tarm BLAZE Laser Source Moving Head Beam User Manual

Contents

tarm BLAZE Laser Source Moving Head Beam

Specifications

- **Model:** Tarm BLAZE
- **Rating:** IP66 (Waterproof)
- **Laser Class:** 1
- **Risk Group:** 3

Product Usage Instructions

Getting Started

Please make sure to carefully read and fully understand the instructions in this manual before operating the BLAZE tarm device. This device should only be operated by trained personnel and is not intended for private use.

Box Contents

The box includes:

- 1 x tarm BLAZE luminaire
- 1 x Power cable
- 2 x Omega brackets
- 1 x PU foam as inlay for a custom flight case (flight case not included)

Information on Waterproof Luminaire

The tarm BLAZE luminaire is IP66-rated, meaning it is protected against dust and water ingress. However, it is not submersible and not suitable for underwater operation. Additional procedures are required after any maintenance or service work involving the opening of the device to ensure waterproofness.

Safety Instructions – General Safety

This fixture is advanced electronic equipment. Follow all instructions provided in the manual to ensure optimal

performance. Installation should be done by qualified personnel using original rigging parts included with the fixture. Any alterations to the fixture or mounting hardware will void the warranty.

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.

BOX CONTENTS

- 1 x tarm BLAZE luminaire
- 1 x Power cable
- 2 x Omega brackets
- 1 x PU foam as inlay for your custom flightcase (flightcase not included)

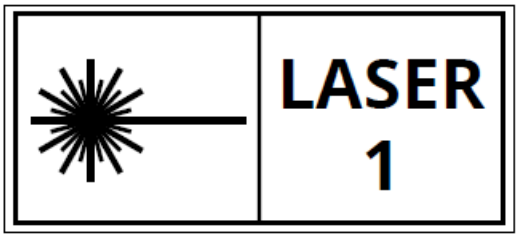
INFORMATION ON WATERPROOF LUMINAIRE

The tarm BLAZE 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 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, perio-dic operation may be necessary to expel accumulated moisture through the vent valve. Recommendations may vary depending on specific installation circumstances.

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, 47 m for close focus use
    - 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 3B can be emitted. Only qualified and trained personnel can open and service the device! Never open the device while it is 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 voids the manufacturer‘s warranty and are not subject to any warranty claims and/or repairs.
- Do not plug the device into 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 under 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 according to 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.

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, or 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 minimum and maximum operating temperatures specified in the technical data. This may lead to damage or a 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 toward 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 toward 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).

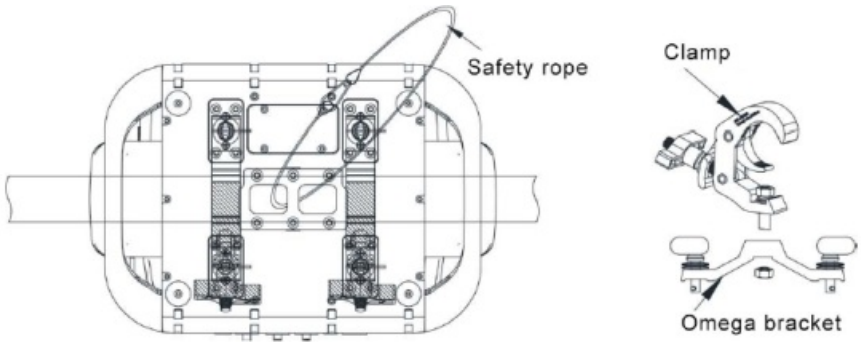
TRANSPORTATION

- Only transport the device using the PU foam included in delivery or comparable.
- Only transport it with the locks for Pan and Tilt movement applied.
- Only transport the device with the base to the top as per the PU-foam.
- Avoid upside-down transportation (base to the bottom), as the PU foam is not made for this.
- Avoid tipping the flight case containing the device during transport and handling.

INSTALLATION

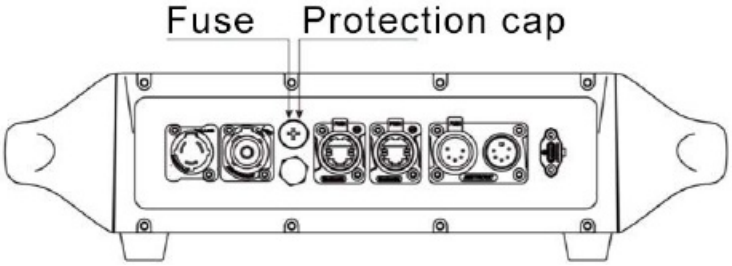
Rigging

- Always install a safety cable in case of overhead use of the device. Follow local requirements regarding the durability, length, and design of the cable.
- Secure the fixture with a safety cable 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.

