

MARPOWER SIGNAL COLUMN SYSTEMS



SIGNAL COLUMN MARPOWER

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Unique characteristics

- Modular building blocks
- Both signal column and signal panel
- Self assembly kits available
- Easy to configure
- 2-wire easy to install system
- Multiple cable entrances
- LED based, including beacons
- Protected outputs
- Standard 24V, optional 230V
- Complies with all classifications (including SeeBG)

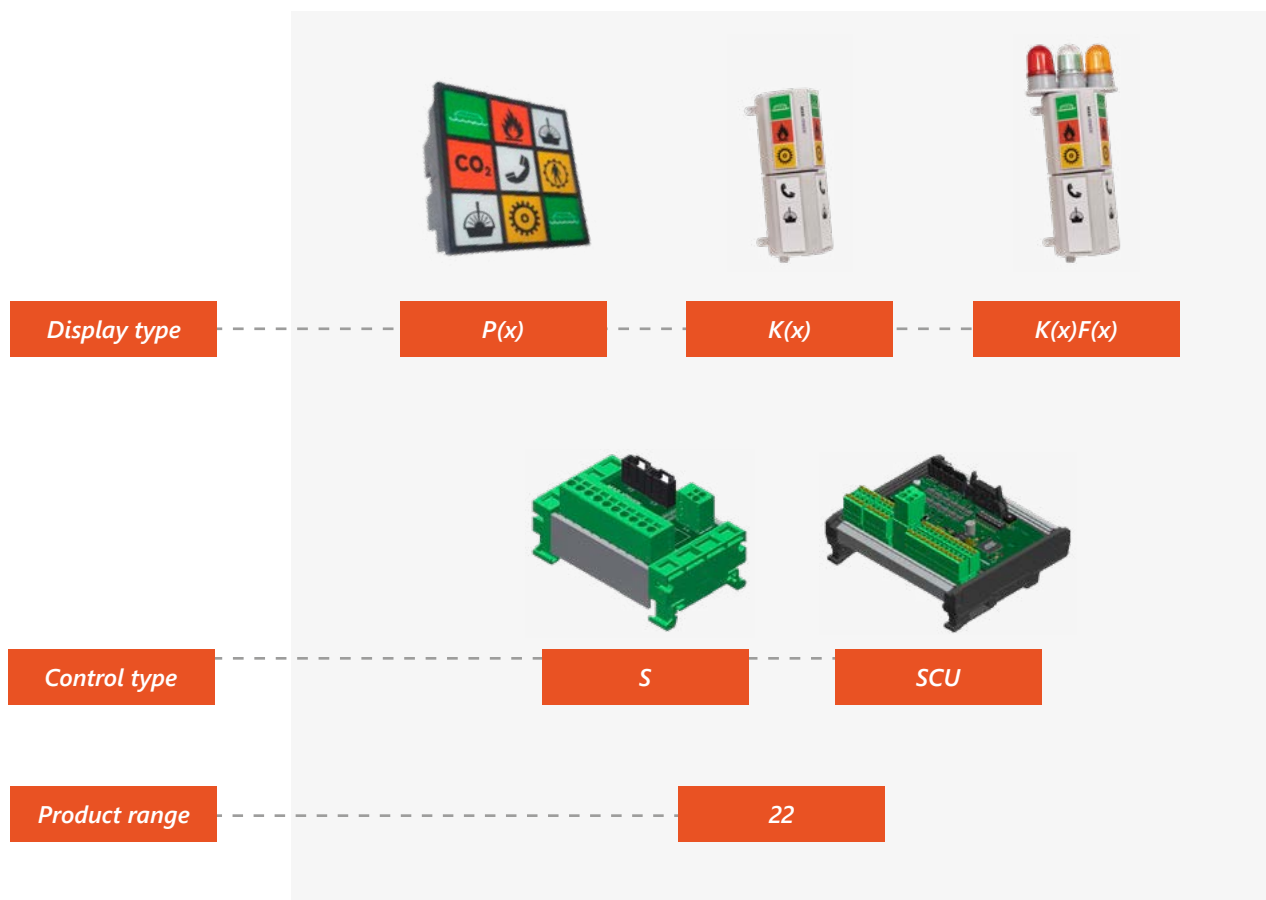
SIGNAL COLUMN TYPE 22

MARPOWER TYPE 22 SIGNAL COLUMN SYSTEM

In order to indicate various ship alarms, a signal column is used in the technical spaces of a vessel. The Signal Column or Signal Panel is often combined with one or more rotating beacons and/or a high output siren.

