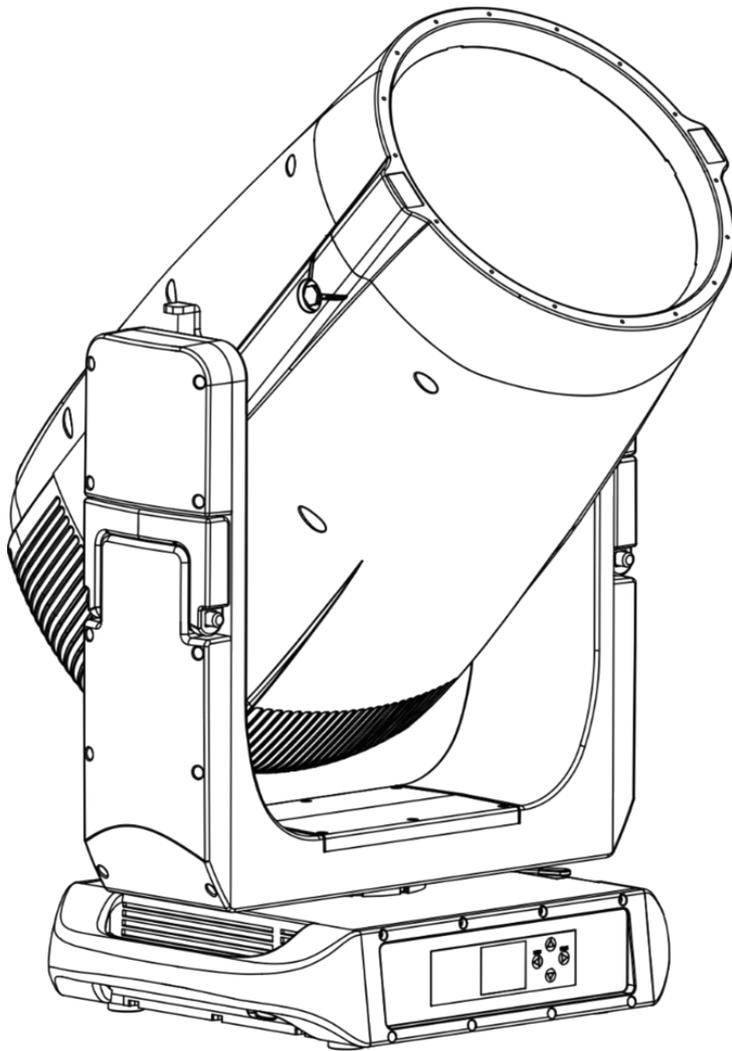
REVOLT

User Manual

Overview

1. GETTING STARTED

Please make sure to carefully read and fully understand the instructions in this manual before operating this device. It includes essential information on safety and usage.
This device should only be operated by trained personnel and is not intended for private use.

2. CONTENT OF DELIVERY

1 x tarm REVOLT luminaire
1 x Power cable
2 x Omega brackets
1 x Heavy-duty wooden flight case

3. INFORMATION ON WATERPROOF LUMINAIRE

The tarm REVOLT luminaire is an IP66 rated, waterproof device. It is protected against dust and water ingress. Thus any maintenance or service work that incorporates the opening of the device requires additional procedures to ensure the waterproofness after the maintenance or service work. Please see the maintenance procedures further down this manual.

Even though this device can endure ingress of dust (6) and powerful water jets from any direction (6) (-> IP66), it is not submersible and not suitable for underwater operation.

Maritime/Coastal Environment Installations:

Coastal environments, located near the sea, expose electronics to atomized saltwater and high humidity, posing a significant corrosive risk. Maritime settings include areas within a 5-mile radius of these coastal environments.

Due to these challenging conditions, maritime installations require additional precautions and more frequent servicing. It's important to note that IP ratings are initially based on freshwater conditions, whereas maritime environments are generally more corrosive to IP fixtures, both internally and externally. During periods of high humidity and low temperatures, periodic operation may be necessary to expel accumulated moisture through the vent valve. Recommendations may vary depending on specific installation circumstances.

4. SAFETY INSTRUCTIONS - GENERAL SAFETY

This fixture is an advanced piece of electronic equipment. To ensure optimal performance, it's crucial to adhere to all instructions and guidelines provided in this manual.
The tarm AG cannot be held liable for any injuries or damages resulting from misuse or neglect of the information provided. Installation should only be carried out by **qualified or certified personnel**, using exclusively the **original rigging parts** (omega brackets) included

with the fixture. Any alterations to the fixture or its mounting hardware will void the manufacturer's warranty and **elevate the risk of damage or personal injury**.
All local requirements for safe rigging and mounting of lighting fixtures must be observed.

This device contains a **laser-based light source** that is considered a substitution of a conventional light source according to IEC / EN 60825-1:2022 chapter 4.4. Therefore this luminaire is classified as **Laser Class 1**, and assigned to Risk Group 3 according to IEC / EN 62471:2006, modified.
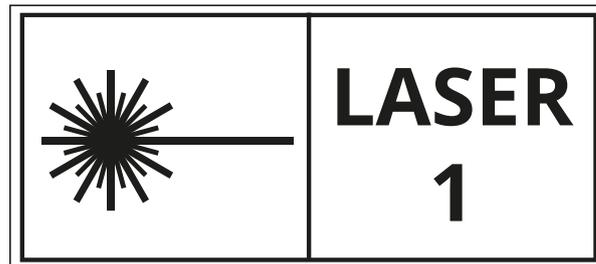
- A **Class 1 Laser is considered safe** according to IEC / EN 60825-1:2022 chapter C.2.1.

- Risk Group 3 (high risk): This luminaire is classified as a Risk Group 3 product according to IEC / EN 62471:2006, modified. That means, that the high intensity of the output can potentially cause various hazards to people and objects. Certain minimum distances must be respected
  - to people: 34 m for wide focus use, 77 m for close focus use. Much closer distances are possible with use of prisms and other effects. **Never exceed the MPE**!
  - to objects: minimum 1m to heat insensitive / non flammable and non-reflective materials, 20m to easily flammable materials or reflective materials.

Caution: If the luminaire is operated with the housing of the device opened, laser radiation of Laser Class 4 can be emitted. **Only qualified and trained personnel to open and service the device! Never open the device while in use!**

- **There are no user serviceable parts inside this luminaire.**
  Do not attempt any repairs yourself. Damages resulting from modification to this luminaire void the manufacturer's warranty. Disregarding safety instructions in this manual also void the manuafcturer's warranty and are not subject to any warranty claims and / or repairs.