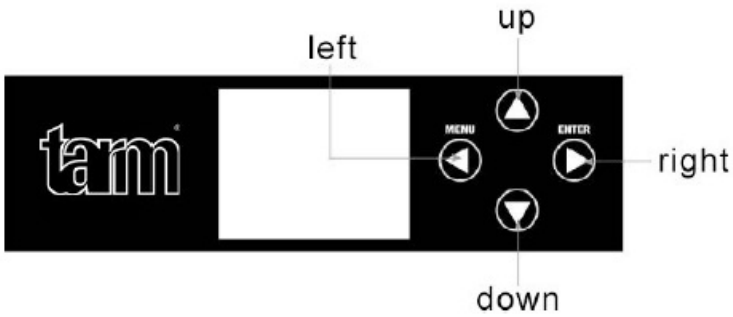


Replacing the fuse

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.



Power connection



1. LEFT (Menu) – Used to access the menu or to return a previous menu option
2. RIGHT (Enter) – Use to select and store the current selection or confirm the current function value or option
3. UP – Navigates upward through the menu list and increases the numeric value in certain submenu options
4. DOWN – Navigates downward through the menu list and decreases the numeric value in certain submenu options

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

Menu Layout

ADDRESS	001 – 512		Set the DMX address of the fixture
PERSON	BASIC		19 DMX channel operation
	STANDARD		23 DMX channel operation
	EXTEND		27 DMX channel operation
RUNMODE	DMX512		Operation mode set to DMX 512
	ARTNET		Operation mode set to Art-Net
	ARTNET TO DMX		The operation mode is 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
	PAN INVERT	NORMAL	Horizontal movement normal
		INVERT	Horizontal movement inverted
	TILT INVERT	NORMAL	Vertical movement normal
		INVERT	Vertical movement inverted
	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	Fast head movement is possible, and 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 is usually around 50 dB
	BLACKOUT	OFF	Blackout with delay
		ON	Blackout without delay

DIMMER	DIM4		
	DIM3		
	DIM2		
	DIM1		
	OFF		
LED PWM	1200Hz		default
	2400Hz		
	4000Hz		
	6000Hz		
	25000Hz		
DMX ERROR	SAVE		Hold last control in case of DMX signal loss
	BLACK		Blackout in case of DMX signal loss
DISPLAY TIME	On		Display permanently on
	30s		Dark display after 30s (default)
	1min		There is a dark display after 1 minute
	2min		It’s a dark display after 2 minutes.
DISPLAY LOCK	OFF		No display lock
	ON		Lock display with password or button combination Password required for unlocking
LOAD PARA	OFF		No parameter upload
	ON		Upload parameters
SETTING	RECOVERY	****	Restore factory settings, enter the corr ect password
	CLEAN EDI T1	****	Clear edit scenario 1, enter the correct password
	CLEAN EDI T2	****	Clear edit scenario 2 Enter the correct password
	WDMX HID E	YES	If the wireless is hidden, the W-DMX R ESET and SIGNAL menus disappear, and the sig nal defaults to wired-only mode
		NO	

OPTION	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	XX.XX.XX.XX	Custom IP setting
	PT ENCODER	OFF		
		ON		Switch the XY encoder
	LANGUAGE	****	ENGLISH	
	WDMX RESET	YES		Select to match with W-DMX transmitter, it clears the receiver pairing and re-connects
		NO		
	SIGNAL	ONLY XLRDMX		Wired signal only
		XLRDMX FIRST		The 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

			PAN	0-255
			TILT	0-255
			PT SPEED	0-255
			CMY_C	0-255
			CMY_M	0-255
			CMY_Y	0-255
			COLOR	0-255
			ROTA.GOBO	0-255
			GOBO.ROTA	0-255

