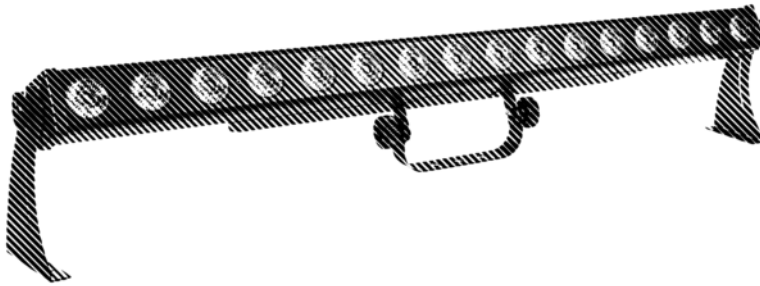


VARYTEC



LED Giga Bar 4 MKII
LED bar

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1 General notes

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

1.1 Further information

On our website (www.thomann.de) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.



Displays


Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.
	Warning – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used as an electronic illumination effect using LED technics. The device is designed for professional use and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety**DANGER!****Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

**DANGER!****Electric shock caused by high voltages inside**

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.



DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.



WARNING!

Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.



NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

Special features of the device:

- 16 × RGBW LEDs (4-in-1, each 8 W)
- Strobe, dimmer and fade effect
- Control via DMX (6 different modes) and buttons and display on the unit
- three selectable automatic programmes
- Sound control
- Master / Slave mode
- robust metal housing

4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



NOTICE!

Risk of overheating

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.



NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

Mounting options

You can install the unit in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved truss. Use the openings of the bracket provided for mounting.

Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be threaded through the safety eyelet.



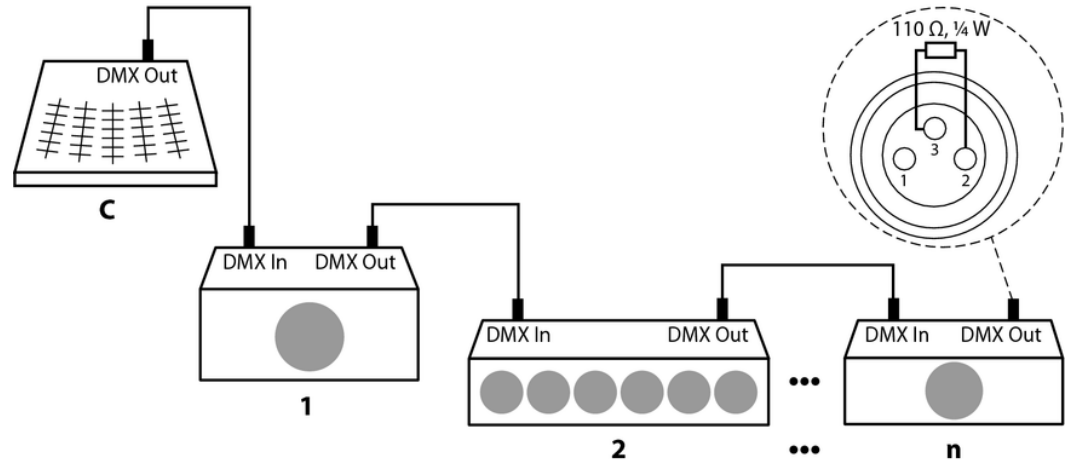
Please note that this device must not be connected to a dimmer.

5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor ($110\ \Omega$, $\frac{1}{4}\text{ W}$).