- Do **not plug** device **to a dimmer**!

- **Keep flammable materials away** from the fixture.

- **Never obstruct the ventilation** / cooling system of the device - it may cause damage or destruction and can cause additional hazards. Obstructing the ventilation of the device voids any warranty.

- **Never look directly into the light source** (see minimum distance to people specified above). Risk of retina injuries, temporary or even permanent blindness.

- Sensitive persons may suffer **epileptic shock**!
- All unused connectors and caps must be sealed with appropriate dielectric grease to prevent corrosion of connectors.

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

5.   SAFETY LIMIT SETTING

The tarm REVOLT is equipped with a option that allows for limiting the PAN and TILT movement. This setting can be used to avoid the beam hitting certain areas. It is accessible through the menu at the device : OPTIONS -> PAN/TILT SETTING -> SAFETY LIMITS

6.   SAFETY INSTRUCTIONS - HANDLING THE FIXTURE

- Handle the **power cord** by the **plug end only**; never pull the plug out by tugging on the wire.
- Do not touch the fixture housing during operation. Turn off the power and allow approximately 15 minutes for the **fixture to cool down before servicing**.
- Avoid shaking the fixture and **do not use brute force during installation** or operation.
- **Do not operate** the fixture if the **power cord is frayed, crimped, damaged**, or if any of the **connectors are compromised** and cannot be securely and easily inserted into the fixture.
- **Never force a power cord connector into the fixture**. If the power cord or any of its connectors are damaged, replace them immediately with a new cord of similar power rating.
- **Do not block any air ventilation slots**. Ensure that all fan and air inlets remain clean and unobstructed.
- Maintain approximately 25 cm of space between the fixture and other devices or walls for proper cooling, and a minimum of 50 cm around fans and air vents.
- When installing the fixture in a suspended environment, always use mounting hardware no less than M10x25mm, and **secure the fixture with an appropriately rated safety cable**.

- Consistent operational breaks will help ensure the fixture functions properly for many years.
- Use only the **original packaging and materials when transporting** the fixture for service.
- **Never exceed** the specified **minimum and maximum operating temperatures** specified in the technical data. This may lead to damage or total break of the device and can furthermore lead to secondary hazards (fire, short circuit, etc.). Operating the device beyond the specified operating temperature range voids the manufacturer's warranty.
- **Do not install a fuse** that has a **higher rating** than the one originally installed in the product.
- **Do not bypass fuses**.
- **Do not stick filters, masks or other materials** onto optical components.
- **Do not point** the front of the fixture **towards the sun** or other strong light sources. The front lens focuses and concentrates light just like a magnifying glass. Strong light can cause internal damage to the fixture, melting components or starting an internal fire within seconds.
- **Avoid pointing other high powered beam lights directly at the fixture**.
- **Do not** focus a light beam from **one lighting fixture directly towards another**.
- **For outdoor applications during daylight, make sure that the front face of any fixture is shielded** or points away from the sun, even when not in use.
- Do not expose the product to heat (from other lighting fixtures for example).

7.   TRANSPORTATION

- Only transport the device **using the flightcase included** in delivery or comparable.
- Only transport it with the **locks for Pan and Tilt movement applied**.
- Only transpoprt the device with the **base to the bottom as per the flightcase.**
- **Avoid upside-down transportation** to prevent shock damage.
- **Avoid tipping the flightcase** containing the device during transport and handling.

8. INSTALLATION

8.1. Rigging

- Always **install a safety rope** in case of overhead use of the device. Follow local requirements regarding durability, length and design of the rope / steel cable.

- Secure the fixture with a safety rope through the rear safety eye and truss as shown.

- Ensure that the structure (truss) to which you are attaching the fixture is secure and is dimensioned to handle dynamic fixtures.
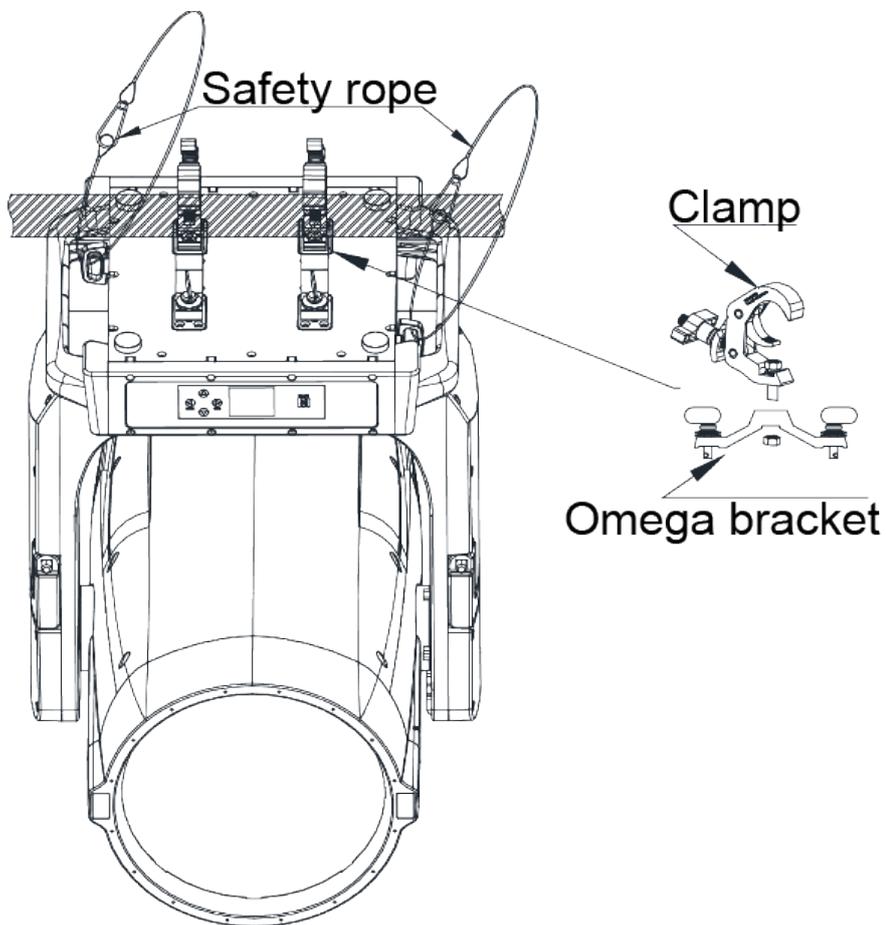
8.2. Replacing the fuse

Fuse   Protection cap
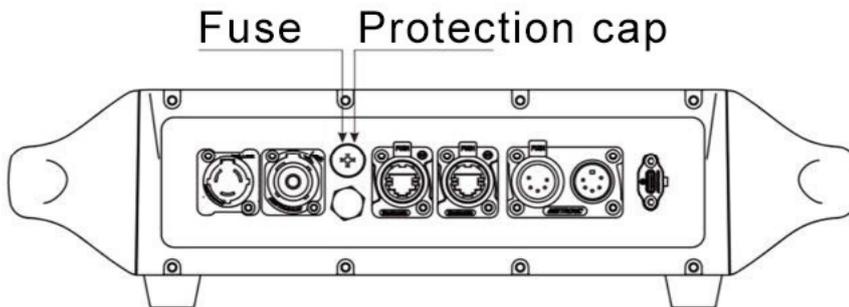
1. Remove the protection cap with a screwdriver.