EDIT	EDIT 1-2	STEP 1-30	FIXED GOBO	0-255	Allows for editing the Custom 1 and Custom 2 settings (basic standalone scene)
			PRISM 1	0-255	
			PRISM 2	0-255	
			FROST	0-255	
			FOCUS	0-255	
			DIMMER	0-255	
			STROBE	0-25	
			TIME	0-255	
			USE	YES/NO	
MANUAL	AUTO TEST				Auto test
	CHANNEL	PAN	0-255		Manual control, Channel test
		TILT	0-255		
		PT SPEED	0-255		
		CMY_C	0-255		
		CMY_M	0-255		
		CMY_Y	0-255		
		COLOR	0-255		
		ROTA.GOBO	0-255		
		GOBO.ROTA	0-255		
		FIXED GOBO	0-255		
		PRISM 1	0-255		
		PRISM 2	0-255		
		FROST	0-255		
		FOCUS	0-255		
		DIMMER	0-255		
		STROBE	0-25		
	DEBUG HIDE	YES			Factory debugging mode
		NO			
		ALL RESET			Reset all settings
		XY RESET			Reset Pan/Tilt

	RESET	COLOR SYS		Reset all color system components: C MY and color wheel
		GOBO SYS		Reset all gobo system components: fix ed gobo, rotating gobo
		OTHER		Resets all other features
INFO	FIXTURE HOURS			Operating hours
	LED USE HOURS			Light engine operating hours
	TEMPERATURE			Light engine temperature
	VERSION			Software version
	NETWORK			Network parameters
	RDM	UID	0x388Axxxxxxxx	Fixture ID
		LABEL		Fixture name
	SYSTEM ERRO R	MEMORY IC		Memory IC
		ANGLESENSOR		Angle sensor
		PAN SENSOR		X magnet
		PAN ENCODER		X encoder
		PAN DRIVEIC		X driver IC
		TILT SENSOR		Y magnet
		TILTENCODER		Y encoder
		TILTDRIVEIC		Y driver IC
		TEMPERATURE		Temperature control IC
		CMY_C RESET		
		CMY_M RESET		
		CMY_Y RESET		
		COLOR RESET		COLOR reset
		GOBO RESET		
		RGOBO RESET		
		FIXED GOBO		Fixed gobo reset
		PRISM 1 RESET		Prism 1 reset
		PRISM 2 RESET		Prism 2 reset
		FOCUS RESET		Focus reset

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	
		PRISM 1	±127	
		PRISM 2	±127	
		FROST	±127	
		FOCUS	±127	
UPDATE SOFTWARE				Allows for firmware updates. Instructions for firmware updates are provided together with the appropriate update files.

DMX-CHART – CONTROLS

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

BASIC (19CH)	**STANDARD (23CH)**	**EXTENDED (27CH)**	**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	0-255	Cyan
5	7	7	0-255	Magenta
6	8	8	0-255	Yellow

7	9	9	**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	Cyan 100% / Magenta 100% / Yellow 0%
			148-166	Cyan 0% / Magenta 100% / Yellow 0%
			167-185	Cyan 0% / Magenta 100% / Yellow 100%
			186-204	Cyan 0% / Magenta 0% / Yellow 100%
			205-223	Cyan 100% / Magenta 0% / Yellow 100%
			224-242	Cyan 100% / Magenta 0% / Yellow 0%
			243-255	Cyan 100% / Magenta 100% / Yellow 0%
8	10	10	0-255	CMY speed (Speed 100% -> 1%)
			COLOR WHEEL 19+1	
			0-7	White / Open
			8-10	1. M Red
			11-13	2. B Red
			14-16	3. M Red X
			17-19	4. Orange
			20-22	5. DS Amber
			23-25	6. D Amber
			26-28	7. Yellow
			29-31	8. J Green
			32-34	9. Ch Green

9	11	11	35-37	10. DY Green
			38-40	11. Prim Green
			41-43	12. J Blue
			44-46	13. M Blue
			47-49	14. Congo
			50-52	15. Indigo
			53-55	16. Magenta
			56-58	17. Salmon

