

USER MANUAL

Smart Hybrid 480 Pro



USER MANUAL

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

Please read the instructions carefully before use!

1. SAFETY PRECAUTIONS

This fixture is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Manufacturer is not responsible for injuries and damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage personal injury.

- **PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED**
- **THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.DO NOT ATTEMPT ANY REPAIRS YOURSELF,AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS**
- **DO NOT PLUG FIXTURE INTO A DIMMER PACK**
- **NEVER OPEN THIS FIXTURE WHILE IN USE!**
- **UNPLUG POWER BEFORE SERVICING FIXTURE**
- **NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT! KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE**
- **NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE**
- **RETINA INJURY RISK - MAY INDUCE BLINDNESS**
- **SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK**
- **ENSURE THAT ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT**
- **KEEP APPROPRIATE DISTANCE FROM OBJECTS/SURFACES 1 METER (3.3 FEET)**
- **MAXIMUM TEMP OF EXTERNAL SURFACE 185° F (85°C)**
- **MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0 .5 METER)**
- **DO NOT TOUCH THE FIXTURE HOUSING DURNING OPERATION. TURN OFF THE POWER AND ALLOW APPROXIMATELY 15 MINUTES FOR THE FIXTURE TO COOL DOWN BEFORE SERVICING**
- **DO NOT SHAKE FIXTURE , AND AVOID BRUTE FORCE WHEN INSTALLING OPERATING**
- **DO NOT operate fixture if the power cord is frayed, crimped, damaged or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease**



- **NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating**
- **DO NOT block any air ventilation slots**
- **All fan and air inlets must remain clean and never blocked**
- **Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling**
- **Always disconnect fixture from main power source before performing any type of service or cleaning procedure**
- **Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord**
- **During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.**
- **Consistent operational breaks will ensure fixture will function properly for many years.**
- **ONLY use the original packaging and materials to transport the fixture in for service.**

2. MAINTENANCE GUIDELINES

DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

2.1. CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. NEVER use alcohol, solvents, or ammonia-based cleaners

2.2. MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized our service technician. Should you need any spare parts, please order genuine parts from your local dealer.

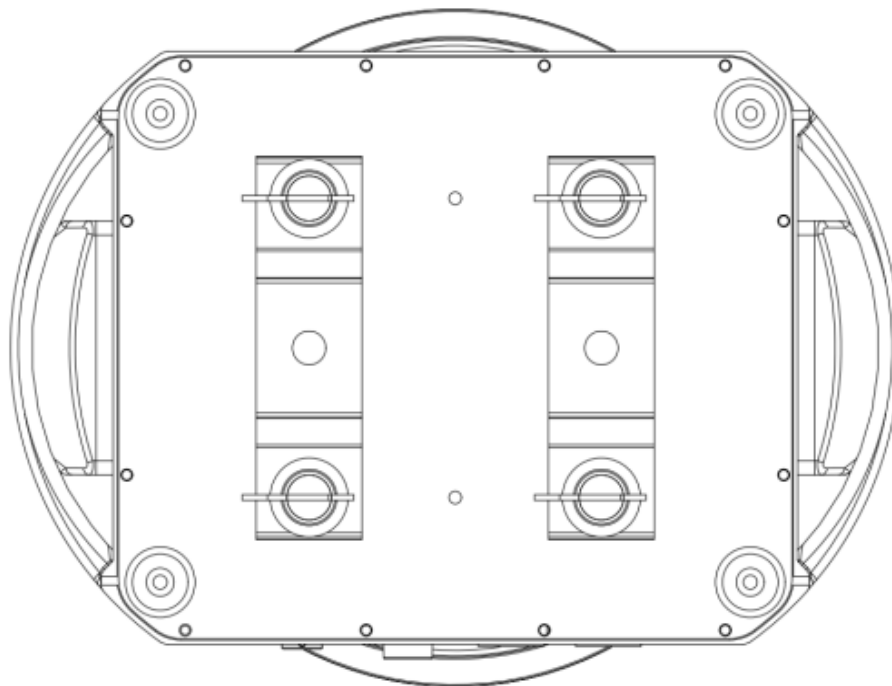
Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s)
- Electric power supply cables must not show any damage, material fatigue or sediments. NEVER remove the ground prong from the power cable

3.INSTALLATION GUIDELINES

OMEGA BRACKET INSTALLATION

Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener $\frac{1}{4}$ turn clockwise . Always check to make sure that each fastener is completely locked. Omega brackets can be installed into the underside of the fixture's base as illustrated below.