2. Remove the old fuse from the cap

3. Install the new fuse.

4. Put the protection cap with the fuse back in place and make sure it is properly locked in place and tight. Do not overtighten.

8.3. Power connection

This product has an auto-ranging power supply that can work with an input voltage range of 100V - 240V AC, 50/60 Hz.
Never connect this product to a dimmer!

You may use the PowerCon TRU1 outlet for power connection of further tarm REVOLT fix-tures. Depending on mains voltage, the maximum quantity of connected fixtures shall not exceed 4 devices (for 230V AC operating) and max 2 devices (for 100V AC operating).
If other devices are connected to the PowerCon TRU1 outlet, make sure to not exceed the total power consumption rating of the main fuse, but maximum 16A. Make sure to take a higher startup current draw of some fixtures into consideration.

9. SETTINGS

9.1. Display Control
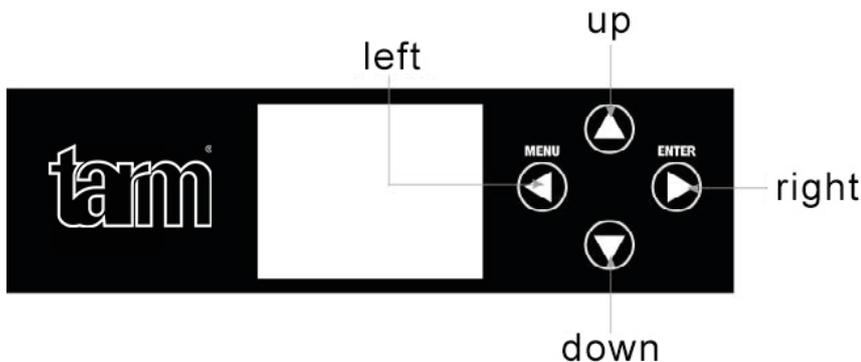
5. **LEFT** (Menu) - Use to access the menu or to return a previous menu option
6. **RIGHT** (Enter) - Use to select and store the current selection or confirm the current function value or option
7. **UP** - Navigates upwards through the menu list and increases the numeric value in certain submenu options
8. **DOWN** - Navigates downwards through the menu list and decreases the numeric value in certain submenu options

Note:
The tarm REVOLT Moving Head is equipped with an internal battery that allows menu operation (e.g. setting the DMX address) without mains power.

During battery operation, the display may show the message "LASER: error". This message is system-related and indicates a missing temperature signal, as the laser source is deactivated in this mode.

During normal operation, the display shows the temperature of the laser source.

If the display is locked, unlock as follows:

1. Press and hold Enter for about 5 seconds, until the display shows „password".
2. Standard password:
   up - down - up - down
   then press enter to unlock

9.2. Menu Layout

ADDRESS	001 - 512				Set the DMX address of the fixture
PERSON	BASIC				23 DMX channel operation
	STANDARD				28 DMX channel operation
	EXTEND				34 DMX channel operation
RUNMODE	DMX512				Operation mode set to DMX 512
	ARTNET				Operation mode set to Art-Net
	ARTNET TO DMX				Operation mode set to Art-Net, but outputting DMX from the DMX port ("node" functionality)
	sACN				Operation mode set to streaming-ACN
	AUTO				Automatic operation mode
	CUSTOM1				Custom operation mode 1
	CUSTOM2				Custom operation mode 2
OPTION	PAN/TILT SETTING	PAN INVERT	NORMAL		Horizontal movement normal
			INVERT		Horizontal movement inverted
		TILT INVERT	NORMAL		Vertical movement normal
			INVERT		Vertical movement inverted
		PT ENCODER	OFF		
			ON		Switch XY encoder
		SAFETY LIMIT	PAN(-)	-270 to -1	default(-270)
			PAN(+)	1 to 270	default(270)
			TILT(-)	-135 to -1	default(-135)
			TILT(+)	1 to 135	default(135)
		BLACKOUT	OFF		Blackout with delay
			ON		Blackout without delay
	DIMMER SETTING	DIMMER SPEED	HALOGEN		
			OFF		
		DIMMER CURVE	LINEAR		
			SQUARE LAW		
			INV. SQUARE LAW		
			S-CURVE		
		PWM	1200Hz		default
			2400Hz		
			4000Hz		
			6000Hz		
			25000Hz		
	DISPLAY SETTING	DISPLAY LOCK	OFF		No display lock
			ON		Lock display with password, button combination password required for unlocking
		DISPLAY TIME	ON		Display permanently on
			30S		Dark display after 30s (default)
			1MIN		Dark display after 1min
			2MIN		Dark display after 2min
	SUN PROTECTION	OFF			
		ON			Turn the fixtures head down to the ground
	PERFORM	STUDIO			Stealth mode: Slow head movement speed, about 30% of the maximum fan speed. The motors can be slowed down. The noise level is controlled to stay below 40 dB
		POWER			Maximum performance mode: Fast head movement possible, maximum fan speed is used most of the time. Noise level around 55 dB
		LIVE			Automatic speed adjustment, intelligent adjustment of fan speed. Noise level usually around 50 dB
	DMX ERROR	Save			Hold last control in case of DMX signal loss
		Black			Blackout in case of DMX signal loss
	LOAD PARA	NO			No parameter upload
		YES			Upload parameters

