

**User Manual** 



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#### 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. 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)

#### 3. 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 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.

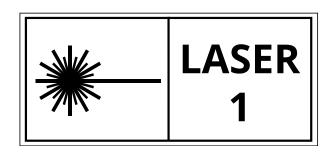
The tarm AG cannot be held liable for any injuries or damages resulting from misuse or neglect of the information provided. Installation should only be carried out by qualified or certified personnel, using exclusively the original rigging parts (omega brackets) included



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, 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 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 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).

#### 6. TRANSPORTATION

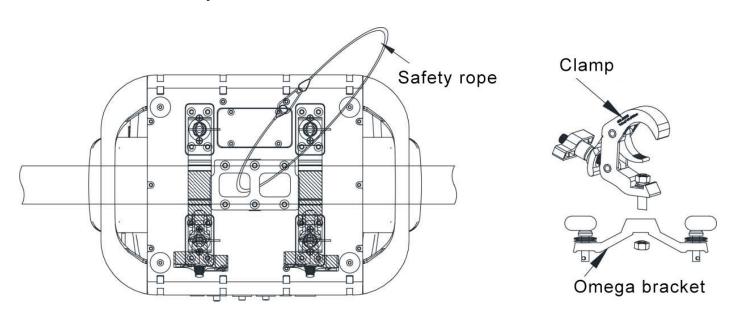
- Only transport the device using the PU foam included in delivery or comparable.
- Only transport it with the locks for Pan and Tilt movement applied.
- Only transpoprt the device with the base to the top as per the PU-foam.
- Avoid upside-down transportation (base to the bottom), as the PU-foam was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



### 7. INSTALLATION

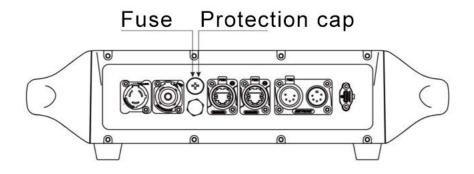
## 7.1. Rigging

- Always **install a safety cable** in case of overhead use of the device. Follow local requirements regarding 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.





### 7.2. 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.

#### 7.3. 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.

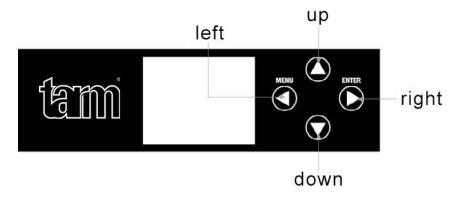
Never connect this product to a dimmer!

You may use the PowerCon TRU1 outlet for power connection of further tarm BLAZE fixtures. Depending on mains voltage, the maximum quantity of connected fixtures shall not exceed 15 devices (for 230V AC operating) and max 8 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.