4.SYSTEM MENU

The light panel diagram illustrated bellow, Left area is TFT Displayer, support touch, and right area is KEY, both of touch and KEY can operate light and setting.

Note: Prevent damage the touch or TFT displayer, Can not use sharp objects chick displayer.



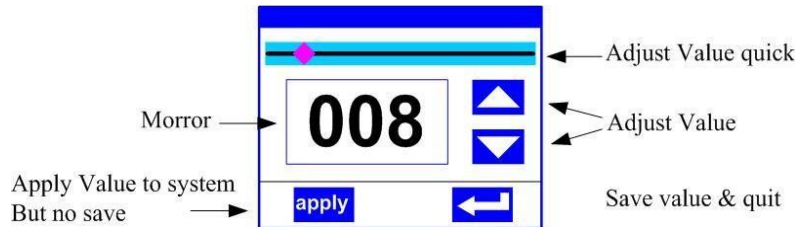
4.1 Operation

4.1.1 Operate light with touch or KEY

- The left area is TFT Displayer and touch, click item or value with finger will to complete operation of set light setting(parameters) or view light state.
- The area on the right hand side is 4 KEY, As auxiliary input interface, if disable touch function,, the KEYr can been choose to set the parameter

4.1.2 Parameter value setting

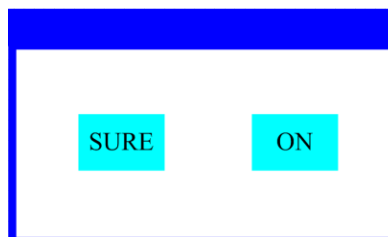
- When the selected item is value need to be modified, the dialog illustrated below will popup



- **Modify value :** Can quickly modify value via pull the slider to the desired position, or click the button of 'up' or 'down' whit finger on the right side to set the exact desired value, another way is roll encoder on the right hand side of panel.
- **Apply value :** When Value had been modified, Then press the bottom of 'apply' in the left corner corner to apply to the light, but havn't saved.
- **Save Value :** Any time, click on the lower right corner of the "OK" button, the setting will be saved into internal memory.

4.1.3 Boolean parameter setting

- When the selected parameters is a Boolean value (such as ON or OFF), can directly modify setting by chick corresponding item, the setting will be saved right now.
- When the parameter is a key item, chick corresponding item, a dialog ilustraded below will be popup ask for the confirm. Click 'sure' to confirm.