Option	SETTING	RECOVERY	****		Restore factory settings, Enter the correct password
		RESET LIMITS	****		Reset the safety limits to standard (none)
		CLEAN EDIT1	****		Clear edit scenario 1,Enter the correct password
		CLEAN EDIT2	****		Clear edit scenario 2 Enter the correct password
		WDMX HIDE	NO		
			YES		If wireless is hidden, the W-DMX RESET and SIGNAL menus disappear and the signal defaults to wired only mode
	NETWORK	NET SWITCH	2.xxx.xxx.xxx/10.xxx.xxx.xxx		Setup the IP address range
		UNIVERS	0-255		Set the Art-Net universe
		IP MODE	DEFAULT IP		Default IP mode (assigned IP according to standard)
			CUSTOM IP		Custom IP setting mode
		CUSTOM IP	XXX.XXX.XXX.XXX		Custom IP setting
	SIGNAL	ONLY XLRDMX			Wired signal only
		XLRDMX FIRST			Wired signal has priority
		ONLY WDMX			Wireless signal only
		WDMX FIRST			Wireless signal has priority
		WDMX TO XLRDMX			Wireless signal to wired signal - throughputs wireless signal to DMX out port
	WDMX RESET	NO			
		YES			Select to match with W-DMX transmitter, it clears the receiver pairing and re-connects
EDIT	EDIT 1-2	STEP 1-30	PAN	0-255	Allows for editing the Custom 1 and Custom 2 settings (basic stand alone scene)
			TILT	0-255	
			PT SPEED	0-255	
			PAN ROTA	0-255	
			CMY_C	0-255	
			CMY_M	0-255	
			CMY_Y	0-255	
			CTO	0-255	
			COLOR	0-255	
			ROTA GOBO	0-255	
			GOBO ROTA	0-255	
			FIXED GOBO	0-255	
			P/F 1 INDEX	0-255	
			PRISM 1 ROTA	0-255	
			P/F 2 INDEX	0-255	
			PRISM 2 ROTA	0-255	
			ZOOM	0-255	
			FOCUS	0-255	
			DIMMER	0-255	
			STROBE	0-255	
			TIME	0-255	
			USE	NO/YES	
MANUAL	AUTO TEST				Auto test
	CHANNEL	PAN	0-255		Manual control, Channel test
		TILT	0-255		
		PT SPEED	0-255		
		PAN ROTA	0-255		
		CMY_C	0-255		
		CMY_M	0-255		
		CMY_Y	0-255		
		CTO	0-255		
		COLOR	0-255		
		ROTA GOBO	0-255		
		GOBO ROTA	0-255		

MANUAL	CHANNEL	FIXED GOBO	0-255	Manual control, Channel test
		P/F 1 INDEX	0-255	
		PRISM 1 ROTA	0-255	
		P/F 2 INDEX	0-255	
		PRISM 2 ROTA	0-255	
		ZOOM	0-255	
		FOCUS	0-255	
		DIMMER	0-255	
		STROBE	0-255	
	DEBUG HIDE	NO		
		YES		Factory debugging mode
	RESET	ALL RESET		Reset all settings
		PT RESET		Reset Pan/Tilt
		COLOR GOBO SYS		Reset the color and gobo system
		ZOOM FOCUS RESET		Resets all other features
INFO	VERSION			Software version
	TEMPERATURE			Light engine temperature
	FAN SPEED	LASER FAN 1		
		LASER FAN 2		
		LASER FAN 3		
		LASER FAN 4		
		LASER FAN 5		
	FIXTURE HOURS			Operating hours
	LASER USE HOURS			Light engine operating hours
	NETWORK	IP ADDRESS		
		NET MASK		
		MAC ADDRESS		
		UNIVERS		
	RDM	UID	0x0536xxxxxxx	Fixture ID
		LABEL		Fixture name
	SYSTEM ERROR	MEMORY IC		Memory IC
		ANGLESENSOR		Angle sensor
		PAN SENSOR		X magnet
		PAN ENCODER		X encoder
		PAN DRIVE OUT/OUT		
		PAK DRIVE FAULT		
		TILT SENSOR		
		TILT ENCODER		
		TILT DRIVE OUT		
		TILT DRIVE FAULT		
		LASER NTC		
		CMY_C RESET		
		CMY_M RESET		
		CMY_Y RESET		
		COLOR RESET		Color reset
		GOBO RESET		
		RGOBO RESET		
		FGOBO RESET		
		FOCUS RESET		
		P/F 1 RESET		
		PRISM1_R RESET		
		P/F 2 RESET		
		PRISM2_R RESET		
		ZOOM RESET		
		FOCUS RESET		Focus reset
		NETWORK IC		

SERVICE	PAN	±127		
	TILT	±127		
	CMY-C	±127		
	CMY-M	±127		
	CMY-Y	±127		
	COLOR	±127		
	ROTA. GOBO	±127		
	GOBO.ROTA	±127		
	FIXED GOBO	±127		
	P/F 1 INDEX	±127		
	PRISM 1 ROTA	±127		
	P/F 2 INDEX	±127		
	PRISM 2 ROTA	±127		
	ZOOM	±127		
	FOCUS	±127		
	nop	±127		
	FOCUS_RGOBO	±127		
UPDATE SOFTWARE				Allows for firmware updates. Instructions for firmware updates are provided together with the appropriate update files.
	LANGUAGE	****	ENGLISH	

10. DMX-CHART - CONTROLS

This is the DMX chart, highlighting the different DMX modes (corresponding to the PERSON settings in the menu):

BASIC (23CH)	STANDARD (28CH)	EXTENDED (34CH)	Value	Function
1	1	1	0-255	Pan 0 - 540°
-	2	2	0-255	Pan fine
2	3	3	0-255	Tilt 0 - 270°
-	4	4	0-255	Tilt fine
3	5	5	0-255	Pan-Tilt speed
4	6	6		**PAN Motor continuos rotation**
			0-63	stop rotation by spinout
			64-127	stop rotation by shortcut
			128-189	Forwards Pan rotation from fast to slow
			190-193	No rotation
			194-255	Backwards Pan rotation from slow to fast
5	7	7	0-255	Cyan
-	-	8	0-255	Cyan fine
6	8	9	0-255	Magenta
-	-	10	0-255	Magenta fine
7	9	11	0-255	Yellow
-	-	12	0-255	Yellow Fine
8	10	13	0-255	CTO
-	-	14	0-255	Empty
9	11	15		**COLOR MACRO (CMY mixture)**
			0-10	Inactive / Open
			11-20	L106
			21-30	L194
			31-40	L019
			41-50	R08
			51-60	L213
			61-70	R80
			71-80	L202
			81-90	L328
			91-100	R3314
			101-110	L101
			111-120	L768
			121-128	No function
			129-147	Color Fade Cyan 100% / Magenta ↑ / Yellow 0%
			148-166	Color Fade Cyan ↓ / Magenta 100% / Yellow 0%
			167-185	Color Fade Cyan 0% / Magenta 100% / Yellow ↑
			186-204	Color Fade Cyan 0% / Magenta ↓ / Yellow 100%
			205-223	Color Fade Cyan ↑ / Magenta 0% / Yellow 100%
			224-242	Color Fade Cyan 100% / Magenta 0% / Yellow ↓
			243-255	Cyan 100% / Magenta 100% / Yellow 0%
10	12	16	0-255	CMY speed (Speed 100% -> 1%)
11	13	17		**COLOR WHEEL 19+1**
			0-5	White / Open
			6	1. M Red
			7	2. B Red
			8	3. M Red X
			9	4. Orange
			10	5. DS Amber
			11	6. D Amber