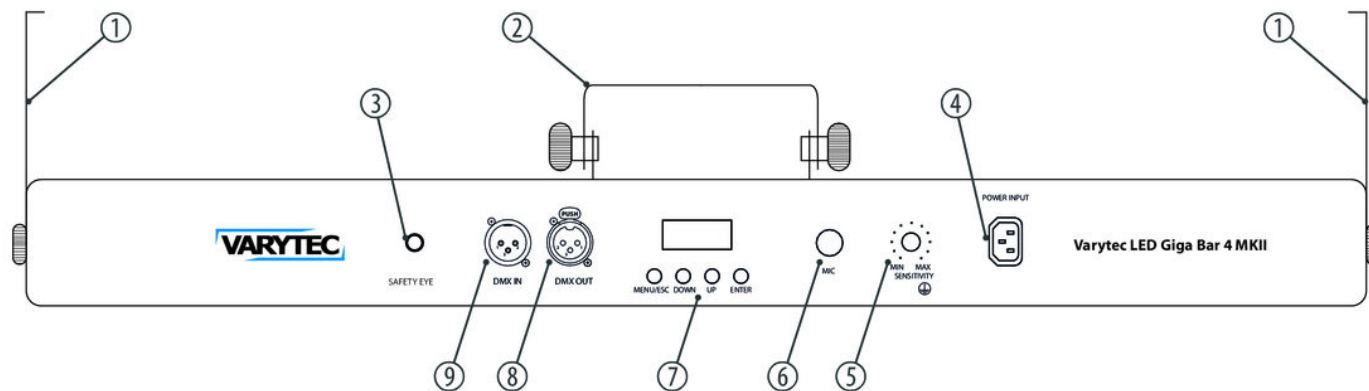
DMX indicator

When the device and the DMX controller are operational, the DMX indicator in the display shows that a DMX signal is being received on the input.

Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

6 Connections and controls



LED Giga Bar 4 MKII

1	Lateral adjustable mounting brackets.
2	Middle adjustable mounting bracket.
3	Safety cable eyelet
4	<i>[POWER INPUT]</i> IEC chassis plug for mains connection.
5	<i>[SENSITIVITY]</i> Rotary control for setting the microphone sensitivity.
6	Microphone
7	Display
	<i>[MENU/ESC]</i> Activates the main menu and toggles between menu items. Skip back and leaving the open menu.
	<i>[UP]</i> Navigates upwards in a menu list. Increases the displayed value by one.

	<i>[DOWN]</i> Navigates downwards in a menu list. Decreases the displayed value by one.
	<i>[ENTER]</i> Selects an option of the respective operating mode.
8	<i>[DMX OUT]</i> DMX output.
9	<i>[DMX IN]</i> DMX input.

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation.

7.2 Main menu

Press *[MENU/ESC]* to open the main menu. Use *[UP]* and *[DOWN]* to navigate the available sub-menus in the main menu. To open the highlighted submenu, press again *[MENU/ESC]*.

DMX address

This setting is only relevant when the device is controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'ADDR' in the main menu.

Now you can set the number of the first DMX channel to be used by the device (DMX address). Use *[UP]* and *[DOWN]* to select a value between 1 and 512 (the display shows 'A001' ... 'A512').

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible first DMX address for the various DMX modes.

Mode	Highest possible DMX address
4-channel	509
8-channel	505
12-channel	501
20-channel	493
32-channel	481
36-channel	477

Press *[MENU/ESC]* to apply the changes and to return to the main menu.

Operating mode Automatic

Automatic operation can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'AUTO' in the main menu.

Use *[UP]* and *[DOWN]* to select the desired automatic mode ('aut1' ... 'aut3').

Press *[MENU/ESC]* to apply the changes and to return to the main menu.

DMX mode

This setting is only relevant when the device is controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'CHND' in the main menu.

With *[UP]* and *[DOWN]* you can now select one of the following DMX operating modes:

- '4Ch' (four channels)
- '8Ch' (eight channels)
- '12Ch' (twelve channels)
- '20Ch' (20 channels)
- '32Ch' (32 channels)
- '36ch' (36 channels)

Press *[MENU/ESC]* to apply the changes and to return to the main menu.

Constant unicoloured pattern

A constant unicoloured pattern can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'COLO' in the main menu. The display shows 'CoL1' ... 'CoL9' or 'AtF'.

Use *[UP]* and *[DOWN]* to select a desired fixed colour in the range 'CoL1' ... 'CoL9'. Selecting 'AtF' opens the menu to adjust the intensity for the fixed colours red, green, blue and white.

Press *[MENU/ESC]* to apply the changes and to return to the main menu.

Sound control

A sound controlled automatic show can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'SOUN' in the main menu.

Use *[UP]* and *[DOWN]* to select the desired mode ('SoU1' ... 'SoU3').

Press *[MENU/ESC]* to apply the changes and to return to the main menu.

The microphone sensitivity is adjusted via the rotary control on the device.