BASIC (19CH)	**STAND ARD (2 3CH)**	**EXTEN DED (2 7CH)**	**Value**	**Function**
			59-61	18. 1/4 CTO
			62-64	19. 1/8 CTO
			65-191	Color wheel rotation 0 – 360° (clockwise)
			192-222	Color wheel rainbow effect (speed 100% -> 1%) clockwise
			223-224	Stop
			225-255	Color wheel rainbow effect (speed 1% -> 100%) counter-clockwise
–	–	12	0-255	Color wheel fine
10	12	13	**ROTATING GOBO 6+1**	
			0-10	White / Open
			11-19	Rotating GOBO 1 – Sun Blaze
			20-28	Rotating GOBO 2 – Ocean Waves
			29-37	Rotating GOBO 3 – Cotton Cluster
			38-46	Rotating GOBO 4 – Honeycomb
			47-55	Rotating GOBO 5 – Grid
			56-64	Rotating GOBO 6 – Drops
			65-73	Rotating GOBO 1 shake (speed 1% -> 100%)
			74-82	Rotating GOBO 2 shake (speed 1% -> 100%)
			83-91	Rotating GOBO 3 shake (speed 1% -> 100%)
			92-100	Rotating GOBO 4 shake (speed 1% -> 100%)
			101-109	Rotating GOBO 5 shake (speed 1% -> 100%)
			110-118	Rotating GOBO 6 shake (speed 1% -> 100%)

			119-127	White / Open
			128-190	Rotating GOBO flowing water effect (speed 100% -> 1%) clockwise
			191-192	Stop rotation
			193-255	Rotating GOBO flowing water effect (speed 1% -> 100%) counter-clockwise
–	–	14	0-255	Rotating GOBO fine
11	13	15	**GOBO ROTATION**	
			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 counterclockwise rotation (speed 1% -> 100%)
–	–	16	0-255	GOBO rotation fine
			FIXED GOBO WHEEL 19+1	
			0-10	White / Open
			11-13	Fixed GOBO 1 – Vertical Line
			14-16	Fixed GOBO 2 – Horizontal Line
			17-19	Fixed GOBO 3 – Dot Square
			20-22	Fixed GOBO 4 – Circle
			23-25	Fixed GOBO 5 – Radioactive
			26-28	Fixed GOBO 6 – Square
			29-31	Fixed GOBO 7 – Wave
			32-34	Fixed GOBO 8 – Three Lines
			35-37	Fixed GOBO 9 – Triangle
			38-40	Fixed GOBO 10 – Square Outline
			41-43	Fixed GOBO 11 – Asterisk
			44-46	Fixed GOBO 12 – Radioactive 2
			47-49	Fixed GOBO 13 – Star
			50-52	Fixed GOBO 14 – Triangular Lines
			53-55	Fixed GOBO 15 – Drum brake
			56-58	Fixed GOBO 16 – Three-Swirl

			59-61	Fixed GOBO 17 – Pinhole Medium
			62-64	Fixed GOBO 18 – Pinhole Small
			65-67	Fixed GOBO 19 – Pinhole Super Small

BASIC (19CH)	**STAND ARD (2 3CH)**	**EXTEN DED (2 7CH)**	**Value**	**Function**
12	14	17	68-70	Fixed GOBO 1 shake (speed 1% -> 100%)
			71-73	Fixed GOBO 2 shake (speed 1% -> 100%)
			74-76	Fixed GOBO 3 shake (speed 1% -> 100%)
			77-79	Fixed GOBO 4 shake (speed 1% -> 100%)
			80-82	Fixed GOBO 5 shake (speed 1% -> 100%)
			83-85	Fixed GOBO 6 shake (speed 1% -> 100%)
			86-88	Fixed GOBO 7 shake (speed 1% -> 100%)
			89-91	Fixed GOBO 8 shake (speed 1% -> 100%)
			92-94	Fixed GOBO 9 shake (speed 1% -> 100%)
			95-97	Fixed GOBO 10 shake (speed 1% -> 100%)
			98-100	Fixed GOBO 11 shake (speed 1% -> 100%)
			101-103	Fixed GOBO 12 shake (speed 1% -> 100%)
			104-106	Fixed GOBO 13 shake (speed 1% -> 100%)
			107-109	Fixed GOBO 14 shake (speed 1% -> 100%)
			110-112	Fixed GOBO 15 shake (speed 1% -> 100%)
			113-115	Fixed GOBO 16 shake (speed 1% -> 100%)
			116-118	Fixed GOBO 17 shake (speed 1% -> 100%)
			119-121	Fixed GOBO 18 shake (speed 1% -> 100%)
			122-124	Fixed GOBO 19 shake (speed 1% -> 100%)
			125-127	White / Open
			128-190	Static GOBO auto-rotation (speed 100% -> 1%) clockwise
			191-192	Stop auto-rotation
			193-255	Static GOBO auto-rotation (speed 1% -> 100%) counter-clockwise
–	–	18	0-255	Static GOBO Wheel fine
			PRISM 1: 6-Facet Linear Prism	
			0-10	Open
			11-145	Prism insert and angle adjustment (0 -> 360°) clockwise