BASIC (23CH)	STANDARD (28CH)	EXTENDED (34CH)	Value	Function
			12	7. Yellow
			13	8. J Green
			14	9. Ch Green
			15	10. DY Green
			16	11. Prim Green
			17	12. M Blue
			18	13. J Blue
			19	14. Congo
			20	15. Violet
			21	16. Magenta
			22	17. Pink
			23	18. 4 Color YB
			24	19. 4 Color YM
			25	20. 4 Color CMYR
			26	21. 4 Color RGBY
11	13	17	27	1800K
			28	3000K
			29	3200K
			30	3500K
			31	4000K
			32	4500K
			33	5000K
			34	5400K
			35	5600K
			36	6000K
			37	6500K
			38	7000K
			39	8000K
			40-191	COLOR WHEEL1 0-360°
			192-222	COLOR WHEEL1 RAINBOW EFFECT(SPEED 100%->1)
			223-224	STOP
			225-255	COLOR WHEEL1 RAINBOW EFFECT(SPEED 1->100%)
-	-	18	0-255	Color wheel fine
				ROTATING GOBO 12+1
			0-5	White / Open
			6-10	Rotating GOBO 1 - Sun
			11-15	Rotating GOBO 2 - Rotor
			16-20	Rotating GOBO 3 - Six Dot Line
			21-25	Rotating GOBO 4 - Dot Circle
			26-30	Rotating GOBO 5 - Flower
			31-35	Rotating GOBO 6 - Scythe
12	14	19	36-40	Rotating GOBO 7 Mosaic
			41-45	Rotating GOBO 8 Organic
			46-50	Rotating GOBO 9 Fire Blaze
			51-55	Rotating GOBO 10 Ocean
			56-60	Rotating GOBO 11 Drops
			61-65	Rotating GOBO 12 Honeycomb
			66-70	Rotating GOBO 1 Shake (Speed 1 —> 100%)
			71-75	Rotating GOBO 2 Shake (Speed 1 —> 100%)
			76-80	Rotating GOBO 3 Shake (Speed 1 —> 100%)

BASIC (23CH)	STANDARD (28CH)	EXTENDED (34CH)	Value	Function
12	14	19	81-85	Rotating GOBO 4 Shake (Speed 1 —> 100%)
			86-90	Rotating GOBO 5 Shake (Speed 1 —> 100%)
			91-95	Rotating GOBO 6 Shake (Speed 1 —> 100%)
			96-100	Rotating GOBO 7 Shake (Speed 1 —> 100%)
			101-105	Rotating GOBO 8 Shake (Speed 1 —> 100%)
			106-110	Rotating GOBO 9 Shake (Speed 1 —> 100%)
			111-115	Rotating GOBO 10 Shake (Speed 1 —> 100%)
			116-120	Rotating GOBO 11 Shake (Speed 1 —> 100%)
			121-125	Rotating GOBO 12 Shake (Speed 1 —> 100%)
			126-127	White
			128-190	Rotating GOBO flowing water effect (Speed 100 —> 1%)
			191-192	Stop
			193-255	Rotating GOBO flowing water effect (Speed 100 —> 1%)
13	15	20	**GOBO ROTATING**	
			0-120	Rotating GOBO angle (0° -> 360°)
			121-125	Stop
			126-165	Rotating GOBO shake (speed 1% -> 100%)
			166-170	Stop
			171-210	Rotating GOBO clockwise rotation (speed 100% -> 1%)
			211-215	Stop
			216-255	Rotating GOBO counter-clockwise rotation (speed 1% -> 100%)
-	-	21	0-255	GOBO rotation fine
14	16	22	**FIXED GOBO WHEEL 25+1**	
			0-5	White / Open
			6	Fixed GOBO 1 - Pinhole Medium
			7	Fixed GOBO 2 - Vertical Line
			8	Fixed GOBO 3 - Horizontal Line
			9	Fixed GOBO 4 - Dot Square
			10	Fixed GOBO 5 - Circle
			11	Fixed GOBO 6 - Radioactive
			12	Fixed GOBO 7 - Square
			13	Fixed GOBO 8 - Wave
			14	Fixed GOBO 9 - Three Lines
			15	Fixed GOBO 10 - Triangle
			16	Fixed GOBO 11 - Square Outline
			17	Fixed GOBO 12 - Asterisk
			18	Fixed GOBO 13 - Radioactive 2
			19	Fixed GOBO 14 - Star
			20	Fixed GOBO 15 - Triangular Lines
			21	Fixed GOBO 16 - Drum Brake
			22	Fixed GOBO 17 - Three Swirl
			23	Fixed GOBO 18 - Cross
			24	Fixed GOBO 19 - Oval
			25	Fixed GOBO 20 Double Moon
			26	Fixed GOBO 21 Half Moon
			27	Fixed GOBO 22 Five Star
			28	Fixed GOBO 23 Bubbles
			29	Fixed GOBO 24 Pinhole Small
			30	Fixed GOBO 25 Pinhole Super Small