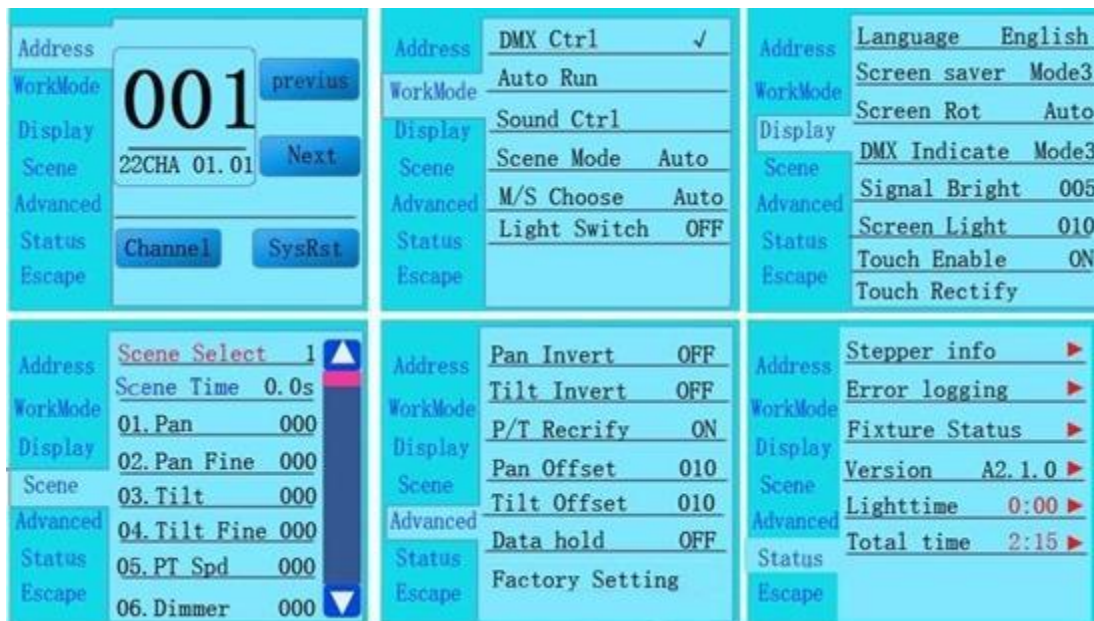


4.1.4 Sub Menu (Parameter)

4.1.3 Boolean parameter setting

Click item of main menu, enter corresponding sub menu, shown in Figure 6, total 6 sub menu, includes class of parameter and status:

- **ADDRESS:** Set light DMX address
- **WORKMOD:** Set light work mode, master or slave mode when in auto run mode
- **DISPLAY:** Set display parameter, eg. select language
- **TEST:** Used for test light, modify DMX channel data to test function, the corresponding function of referencechannel function table
- **ADVANCE:** Set light running parameter
- **STATUS:** Vieq light current status



Operation and parameter instruction

Via following operation, enter sub menu (parameter menu)

- In main menu, click 1/6 function button into corresponding parameter menu.
- In sub menu (page), click main item on the left side of displayer, can shift to corresponding sub menu (page) quickly.

4.2.1 ADDR --> Address: Set DMX Address

Click and select the "ADDR", can enter the page of DMX address setting, range from 1 to 512, the address code shouldn't is not greater than (512- channels quantity), otherwise the light will not be controlled. Following is the operation:

Enter the page of DMX address, click the blank area in right side of display will pop-up dialog as

in Fig. 4, modify value, then click 'ENTER' to confirm and save DMX address code.



4.2.2 MODE -->WorkMode: Set Light work mode

Enter the page of illustrated below and modify setting. Can set light work mode, control lamp and DMX channel mode.



- **DMX Ctrl:** Choose to set DMX Mode
- **Auto Run:** Choose to set Auto Mode
- **Sound Ctrl:** Choose to set Sound Mode
- **M/S Choose:** Available just in **AUTO RUN** or **SOUND CTRL** mode.
 On -->Master (Data will be send to other slave lamp immediately)
 Off --> Slaver (Not send data to other device via DMX cable)
- **LIGHT SWITCH:**

On --> Turn on the light

Off --> Turn off the light

4.2.3 DISP--> DISPLAY: Set display

Device support 2 languages, rotation display, screen saver and possibility to turn off touch

- **LANGUAGE:** English/Chinese
- **SCREEN SAVER:** when panel is idle (there is no operation for 10 seconds), display will enter saver status:
OFF--> No screen saver
Mode 1--> Turns off the display
Mode 2--> Displays the current adres
Mode 3--> Displays the icon the current working mode (Default)
- **SCREEN ROTATION:** to turning display
OFF--> Normal Display (Default)
ON--> 180° turning display
- **TOUCH ENABLE:** Disable or enable touch function

4.2.4 TEST--> TestMode Light will into test mode, in this mode, the light does not receive the data for DMX controller:

4.2.5 ADVA--> Advanced: Set light run parameter

Set the parameter of light: P/T Inver, data hold, factory settings

5.DMX CHART

22CH Mode

CH	Value	Function	Description
1CH	0-255	Pan	-270°- 270°
2CH	0-255	Pan Fine	16 bit adjustable
3CH	0-255	Tilt	-135°- 135°
4CH	0-255	Tilt Fine	16 bit adjustable
5CH	0-255	Dimmer	Dark to light
6CH	0-255	Strobe	
	0-3	Closed	
	4-103	Strobe	The larger value, the faster speed
	104-107	Open	
	108-155	Pulse Close	The larger value, the faster speed Light to Dark
	156-207	Pulse Open	The larger value, the faster speed Dark to Light
	208-212	Open	
	213-251	Random	The larger value, the faster speed
	252-255	Open	
7CH	0-255	Color	
	0-9	White	
	10-19	Red	
	20-29	Green	
	30-39	Blue	
	40-49	Yellow	
	50-59	Cyan	
	60-69	Magenta	
	70-79	Amber	
	80-89	White+Red	
	90-99	Red+Green	
	100-109	Green+Blue	
	110-119	Blue+Yellow	
	120-129	Yellow+Cyan	
	130-139	Cyan+Magenta	
140-149	Magenta+Amber		