The Marpower Type 22 Signal Column series are available in both a flush mounted (Signal Panel) and a wall mounted (Signal Column) version. Both types are completely redesigned compared to their predecessors. The new Signal Column is made of glasfiber reinforced polyester which has excellent electrical properties and is flame retardant. The Marpower Type 22 Signal Column is flexibly configurable, based on modular building blocks. This allows for self- assembly of the units by the electrical contractor to save money. All Marpower Signal Columns can display various alarms according to the safety regulations and compliant to various class requirements, such as SeeBG.

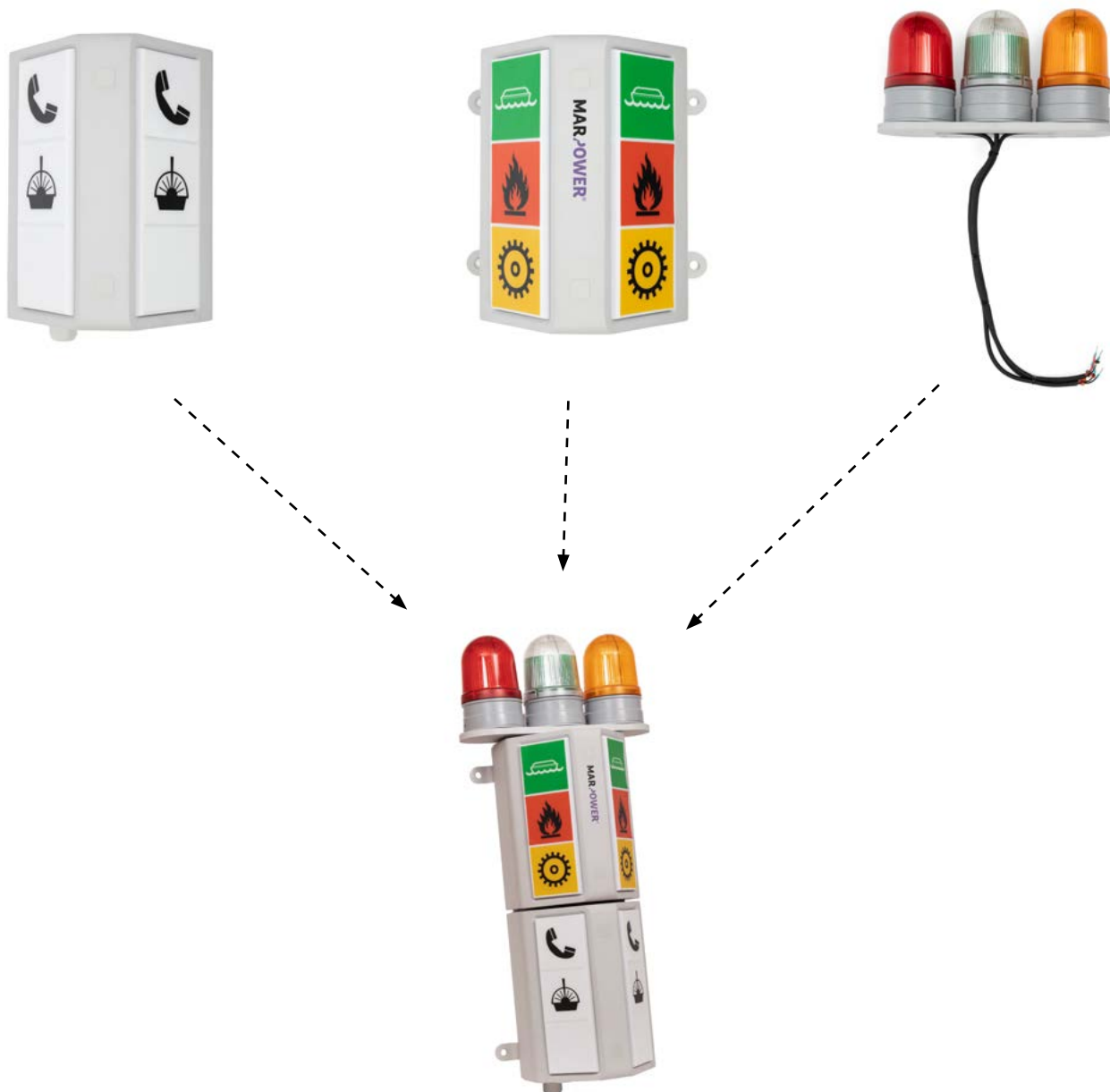
Any signal column must be controlled by a control unit. The Marpower Type 22 signal columns can be controlled either by a separate system operated by the client, or by the advanced Marpower Signal Column Unit (22-SCU). The 22-SCU interface controls the LEDs and rotating LED beacons of the connected display type. An overview of the categorized products is shown below:



