



spectrum M

The versatile all-rounder with state-of-the-art 5" display technology.



Scale 1:2

Quality in Control.

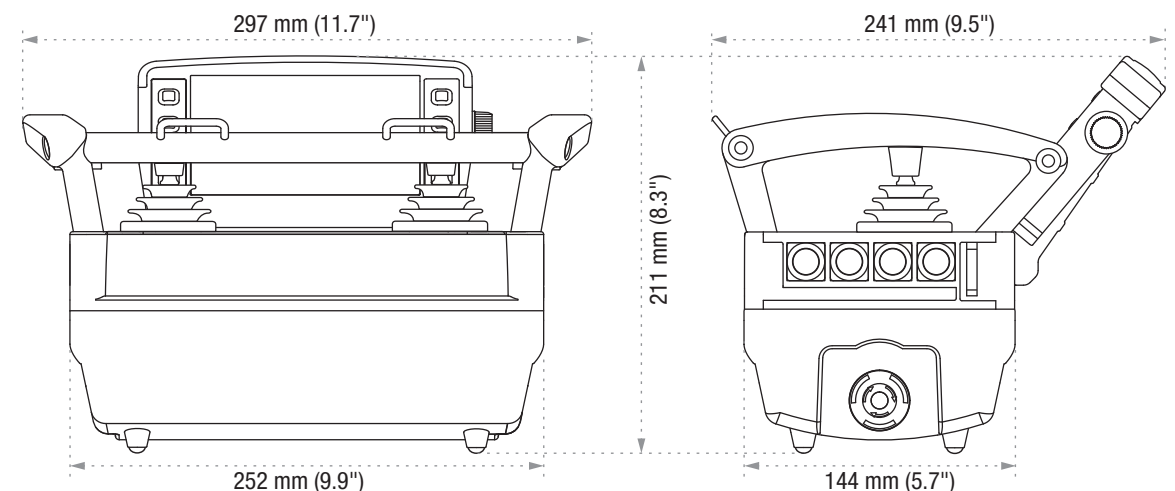
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Technical data

Radio transmitter	spectrum M		
Combined with	FSE 510 / 511 / 516 / 524, FSE 726 / 727 / 736 / 737 / 776 / 777 radiobus®		
Control concepts	Point-to-point operation, catch-release, combined operation (tandem, trio, quattro), hoist / trolley pre-selection; cable option		
Operating elements	Up to 3 joysticks or up to 6 linear levers; combination of push buttons, toggle switches, rotary switches (maintained / spring-return) and other operating elements; a total of 8 one-step push buttons on the sides; radiomatic® iCON for display navigation; 8 push buttons located on the sides of the display for navigation and for quick access to pre-defined functions; <i>optional</i> : joysticks with integrated button; z-axis switches for the simultaneous control of 3 drives		
Control functions	Up to 32 control functions (on / off); up to 8 analog functions for joysticks / linear levers; up to 4 additional analog functions, e. g. for potentiometers; number of control functions expandable by radiobus® modules		
Indication	LED / acoustic signal / transmitter vibration / display: operating status, battery status		
Safety	E-STOP: PL d category 3 according to EN ISO 13849-1:2015 Protection from unauthorized use: activation via HBC start sequence or merlin® TUC Auto Power Off: automatic deactivation of the transmitter after 15 min without command input Auto Movement Off: automatic deactivation of movement functions after 5 min without command input		
Enhanced safety functions	radiomatic® shock-off / zero-g / inclination switch; <i>optional</i> : access control with merlin® TUC, radiomatic® infrakey, micro / orthogonal drive, two-step enabling switch, radiomatic® touch-to-activate, front panel lighting, flashlight, shut-down on implausible control commands		
Feedback to the operator	Data, information and warnings via 5" color TFT display; information and warnings via 16 LEDs and / or transmitter vibration; number of LEDs expandable by radiobus® modules		
Service concept	radiomatic® iLOG, radiomatic® ADCON, merlin® TMC (Teach Mode Card) for teaching of hydraulic functions		
Frequency ranges	ISM bands	Channel spacing	Radiated power
	country-specific use: 405 – 475 MHz 865 – 870 MHz	12.5 / 25 kHz 25 kHz	max. 10 mW max. 10 mW
	902 – 928 MHz	75 kHz	max. 70 mW
	country-independent use: 2.4 GHz: 2402 – 2480 MHz country-specific use: DECT: 1790 – 1930 MHz	1 MHz 1.728 MHz	max. 100 mW max. 250 mW
Frequency management	Fixed frequency, radiomatic® AFS, radiomatic® AFM, Adaptive Frequency Hopping, DECT		
Antenna	Internal		
Battery technology	Rechargeable Li-ion exchange battery with capacity gauge via LEDs; continuous operating time: typically 13 hours		
Charging time	< 6 h (typ.)		
Housing material	Plastic (PA6 GF30)		
Weight	approx. 2.7 kg (6.0 lb.)		
Operating temperature	-20 °C ... +70 °C (-4 °F ... 158° F)		
Protection class	IP 65		



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spectrum M incorporates the latest display technology combined with HBC's tried and tested spectrum transmitter design. This control offers great versatility and provides virtually limitless design possibilities for the most challenging applications.

Valuable features at a glance:



Functionally safe commands

Enhanced safety functions for particular scenarios

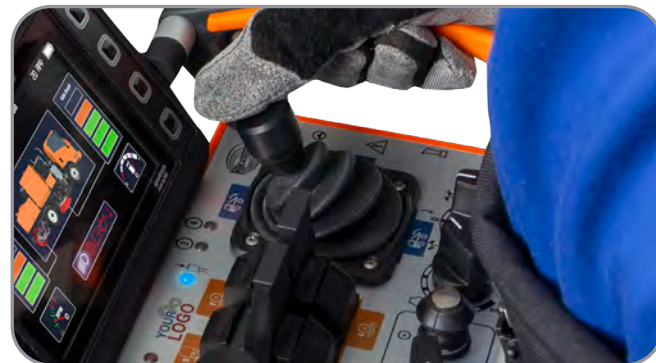
Apart from the E-STOP, the radio control is available with added safe commands corresponding to PL d category 3 according to EN 13849-1:2015.



merlin® TUC (Transmitter User Card)

Simple and safe management of access rights

merlin® TUC protects the control against unauthorized use. In addition, this card allows you to unlock or lock machine functions for each different operator.



radiomatic® touch-to-activate

Intelligent protection against unintended initiation of commands

In order to enable movement commands, the operator has to touch the roll-over bar or the joystick button. This feature protects the operator against unintended machine movements.



Front panel lighting

All information is optimally visible

Built in sensors will activate the integrated front panel lighting if necessary.



Front view



E-STOP



Flashlight



Feedback via 5" color display.

Safety and comfort paired with individual design.

- State-of-the-art TFT technology for first-class performance.
- Clear presentation of an extensive array of data and information via 800 x 480 pixel high resolution 5" display.
- Automatic adjustment of display brightness matched to the environment, integrated front panel lighting and 80° viewing angle from all directions.
- Layout and display elements can be chosen freely.
- Access to HBC's comprehensive library of commonly used symbols, images and graphics for display design.
- Intuitive HBC menu with setting options, warning messages and system information.



High-performing Li-ion exchange batteries with capacity gauge



radiomatic® iLOG for the quick activation of a spare transmitter



Convenient carrying with the hip belt