13	15	19	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%)
14	16	20	**PRISM 2: 16-Facet Radial Prism**	
			0-10	Open
			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 rotation
			206-255	Prism insert and counter-clockwise rotation (speed 1% -> 100%)
15	17	21	**FROST**	
			0-10	Open
			11-145	Frost insert and angle adjustment (0 -> 360°) clockwise
			146-150	Stop
			151-200	Frost insert and clockwise (speed 100% -> 1%)
			201-205	Stop rotation
			206-255	Frost insert and counter-clockwise rotation (speed 1% -> 100%)
16	18	22	0-255	Focus
–	19	23	0-255	Focus fine
17	20	24	0-255	Dimmer / Intensity
–	21	25	0-255	Dimmer / Intensity fine

BASIC (19CH)	**STAND ARD (2 3CH)**	**EXTEN DED (2 7CH)**	**Value**	**Function**
18	22	26	**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
			CONTROL commands effective after 3 seconds	

			0-10	Inactive
			11-20	Pan/Tilt Black activated
			21-30	Pan/Tilt Black deactivated
			31-40	Pan invert
			41-50	Tilt invert
			51-60	Pan/Tilt invert off
			61-70	Studio mode
			71-80	Power mode
			81-90	Live mode
			91-100	Reserved
			101-110	Dim 4
			111-120	Off
			121-130	Reserved
			131-140	Reserved
			141-150	Reserved
			151-160	PWM 1200Hz
			161-170	PWM 2400Hz
			171-180	PWM 4000Hz
19	23	27	181-190	PWM 6000Hz
			191-200	PWM 25000Hz
			201-210	All reset
			211-220	XY reset
			221-230	Color System reset
			231-240	Gobo System reset
			241-255	Other reset

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

W-DMX OPERATION

- This product is equipped with a wireless DMX receiver, TiMo RX by Lumenradio.
- To establish a connection, put your transmitter device into pairing mode and then select the Menu option of the device OPTION > WDMX RESET > YES.
- This pairs the device to the transmitter.
- Make sure to only use compatible transmitter or transceiver devices!
- Please refer to the Lumenradio support website if any wireless DMX configuration issues arise besides the

basic connection or if you need to learn more about compatible transmitters or transceivers.

COLORS

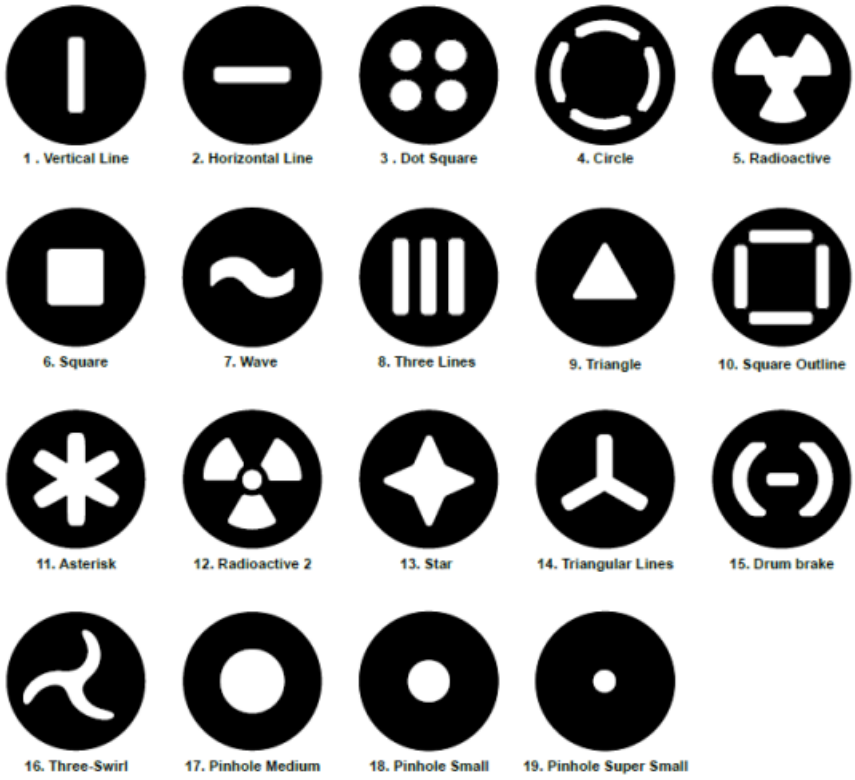
Color Wheel

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).