BASIC (23CH)	STANDARD (28CH)	EXTENDED (34CH)	Value	Function
			49-51	Fixed GOBO 7 Shake (Speed 1 —> 100%)
			52-54	Fixed GOBO 8 Shake (Speed 1 —> 100%)
			55-57	Fixed GOBO 9 Shake (Speed 1 —> 100%)
			58-60	Fixed GOBO 10 Shake (Speed 1 —> 100%)
			61-63	Fixed GOBO 11 Shake (Speed 1 —> 100%)
			64-66	Fixed GOBO 12 Shake (Speed 1 —> 100%)
			67-69	Fixed GOBO 13 Shake (Speed 1 —> 100%)
			70-72	Fixed GOBO 14 Shake (Speed 1 —> 100%)
			73-75	Fixed GOBO 15 Shake (Speed 1 —> 100%)
			76-78	Fixed GOBO 16 Shake (Speed 1 —> 100%)
			79-81	Fixed GOBO 17 Shake (Speed 1 —> 100%)
14	16	22	82-84	Fixed GOBO 18 Shake (Speed 1 —> 100%)
			85-87	Fixed GOBO 19 Shake (Speed 1 —> 100%)
			88-90	Fixed GOBO 20 Shake (Speed 1 —> 100%)
			91-93	Fixed GOBO 21 Shake (Speed 1 —> 100%)
			94-96	Fixed GOBO 22 Shake (Speed 1 —> 100%)
			97-99	Fixed GOBO 23 Shake (Speed 1 —> 100%)
			100-102	Fixed GOBO 24 Shake (Speed 1 —> 100%)
			103-105	Fixed GOBO 25 Shake (Speed 1 —> 100%)
			106-127	White
			128-190	Static GOBO flowing water effect (Speed 100 —> 1 %)
			191-192	Stop water effect
			193-255	Static GOBO flowing water effect (Speed 1 —> 100%)
			P/F Index 1	
			0-10	White
			11-50	Prism 1
15	17	23	51-100	Prism 2
			101-150	Prism 3
			151-200	Frost 1
			201-255	Frost 2
			PRISM WHEEL 1:	
			0-10	Open
			11-145	Prism insert and angle adjustment (0 -> 360°) clockwise
16	18	24	146-150	Stop
			151-200	Prism insert and clockwise (speed 100% -> 1%)
			201-205	Stop rotation
			206-255	Prism insert and counter-clockwise rotation (speed 1% -> 100%)
			P/F Index 2	
			0-10	White
			11-50	Prism 4
17	19	25	51-100	Prism 5
			101-150	Prism 6
			151-200	Prism 7
			201-255	Frost 3
			PRISM WHEEL 2:	
			0-10	Open
18	20	26	11-145	Prism insert and angle adjustment (0 -> 360°) clockwise
			146-150	Stop
			151-200	Prism insert and clockwise (speed 100% -> 1%)
			201-205	Stop

BASIC (23CH)	STANDARD (28CH)	EXTENDED (34CH)	Value	Function
18	20	26	206-255	Prism insert and counter-clockwise rotation (speed 1% -> 100%)
19	21	27	0-255	Zoom
-	22	28	0-255	Zoom fine
20	23	29	0-255	Focus
-	24	30	0-255	Focus fine
21	25	31	0-255	Dimmer
-	26	32	0-255	Dimmer fine
22	27	33	**STROBE**	
			0-9	Inactive / No strobe
			10-99	Strobe, increasing speed from slow to fast
			100-109	Inactive
			110-179	Lightning Strobe
			180-189	Inactive
			190-255	Random Strobe
23	28	34	**CONTROL** (commands effective after 3 seconds)	
			0-10	Inactive
			11-15	Pan/Tilt Black activated
			16-20	Pan/Tilt Black deactivated
			21-25	Pan invert
			26-30	Tilt invert
			31-35	Pan/Tilt invert off
			36-40	Studio mode / PAN degree 540
			41-45	Power mode / PAN degree 630
			46-50	Sun protection on
			51-55	Sun protection off
			56-100	Empty
			101-105	Studio
			106-110	Power
			111-115	Live
			116-120	Empty
			121-125	Dimmer Speed Halogen
			126-130	Dimmer Speed off
			131-135	Dimmer Speed Linear

Ready-made fixture profiles / personalities can either be found in the latest libraries of your DMX controller or on www.tarm.com

11. COLORS

11.1. Color Wheel
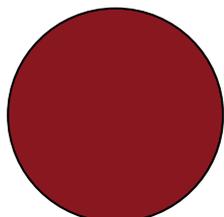
1 . M Red
~ E787
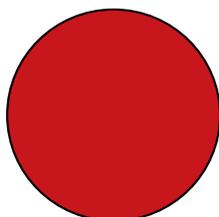
2. B Red
~ E026
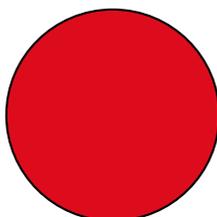
3 . M Red X
~ G250
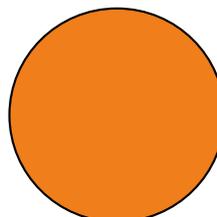
4. Orange
~ E105
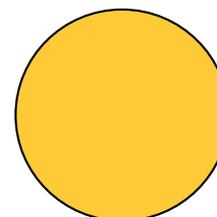
5. DS Amber
~ E015
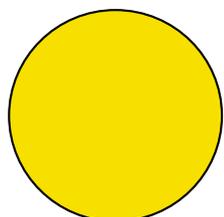
6. D Amber
~ 104
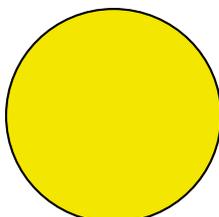
7. Yellow
~ E101
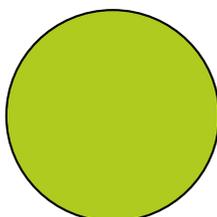
8. J Green
~ 738
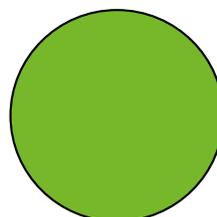
9. Ch Green
~ R389
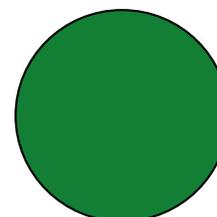
10. DY Green
~ R90
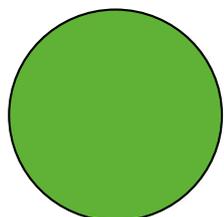
11. Prime Green
~ 139
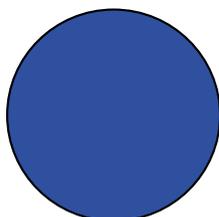
12. M Blue
~ 132
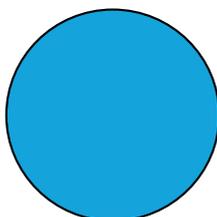
13. J Blue
~ R79
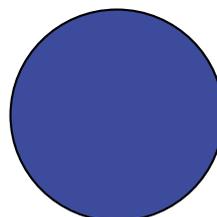
14. Congo
~ R382
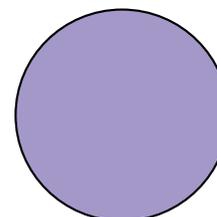
15. Violet
~ R59
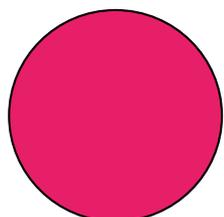
16. Magenta
~ 113
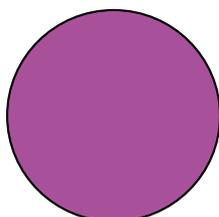
17. Pink
~ R834
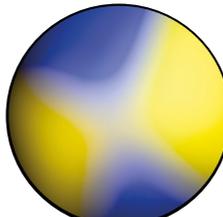
18. 4 Color YB
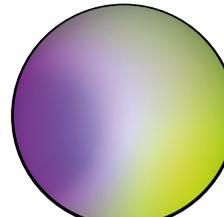
19. 4 Color YM
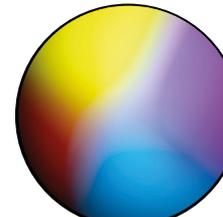
20. 4 Çolor CMYR
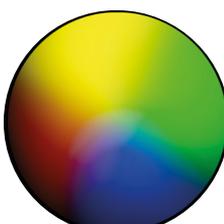
21. 4 Color RGBY