	150-159	Amber+CTO	
	160-203	Forward flow from fast to slow	
	204-205	Stop	
	206-255	Reverse flow from slow to fast	
8CH	0-255	Cyan	
9CH	0-255	Magenta	
10CH	0-255	Yellow	
11CH	0-255	CTO	
12CH	0-255	Static Gobo	
	0-5	Open	
	6-11	Gobo 1	
	12-17	Gobo 2	
	18-23	Gobo 3	
	24-29	Gobo 4	
	30-35	Gobo 5	
	36-41	Gobo 6	
	42-47	Gobo 7	
	48-53	Gobo 8	
	54-59	Gobo 9	
	60-65	Gobo 10	
	66-71	Gobo 11	
	72-77	White shaking slow to fast	
	78-83	Gobo 1 shaking slow to fast	
	84-89	Gobo 2 shaking slow to fast	
	90-95	Gobo 3 shaking slow to fast	
	96-101	Gobo 4 shaking slow to fast	
	102-107	Gobo 5 shaking slow to fast	
	108-113	Gobo 6 shaking slow to fast	
	114-119	Gobo 7 shaking slow to fast	

	120-125	Gobo 8 shaking slow to fast	
	126-131	Gobo 9 shaking slow to fast	
	132-137	Gobo 10 shaking slow to fast	
	138-195	CW Rot F>S	
	196-197	Stop	
	198-255	CCW Rot S>F	
13CH	0-255	Rot Gobo	
	0-6	Open	
	7-13	Gobo 1	
	14-20	Gobo 2	
	21-27	Gobo 3	
	28-34	Gobo 4	
	35-41	Gobo 5	
	42-48	Gobo 6	
	49-55	Gobo 7	
	56-62	Gobo 8	
	63-69	Gobo 1 shaking slow to fast	
	70-76	Gobo 2 shaking slow to fast	
	77-83	Gobo 3 shaking slow to fast	
	84-90	Gobo 4 shaking slow to fast	
	91-97	Gobo 5 shaking slow to fast	
	98-104	Gobo 6 shaking slow to fast	
	105-111	Gobo 7 shaking slow to fast	
	112-118	Gobo 8 shaking slow to fast	
	119-185	Forward flow from fast to slow	
	186-189	Stop	
190-255	Reverse flow from slow to fast		
14CH	0-255	Gobo Rotation	
	0-127	0-360 degrees	
	128-190	CW from from fast to slow	
	191-192	Stop	
	193-255	CCW from slow to fast	

15CH	0-255	Prism 1 (Linear)	
	0-127	Prism off	
	128-255	Prism on	
16CH	0-255	Prism 1 Rot	
	0-127	0-360 degrees	
	128-187	Forward flow from fast to slow	
	188-195	Stop	
	196-255	Reverse flow from slow to fast	
17CH	0-255	Prism 2 (Circular)	
	0-127	Prism off	
	128-255	Prism on	
18CH	0-255	Prism 2 Rot	
	0-127	0-360 degrees	
	128-187	Forward flow from fast to slow	
	188-195	Stop	
	196-255	Reverse flow from slow to fast	
19CH	0-255	Frost	
	0-127	Frost off	
	128-255	Frost on	
20CH	0-255	Zoom	Wide to Narrow
21CH	0-255	Focus	Near to far
22CH	0-255	Reset	
	0-209	No function	
	210-215	4 seconds to reset XY motors	
	216-219	No function	
	220-235	4 seconds to reset effect motors	
	236-239	No function	
	240-255	4 seconds to reset all	