#### 8. SETTINGS

## 8.1. 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

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



## 8.2. Menu Layout

ADDRESS	001 - 512			Set the DMX address of the fixture
ADDUE 33	BASIC		19 DMX channel operation	
PERSON	STANDARD		23 DMX channel operation	
	EXTEND			27 DMX channel operation
	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	
RUNMODE			DMX from the DMX port ("node" functionality)	
	sACN AUTO			Operation mode set to streaming-ACN
	CUSTOM1		Automatic operation mode  Custom operation mode 1	
	CUSTOM2		Custom operation mode 1  Custom operation mode 2	
		NORMAL		Horizontal movement normal
	PAN INVERT	INVERT		Horizontal movement inverted
	TILT INVERT	NORMAL		Vertical movement normal
	TILI INVERT	INVERT		Vertical movement inverted
				Stealth mode: Slow head movement speed,
		STUDIO		about 30% of the maximum fan speed. The
				motors can be slowed down. The noise level is
				controlled to stay below 40 dB Fast head movement possible, maximum fan
	PERFORM	POWER		speed is used most of the time. Noise level
		I OWER		around 55 dB
				Automatic speed adjustment, intelligent
		LIVE		adjustment of fan speed. Noise level usually
				around 50 dB
	BLACKOUT	OFF		Blackout with delay
	DEACROOT	ON		Blackout without delay
		DIM4		
	DIMMED	DIM3 DIM2		
	DIMMER	DIM2 DIM1		
		OFF		
		1200Hz		default
	LED PWM	2400Hz		doladit
		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 30s		Display permanently on Dark display after 30s (default)
		1min		Dark display after 30s (default)  Dark display after 1min
		2min		Dark display after 111111
OPTION		OFF		No display lock
	DISPLAY LOCK	ON		Lock display with password, button combination
				password required for unlocking
	LOAD PARA	OFF		No parameter upload
		ON	1	Upload parameters
		RECOVERY	***	Restore factory settings, Enter the correct
				password
		CLEAN EDIT1	***	Clear edit scenario 1,Enter the correct password
			***	
	SETTING	CLEAN EDIT2		Clear edit scenario 2 Enter the correct password
				If wireless is hidden, the W-DMX RESET and
		WDMX HIDE	YES	SIGNAL menus disappear and the signal
		WBINKTIBE		defaults to wired only mode
			NO //	
		NET SWITCH	2.xxx.xxx.xxx/10.xxx.xxx.xxx	Setup the IP address range
		UNIVERS	0-255	Set the Art-Net universe  Default IP mode (assigned IP according to
	NETWORK	IP MODE	DEFAULT IP	standard)
		II WODE	CUSTOM IP	Custom IP setting mode
		CUSTOM IP	XX.XX.XX	Custom IP setting
	DT ENCODED	OFF		Outside in Southing
	PT ENCODER	ON		Switch XY encoder
	LANGUAGE	***	ENGLISH	
		YES		Select to match with W-DMX transmitter, it clears
	WDMX RESET			the receiver pairing and re-connects
		NO ONLY VI BRMY		IMP - I - I - I - I - I - I - I
		ONLY XLRDMX		Wired signal has priority
		XLRDMX FIRST ONLY WDMX		Wireless signal only
	SIGNAL	WDMX FIRST		Wireless signal only Wireless signal has priority
				Wireless signal has priority  Wireless signal to wired signal - throughputs
		WDMX TO XLRDMX		
		WDMX TO XLRI	OMX	wireless signal to DMX out port