Operating mode Slave

This setting is only relevant if the device is working as Slave in a Master / Slave configuration and is not controlled via DMX.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'SLAV' in the main menu.

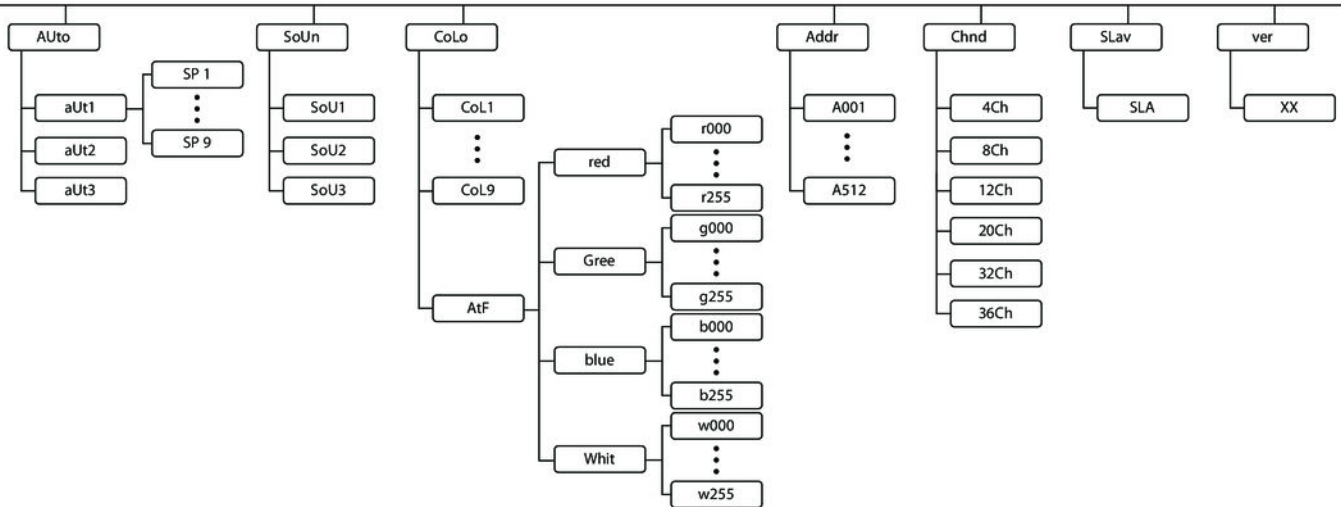
Confirm with *[MENU/ESC]*. The unit now operates in slave mode. Press again *[MENU/ESC]* to return to the main menu.

Software version display.

Press *[MENU/ESC]* and use *[UP]* and *[DOWN]* to highlight the option 'Auto' in the main menu.

Confirm with *[MENU/ESC]*. The unit's current software version appears on the display. Press again *[MENU/ESC]* to return to the main menu.

7.3 Menu overview



7.4 Functions in 4-channel DMX mode

Channel	Value	Function
1	0...255	Intensity red, all LEDs
2	0...255	Intensity green, all LEDs
3	0...255	Intensity blue, all LEDs
4	0...255	Intensity white, all LEDs

7.5 Functions in 8-channel DMX mode

Channel	Value	Function
1	0...255	Dimmer
2	LED function	
	0...7	Dimmer

Channel	Value	Function
	8...15	Strobe effect
	16...23	Mode 1

	224...231	Mode 27
	232...239	Sound 1
	240...247	Sound 2
	248...255	Sound 3
3	0...255	Speed control for mode 1 ... 27
4	0...255	Stroboscope effect, increasing speed
5	0...255	Intensity red, all LEDs
6	0...255	Intensity green, all LEDs
7	0...255	Intensity blue, all LEDs
8	0...255	Intensity white, all LEDs

7.6 Functions in 12-channel DMX mode

Channel	Value	Function
1	0...255	Dimmer
2	LED function	
	0...7	Dimmer
	8...15	Strobe effect
	16...23	Mode 1

	224...231	Mode 27
	232...239	Sound 1
	240...247	Sound 2
	248...255	Sound 3
3	0...255	Speed control for mode 1 ... 27