22. CTO gradual

11.2. CMY Color Mixture

This product is equipped with a **CMY color mixture unit**. This type of color mixture allows for creating a multitude of different color tones. A **Cyan (C)**, a **Magenta (M)** and a **Yellow (Y)** wheel, each with a colored intensity gradient applied, can be used for mixing many different colors. This color mixture is available in addition to the color wheel (see above).

12. GOBOS

12.1. Static Gobos, with Gobo Shake
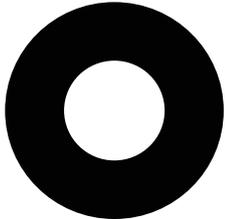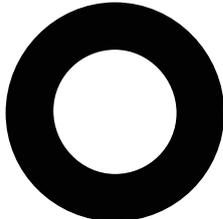
1 . Pinhole Medium	2. Pinhole Large	3 . Vertical Line	4. Horizontal Line	5. Dot Square
6. Circle	7. Radioactive	8. Square	9. Wave	10. Three Lines
11. Triangle	12. Square Outline	13. Asterisk	14. Radioactive 2	15. Star
16. Triangular Lines	17. Drum Brake	18. Three Swirl	19. Cross	20. Oval
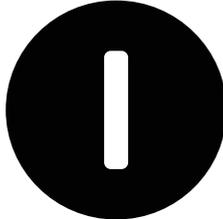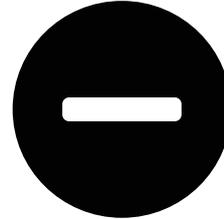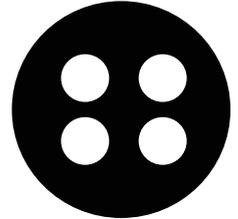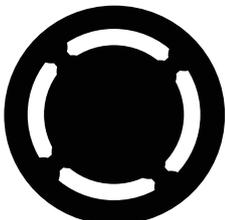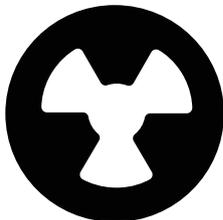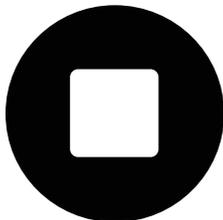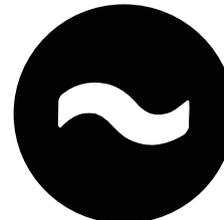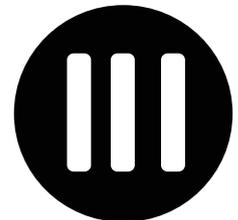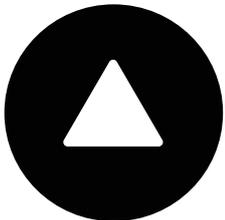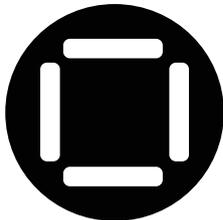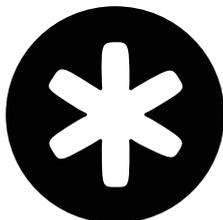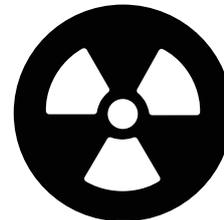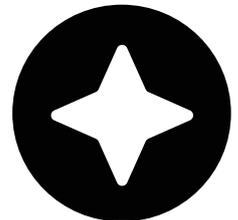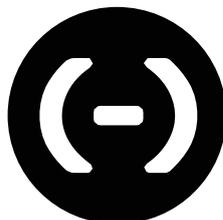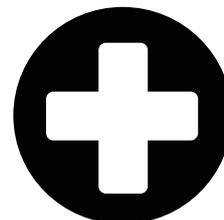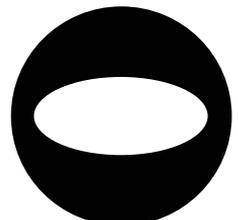
12.2. Rotating Gobos, Effects

Rotating Gobos
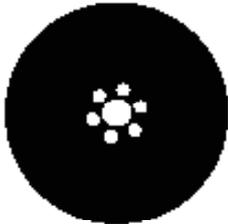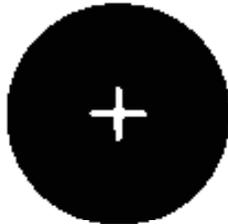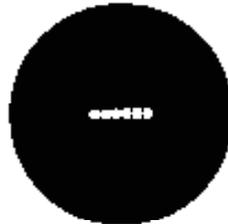
1. Sun
2. Rotor
3. Six Dot Line
4. Dot Circle
5. Flower
6. Scythe
7. Mosaic
8. Organic
9. Honeycomb
10. Fire Blaze
11. Ocean
12. Drops
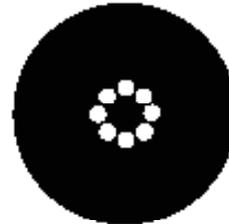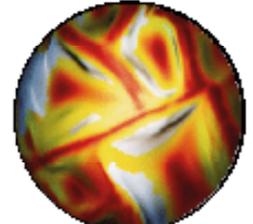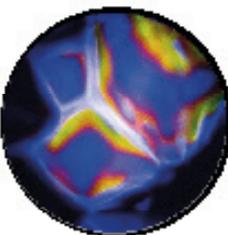
13. PRISMS AND FROST