			PAN	0-255		
1			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		
EDIT	EDIT 4.0	OTED 4 00	GOBO.ROTA	0-255	Allows for editing the Custom 1 and Custom 2	
EDIT	EDIT 1-2	STEP 1-30	FIXED GOBO	0-255	settings (basic stand alone scene)	
			PRISM 1	0-255	- Collings (basis starta dierio secile)	
			PRISM 2	0-255		
			FROST	0-255		
			FOCUS	0-255		
			DIMMER	0-255		
			STROBE	0-25		
			TIME	0-255		
			USE	YES/NO		
		AUTO TI			Auto test	
		PAN	0-255			
I		TILT	0-255			
		PT SPEED	0-255			
		CMY C	0-255			
		CMY M	0-255			
					$\dashv$	
I		CMY_Y	0-255		<del>_</del>	
I		COLOR	0-255		<u> </u>	
	CHANNEL	ROTA.GOBO	0-255		Manual control. Channol tost	
	CHANNEL	GOBO.ROTA	0-255		Manual control, Channel test	
		FIXED GOBO	0-255			
		PRISM 1	0-255			
			0-255			
MANUAL		PRISM 2				
		FROST	0-255			
		FOCUS	0-255			
		DIMMER	0-255			
		STROBE	0-25			
		YES			Factory debugging mode	
	DEBUG HIDE	NO			r dotory dobugging mode	
		ALL RESET			Reset all settings	
		XY RESET			Reset Pan/Tilt	
		ATTALOLT				
		COLOR SYS			Reset all color system components: CMY and	
	RESET				color wheel	
	RESET				Poset all gobe system components: fixed gobe	
	RESET	CORO SVS			Reset all gobo system components: fixed gobo,	
	RESET	GOBO SYS			rotating gobo	
	RESET	GOBO SYS			rotating gobo	
	FIXTURE HOURS				rotating gobo  Resets all other features	
	FIXTURE HOURS				rotating gobo  Resets all other features  Operating hours	
	FIXTURE HOURS LED USE HOURS				rotating gobo  Resets all other features  Operating hours  Light engine operating hours	
	FIXTURE HOURS LED USE HOURS TEMPERATURE				rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION				rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version	
	FIXTURE HOURS LED USE HOURS TEMPERATURE	OTHER	In one:		rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	OTHER	0x388Axxxxxx	X	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION	OTHER	0x388Axxxxxx	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	OTHER	0x388Axxxxxxx	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	OTHER  UID  LABEL  MEMORY IC		x	rotating gobo Resets all other features Operating hours Light engine operating hours Light engine temperature Software version Network parameters Fixture ID Fixture name Memory IC	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	OTHER  UID  LABEL  MEMORY IC  ANGLESENSOF		x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	OTHER  UID  LABEL  MEMORY IC  ANGLESENSOF  PAN SENSOR	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder	
	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER	?	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X driver IC  Y magnet	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTENCODER	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTENCODER TILTORIVEIC TEMPERATURE	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET CMY_Y RESET	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET	2	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET CMY_Y RESET	2	X	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET CMY_Y RESET COLOR RESET GOBO RESET	2	X	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTDRIVEIC TEMPERATURE CMY_C RESET CMY_M RESET CMY_Y RESET COLOR RESET GOBO RESET RGOBO RESET	2	X	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC  COLOR reset	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILT SENSOR TILT TENCODER CMY_C RESET CMY_M RESET CMY_Y RESET COLOR RESET GOBO RESET RGOBO RESET FIXED GOBO	<b>R</b>	x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC  COLOR reset	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOR PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILTENCODER TILTENCODER TILTENCODER TILTORIVEIC TEMPERATURE CMY_C RESET CMY_M RESET CMY_Y RESET COLOR RESET GOBO RESET RGOBO RESET FIXED GOBO PRISM 1 RESET		x	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC  COLOR reset  Fixed gobo reset  Prism 1 reset	
INFO	FIXTURE HOURS LED USE HOURS TEMPERATURE VERSION NETWORK RDM	UID LABEL MEMORY IC ANGLESENSOF PAN SENSOR PAN ENCODER PAN DRIVEIC TILT SENSOR TILT SENSOR TILT TENCODER CMY_C RESET CMY_M RESET CMY_Y RESET COLOR RESET GOBO RESET RGOBO RESET FIXED GOBO		X	rotating gobo  Resets all other features  Operating hours  Light engine operating hours  Light engine temperature  Software version  Network parameters  Fixture ID  Fixture name  Memory IC  Angle sensor  X magnet  X encoder  X driver IC  Y magnet  Y encoder  Y driver IC  Temperature control IC  COLOR reset	



		PAN	±127	
		TILT	±127	
		CMY-C	±127	
		CMY-M	±127	
		CMY-Y	±127	
		COLOR	±127	
SERVICE	***	ROTA. GOBO	±127	
		GOBO.ROTA	±127	
		FIXED GOBO	±127	
		PRISM 1	±127	
		PRISM 2	±127	
		FROST	±127	
		FOCUS	±127	
				Allows for firmware updates. Instructions for
UPDATE SOFTWARE				firmware updates are provided together with the appropriate update files.



## 9. 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
				O (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
7	9	9	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 WHEE	L 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
			35-37	10. DY Green
9	11	11	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)	STANDARD (23CH)	EXTENDED (27CH)	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
			ROTATING GO	
			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
10	12	13	65-73	Rotating GOBO 1 shake (speed 1% -> 100%)
10	'2	10	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
			GOBO ROTAT	
			0-120	Rotating GOBO angle (0° -> 360°)
			121-125	Stop
			126-165	Rotating GOBO shake (speed 1% -> 100%)
11	13	15	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%)
	-	16	0-255	GOBO rotation fine
-	-	10	FIXED GOBO	
			0-10	
				White / Open
			11-13	Fixed CORO 3 Horizontal 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
	1	I	65-67	