26CH Mode

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6.SPECIFICATIONS

CONSTRUCTION/PHYSICAL

Dimensions:360x290x660mm

Weight: 22,5 Kg

Exterior Color: Black

Housing Material: High-quality plastic +aluminum profile

DYNAMIC EFFECTS

Dimmer: Electronic

Shutter/Strobe: Electronic

Strobe Rate: 1-30Hz

Standalone: Yes

Color Wheel: 7 colors + white

Color Mixing: CMY+CTO

Gobo Wheel: 11 static and 8 rotating patterns

Frost Filter: Yes

Prism: 8-facet linear, 5-facet circular

CONNECTIONS

Power Connection: PowerCon True1

DMX Connection: XLR 3-pin

CONTROL

Control Protocols: DMX /RDM

DMX Channels: 22/26CH

Build-in Effects: Yes

ELECTRICAL

Power Supply Voltage: 100-240V 50/60Hz

Maximum Power Consumption: 500W

Light Source 480W LED

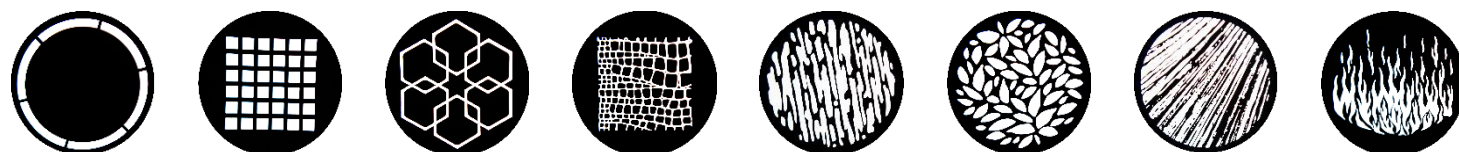
OPTIC

Zoom: 4°- 40°

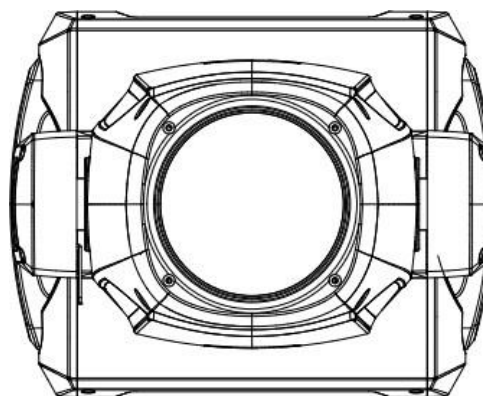
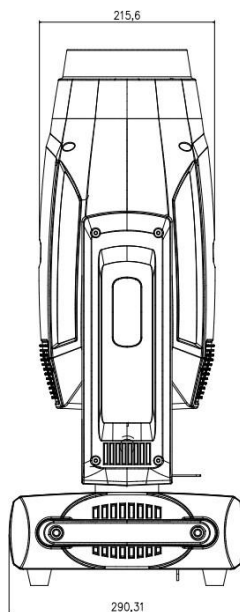
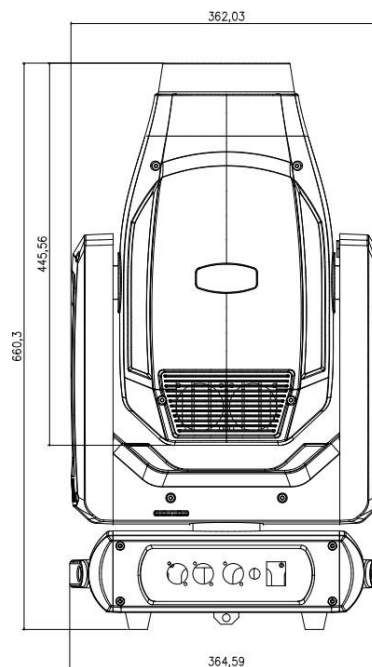
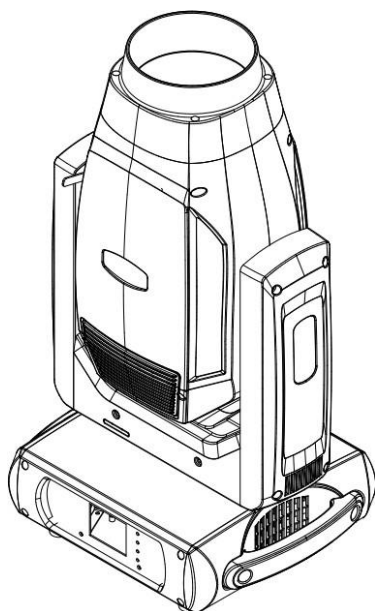
STATIC GOBO WHEEL IN ORDER



ROT GOBO WHEEL IN ORDER



7.DIMENSIONAL DRAWINGS



brighter

BRIGHTER LIGHTING SP. Z.O.O.
ul. Warszawska 111
32-087 Bibice
POLAND
NIP: 9442248196
REGON: 361197164

brighter

BRIGHTER LIGHTING SP. Z.O.O.

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POLAND

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REGON: 361197164

The manufacturer reserves the right to make changes to technical parameters



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