This product is equipped with **two combined prism-frost-wheels**, which are stackable, so they can be overlayed with each other.
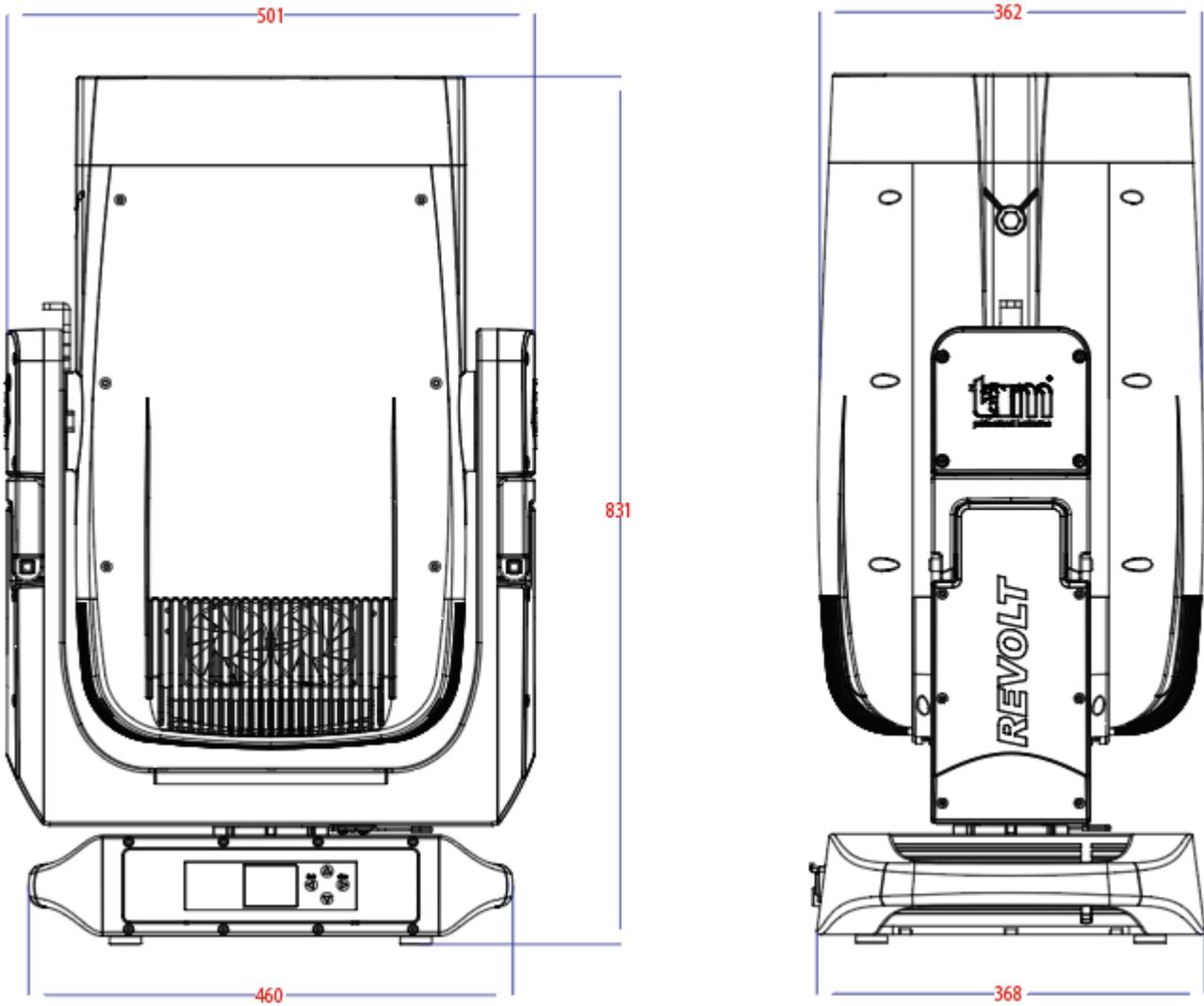
13.1. Prism wheel 1 - three prisms, two frost filters

Prism 1:   12 facet radial prism
Prism 2:   6 facet linear prism
Prism 3:   2 facet prism
Frost 1:   Light frost
Frost 2:   Heavy frost

13.2. Prism wheel 2 - four prisms, one frost filter

Prism 4:   6 facet radial prism
Prism 5:   24 facet double radial prism
Prism 6:   3 facet line prism
Prism 7:   6 facet line prism
Frost 3:   Top hat frost

14. DIMENSIONS

Dimensions given in millimeters.

15.   TECHNICAL DATASHEET

Product: **tarm REVOLT**

Optical System

Light source	500 W White Laser Engine
Lens diameter	300 mm
Angle	0.38 - 12.5°, up to 40° with wash and prism effects
Illuminance	170'000 lx @ 20m, 0.7°
Luminous flux	≥ 16'800 lm
CRI	> 70
Color temperature	9100K
Rated life (LP70)	12'000 hrs

Feature Set

Pan / Tilt	Infinite (540° reference) / 270° (8-16 bit)
Dimmer	0 - 100%, 24bit
Static Gobo	25 gobos + open, gobo shake
Rotating Gobo	12 rotating glass gobos + effects gobos, gobo shake
Colors	Color wheel 17 colors, 4x4 Colors, white, gradual CTO
Color mixture	CMY-mixture
Prism	7 radial and linear prisms, bi-directional rotation, adjustable speed, stackable
Frost	3 frost filter on prism wheels

Constructive Parameters

Cooling	Forced convection
Temperature range	-20°C up to +45°C
IP rating	IP66
Power supply	100 - 240 V AC 50/60Hz
Power consumption	750 W
Connectivity	5-pin DMX in and through RJ45 in and through, USB-C
Material	Magnalium and die-cast
Color	Black
Dimensions	368 x 501 x 831 mm
Weight	56 kg
Rigging	Two omega brackets included
Transportation	Delivered in heavy duty wooden flightcase

Control Modes

DMX512, Art-Net, RDM, sACN, W-DMX

16. GENERAL AND LEGAL INFORMATION

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8574 Lengwil
Switzerland

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CEO: Martin Werner

Representative in the European Union:
LaserAnimation Sollinger GmbH
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An updated version of this document may be available online due to product updates. Please visit www.tarm.com for the latest version.