SELF ASSEMBLY SIGNAL COLUMN

SELF-ASSEMBLY MARPOWER SIGNAL COLUMN

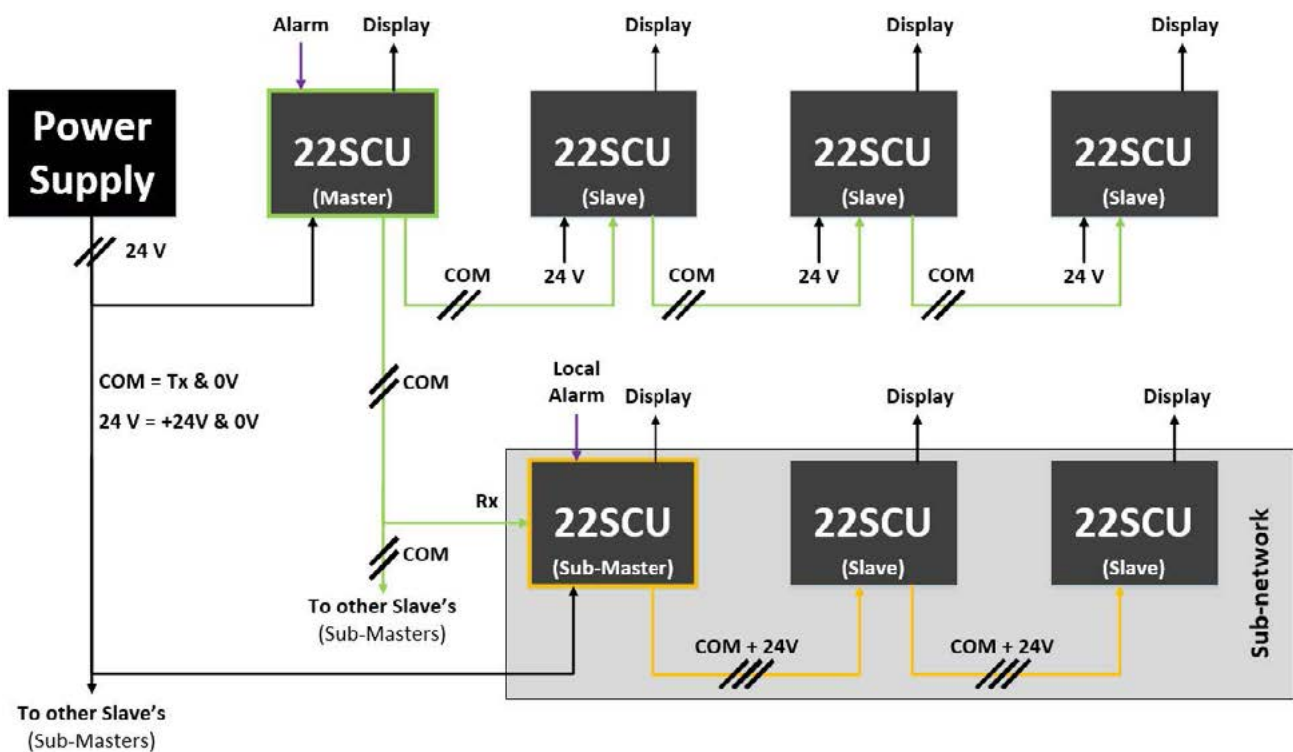
The Type 22 signal column is available in both a rectangular flush mounted version (panel) and a wall mounted version (column). The wall mounted version is flexibly configurable, based on modular building blocks. Apart from that, it is possible to order self-assembly kits to construct the signal column by yourself, completely according to any specific demands. Ordering a self-assembly kit does not only save out of pocket costs, it also guarantees maximum flexibility with regard to the actual mounting of the signal columns itself. The units can be built according to specification shortly before final mounting, allowing for any desired change, both in amount of fields, icons chosen as well as the application of rotating beacons. By rotating the symbols 90 degrees, it is also possible to mount the signal column horizontally.