GOBOS

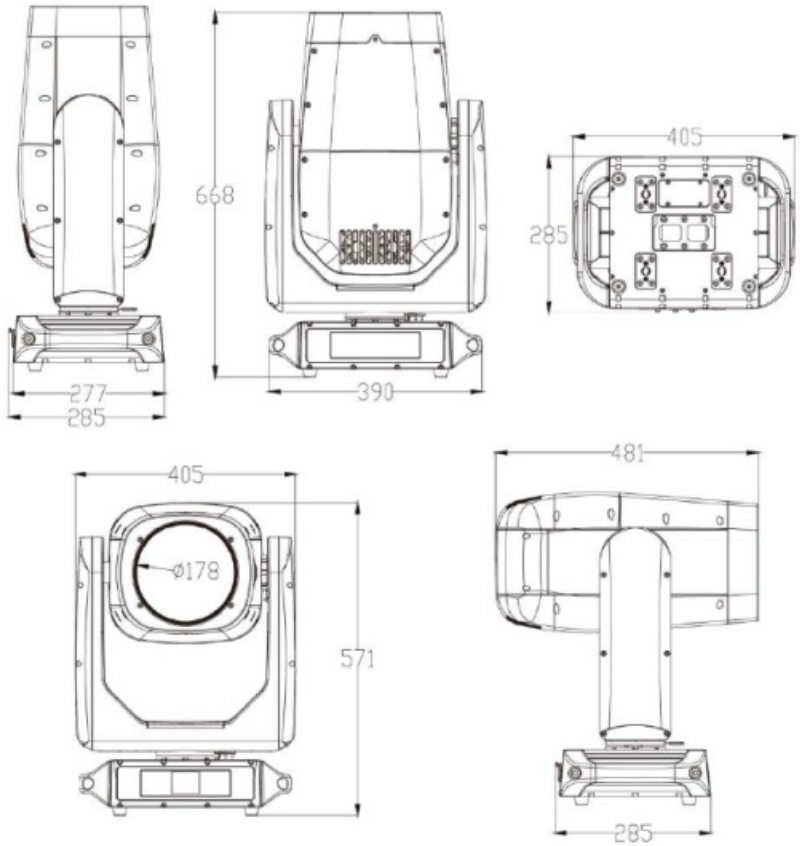
Static Gobos, with Gobo Shake



Rotating Gobos, Effects

- **PRISMS**
  This product is equipped with two stackable prism units, so they can be overlayed with each other and with frost.
- **Prism 1 – Linear prism**
  This is a 6-facet rotating linear prism. It creates six times the projection in a line. The prism can be rotated, the speed can be adjusted.
- **Prism 2 – Radial Prism**
  This is a 16-facet rotating radial prism. It creates 16 times the projection arranged in a circle. The prism can be rotated, the speed can be adjusted.
- **FROST**
  The frost filter can be stacked with the prisms. This device has a rotating frost filter that goes well with the rotating glass effects Gobos.