BASIC (19CH)	STANDARD (23CH)	EXTENDED (27CH)	Value	Function	
12	14	17	68-70	Fixed GOBO 1 shake (speed 1% -> 100%)	
12	14	17	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	
	_	10		cet 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%)	
				acet Radial Prism	
			0-10	Open	
			11-145	Prism insert and angle adjustment (0 -> 360°) clockwise	
14	16	16 20	20	146-150	Stop
17	10	20	151-200	Prism insert and clockwise (speed 100% -> 1%)	
			201-205	Stop rotation	
			206-255	Prism insert and counter-clockwise rotation (speed 1% -> 100%)	
			FROST	Frisin lisert and counter-clockwise fotation (speed 176 -> 100 %)	
			0-10	Open	
				· ·	
15	17	21	11-145	Frost insert and angle adjustment (0 -> 360°) clockwise	
15	17		146-150	Stop	
			151-200	Frost insert and clockwise (speed 100% -> 1%)	
			201-205	Stop rotation	
40	40		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)	STANDARD (23CH)	EXTENDED (27CH)	Value	Function
			STROBE	
			0-9	Inactive / No strobe
			10-99	Strobe, increasing speed from slow to fast
18	22	26	100-109	Inactive
			110-179	Lightning Strobe
			180-189	Inactive
			190-255	Random Strobe
			CONTROL (co	mmands 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
19	23		111-120	Off
13	20		121-130	Reserved
			131-140	Reserved
			141-150	Reserved
			151-160	PWM 1200Hz
			161-170	PWM 2400Hz
			171-180	PWM 4000Hz
			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

#### 10. 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 a pairing state 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.



#### 11. COLORS

#### 11.1. Color Wheel



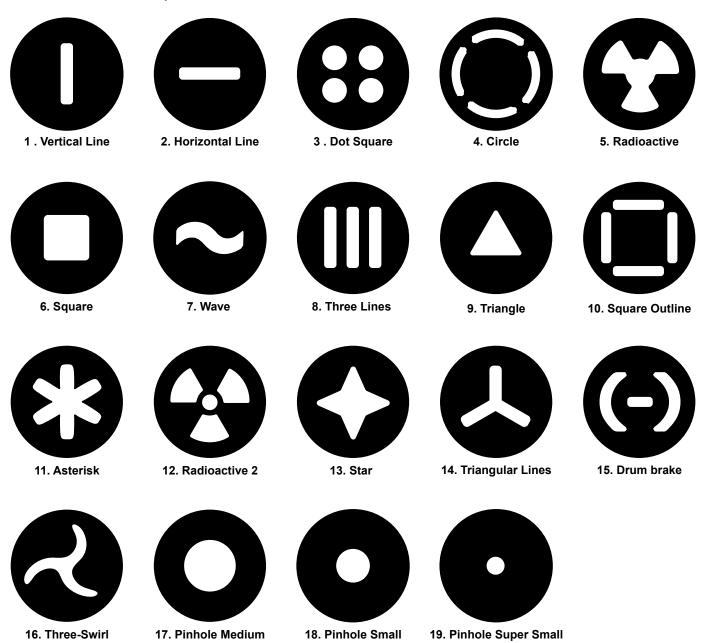
#### 11.2. CMY Color Mixture

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).



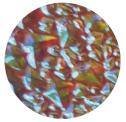
## 12. GOBOS

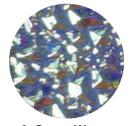
## 12.1. Static Gobos, with Gobo Shake





## 12.2. Rotating Gobos, Effects











1 . Sun Blaze

2. Ocean Waves

3 . Cotton Cluster

4. Honeycomb

5. Grid



6. Drops

#### 13. PRISMS

This product is equipped with **two prism units**, which are stackable, so they can be overlayed with each other and with frost.