SIGNAL COLUMN NETWORK

EXAMPLE OF A NETWORK CONFIGURATION

The Marpower Signal Column Type 22, both the Signal Column and Signal Panel version, can be controlled by an intelligent Signal Column Unit (22-SCU), that controls the alarm indicators based on the classified priority order (IMO regulation). The 22-SCU has several outputs for sirens and rotating beacons. To reduce cabling and installation costs, the 22-SCU can be interlinked within a robust communication network that is able to cover large distances. This network is based on the principle of a master and slave topology, where the master receives all the needed alarm information and sends it through the COM network. The slave units will mimic the masters' alarm inputs, unless these are modified during the user configuration.



The above illustration indicates the following characteristics for the 22-SCU unit:

- Can be powered by an external power supply, or by a other 22-SCU
- Uses 2 wire communication
- Can be connected parallel to any 22-SCU device
- Possibility to control an alarm signal locally
- Possibility to create another sub-network with a Sub-Master.

The 22-SCU controls a display product. The display product can be a Signal Column, a Signal Panel, or a different signalling type.

SIGNAL PANEL 22-P(X)

ELECTRICAL SPECIFICATIONS 22-P(X)	
Term	Property
X1	
Power Supply	+24 Vdc (-25% & +30%)
Maximum current supply (continuous)	300 mA
Idle current consumption	40 mA
Terminal supported wire diameter	24 – 30 AWG (flat cable)
INTERFACE SPECIFICATIONS (S1 & S2 & S3)	
Operation Voltage	24 Vdc
Selection mode (dip-switch)	ON / OFF
Number of switches	5
MECHANICAL	
Product (H x W x L)	65x142x142 mm
Weight Module (approx.)	310 g
Weight cable (approx.)	200 g
Mounting	Panel Mount
ENVIRONMENTAL	
Operating temperature Range ¹	-25°C / +60°C
Maximum humidity	95% RH @ 55°C
Cooling	Passive
IP-Grade / (with top-cover)	IP40

¹ Exceeding these values may reduce the life time of the product



Example -22-P6



Example -22-P9

SIGNAL COLUMN 22-K(X)-F(Y)