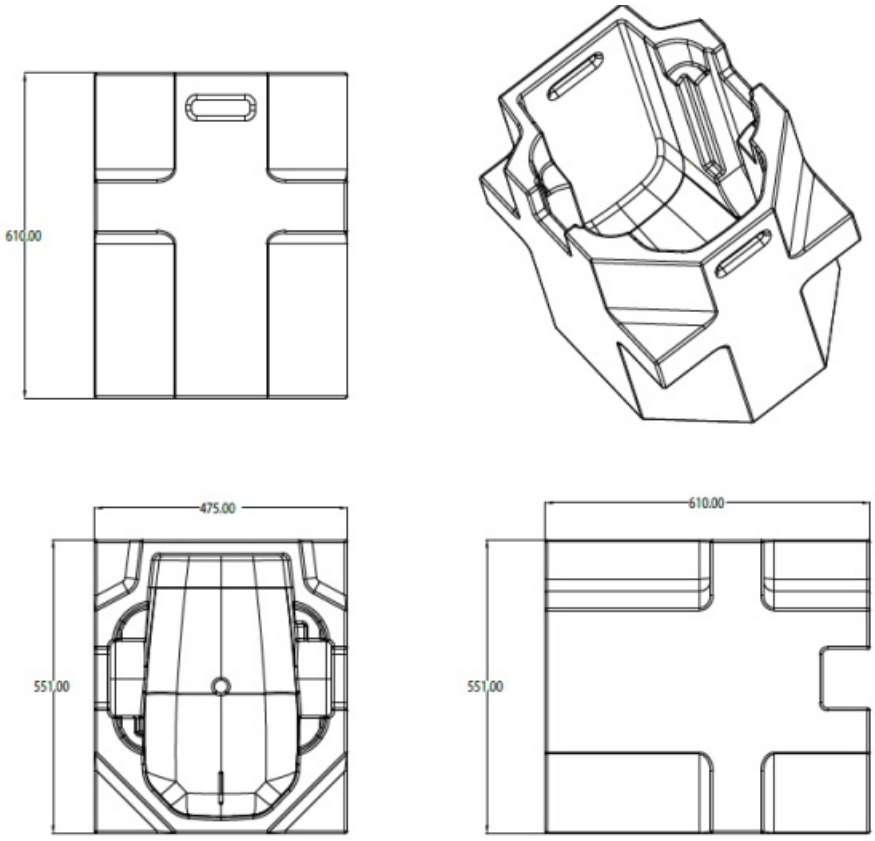
DIMENSIONS



Dimensions given in millimeters.

FLIGHTCASE INLAY – HIGH DENSITY PU FOAM SHELL

- This product comes standard in a high-density PU foam shell, it is part of the packaging you received the product in.
- This PU foam is designed to fit in custom flight cases to protect the product (flightcase inlay).
- The product is inserted from the top, with the head tilted by 90°.
- The below graphics show the dimensions of that PU foam to ease the ordering of custom flight cases.



TECHNICAL DATASHEET

Product: Tarm Blaze

Optical System

Light source	**100 W White Laser Engine**
Lens diameter	**180 mm**
Angle	**0.7 – 5°**
Illuminance	**220‘000 lx @ 20m, 0.7°**
Luminous flux	**≥ 3000 lm**
CRI	**> 65**
Color temperature	**6500K**
Rated life (LP70)	**12‘000 hrs**

Feature Set

Pan / Tilt	**540° / 270° (8-16 bit)**
Dimmer	**0 – 100%, 24bit**
Static Gobo	**19 gobos + open**
Rotating Gobo	**6 rotating effects gobos, gobo shake**
Colors	**Color wheel with 19 colors, incl. CTO, + white, rainbow flow effect**
Color mixture	**CMY-mixture**
Prism	**16 facet radial prism, 6 facet linear prism, bi-directional rotation, adjustable speed, stackable**
Frost	**Frost filter, bi-directional rotation**

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	**240 W**
Connectivity	**5-pin DMX in and through RJ45 in and through USB-C**
Material	**Magnalium and die-cast**
Color	**Black**
Dimensions	**381 x 280 x 665 mm**
Weight	**24 kg**
Rigging	**Two omega brackets included**
Transportation	**Delivered in High-Density Foam Shell**

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

GENERAL AND LEGAL INFORMATION

tarm AG In der Halde 4 8268 Salenstein Switzerland

- **UID**: CHE-422.406.186
- **CH-ID:** CH-130-3019611-6
- **CEO:** Martin Werner

Representative in the European Union:

- tarm laser technologies tlt GmbH & Co. KG

- Lindenallee 27
- 44625 Herne

Germany

FAQs

- **Q: Is the Tarm BLAZE luminaire suitable for underwater use?**
  A: No, the device is not suitable for underwater operation despite being IP66-rated for dust and water ingress protection.
- **Q: Can I perform maintenance on the device without following additional waterproofing procedures?**
  A: No, any maintenance work that involves opening the device requires additional procedures to maintain waterproofness.
- **Q: What is the Laser Class of the tarm BLAZE luminaire?**
  A: The tarm BLAZE is classified as Laser Class 1 and assigned to Risk Group 3 according to relevant standards.

Documents / Resources

	tarm BLAZE Laser Source Moving Head Beam [pdf] User Manual BLAZE Laser Source Moving Head Beam, BLAZE, Laser Source Moving Head Beam, Source Moving Head Beam, Moving Head Beam

References

- User Manual