### 13.1. 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.

#### 13.2. Prism 2 - Radial prism

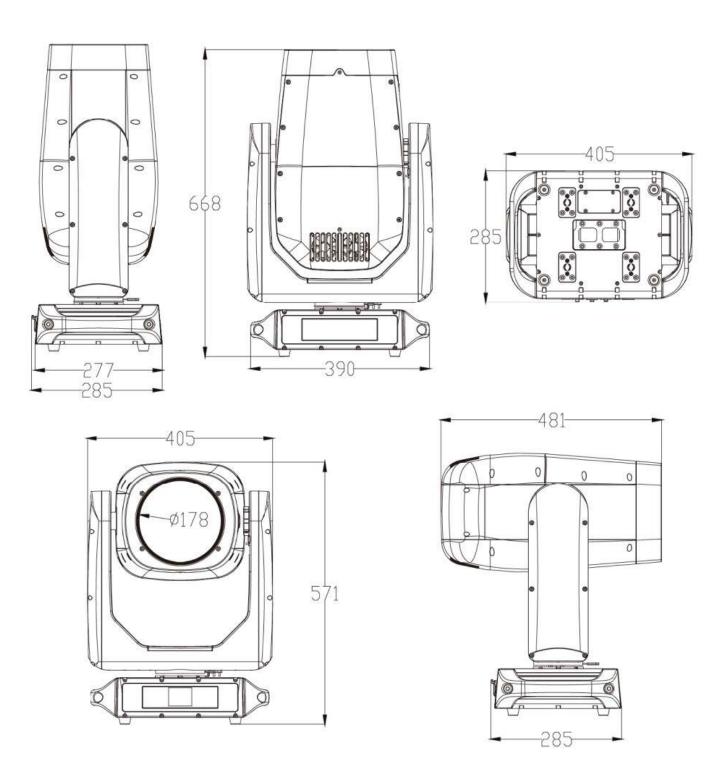
This is a **16-facet rotating radial prism**. It creates 16 times the projection arranged in a circle. The prism can be rotated, the speed can be adjusted.

### 14. FROST

The **frost filter can be stacked with the prisms**. This device has a rotating frost filter that goes well together with the rotating glass effects Gobos.



## 15. DIMENSIONS



Dimensions given in millimeters.

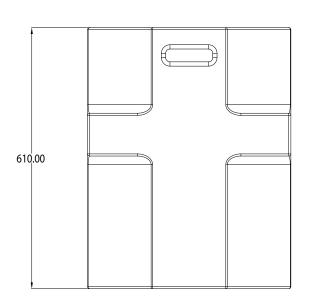


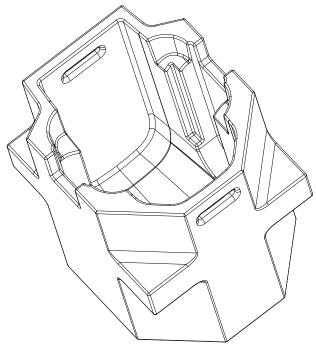
#### 16. FLIGHTCASE INLAY - HIGH DENSITY PU FOAM SHELL

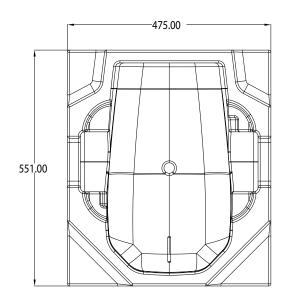
This product comes standard in a high density PU foam shell, it is **part of the packaging you received the product in**. This PU foam is designed to fit in custom flightcases to protect the product (flightcase inlay).

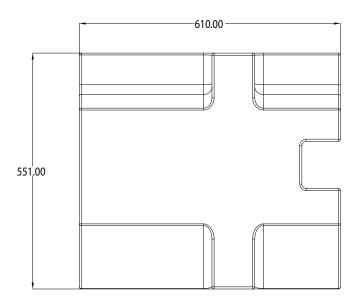
The product is inserted from the top, with the head tilted by 90°.

Below graphics show the dimensions of that PU foam to ease the ordering of custom flightcases.









Dimensions given in millimeters.



#### 17. 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 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



#### 18. **GENERAL AND LEGAL INFORMATION**

#### tarm AG

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CEO: Martin Werner



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