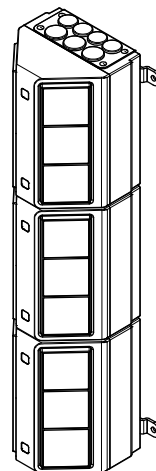
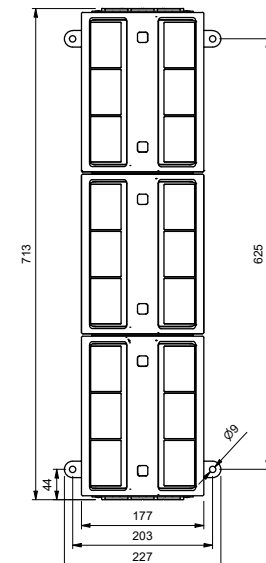
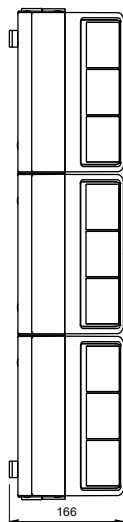
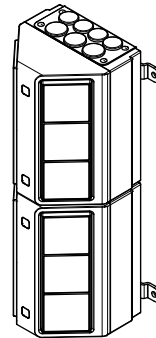
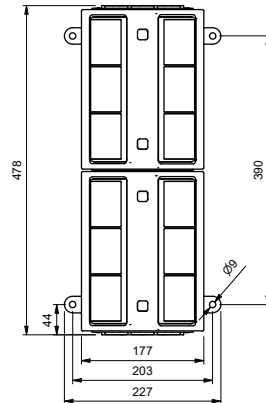
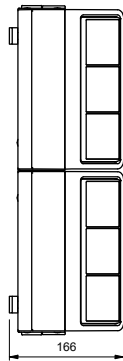
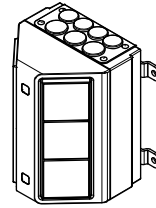
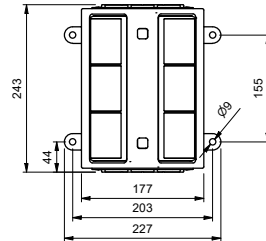
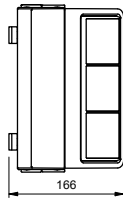
ELECTRICAL SPECIFICATIONS 22-K(X)-F(Y)	
Term	Property
LED BOARD	
Power Supply	+24 Vdc (-25% & +30%)
Maximum current supply (continuous)	3A
Idle current consumption	< 1 mA
Terminal supported wire diameter	24 – 30 AWG (flat cable)
Number of terminal ports	2
Protection	Inverse Polarity Protection, TVS
MECHANICAL SIGNAL COLUMN	
Color	RAL 7047 (grey)
Mounting	4x M8 on a flat surface with 2x mounting bracket
K3	
Dimension with mounting brackets (H x W x L)	166x227x243 mm
Dimension without mounting brackets (H x W x L)	166x177x243 mm
Weight (approx.)	2770 ¹ g
Number of alarm fields displayed	3 alarm fields, dual panels
K6	
Dimension with mounting brackets (H x W x L)	166x227x478 mm
Dimension without mounting brackets (H x W x L)	166x177x478 mm
Weight (approx.)	5250 ¹ g
Number of alarm fields displayed	6 alarm fields, dual panels
K9	
Dimension with mounting brackets (H x W x L)	166x227x713 mm
Dimension without mounting brackets (H x W x L)	166x177x713 mm
Weight (approx.)	7730 ¹ g
Number of alarm fields displayed	9 alarm fields, dual panels
MECHANICAL FLASHLIGHT FRAME	
Color	RAL 7047 (grey)
Mounting	4x M6 on Signal Column top side
Dimension of frame with 3x flashlight (H x W x L)	85x280x140 mm
Weight of flashlight frame (approx.)	470 g
Weight of one flashlight lamp (approx.)	210 g
Number of possible mounted LED beacons in frame	1 – 3
ENVIRONMENTAL	
Operating temperature Range ²	-25°C / +60°C
Maximum humidity	95% RH @ 55°C
Cooling	Passive
IP-Grade	IP44

¹ Weight including mounting bracket. A single bracket weights approximately 150gr

² Exceeding these values may reduce the life time of the product

SIGNAL COLUMN 22-K(X)

DIMENSION DRAWINGS - WITHOUT BEACONS



SIGNAL COLUMN 22-K(X)-F(Y)

DIMENSION DRAWINGS - WITH BEACONS