Channel	Value	Function
4	0...255	Stroboscope effect, increasing speed
5	0...255	Intensity red, LED group 1
6	0...255	Intensity green, LED group 1
7	0...255	Intensity blue, LED group 1
8	0...255	Intensity white, LED group 1
9	0...255	Intensity red, LED group 2
10	0...255	Intensity green, LED group 2
11	0...255	Intensity blue, LED group 2
12	0...255	Intensity white, LED group 2

7.7 Functions in 20-channel DMX mode

Channel	Value	Function
1	0...255	Dimmer
2	LED function	
	0...7	Dimmer
	8...15	Strobe effect
	16...23	Mode 1

	224...231	Mode 27
	232...239	Sound 1
	240...247	Sound 2
	248...255	Sound 3
3	0...255	Speed control for mode 1 ... 27

Channel	Value	Function
4	0...255	Stroboscope effect, increasing speed
5	0...255	Intensity red, LED group 1
6	0...255	Intensity green, LED group 1
7	0...255	Intensity blue, LED group 1
8	0...255	Intensity white, LED group 1
9	0...255	Intensity red, LED group 2
10	0...255	Intensity green, LED group 2
11	0...255	Intensity blue, LED group 2
12	0...255	Intensity white, LED group 2
13	0...255	Intensity red, LED group 3
14	0...255	Intensity green, LED group 3
15	0...255	Intensity blue, LED group 3
16	0...255	Intensity white, LED group 3

Channel	Value	Function
17	0...255	Intensity red, LED group 4
18	0...255	Intensity green, LED group 4
19	0...255	Intensity blue, LED group 4
20	0...255	Intensity white, LED group 4

7.8 Functions in 32-channel DMX mode

Channel	Value	Function
1	0...255	Intensity red, LED group 1
2	0...255	Intensity green, LED group 1
3	0...255	Intensity blue, LED group 1
4	0...255	Intensity white, LED group 1

Channel	Value	Function
...
29	0...255	Intensity red, LED group 8
30	0...255	Intensity green, LED group 8
31	0...255	Intensity blue, LED group 8
32	0...255	Intensity white, LED group 8

7.9 Functions in 36-channel DMX mode

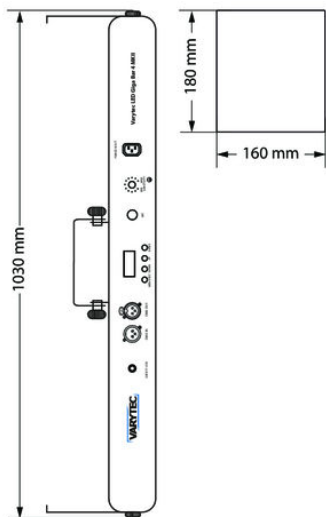
Channel	Value	Function
1	0...255	Dimmer
2	LED function	
	0...7	Dimmer

Channel	Value	Function
	8...15	Strobe effect
	16...23	Mode 1

	224...231	Mode 27
	232...239	Sound 1
	240...247	Sound 2
	248...255	Sound 3
3	0...255	Speed control for mode 1 ... 27
4	0...255	Stroboscope effect, increasing speed
5	0...255	Intensity red, LED group 1
6	0...255	Intensity green, LED group 1
7	0...255	Intensity blue, LED group 1
8	0...255	Intensity white, LED group 1

Channel	Value	Function
...
33	0...255	Intensity red, LED group 8
34	0...255	Intensity green, LED group 8
35	0...255	Intensity blue, LED group 8
36	0...255	Intensity white, LED group 8

8 Technical specifications



LEDs	16 × RGBW LEDs (4-in-1, each 8 W)
Beam angle	25°
Number of DMX channels	4, 8, 12, 20, 32 or 36
Power consumption	90 W
Operating supply voltage	AC 100 – 240 V ~ 50/60 Hz
Fuse	5 mm × 20 mm, 3.15 A, 250 V, fast-acting
Dimensions (W × H × D)	1030 mm × 160 mm × 180 mm
Weight	5.5 kg

9 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections



The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX-, 'cold signal')
3	Signal (DMX+, 'hot signal')

10 Troubleshooting



NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work, no light	Check the mains connection and the main fuse.
No response to the DMX controller	1. Check whether the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. Check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	4. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at www.thomann.de.

11 Cleaning

Optical lenses

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

12 Protecting the environment

Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

LED Giga Bar 4 MKII



