Compu-Spread CS-15X
Multiple Joystick Control Console

V04: 2018.07

4 joystick console type CS-154, with 2 and 3 axis joysticks, with auxiliary switch options, for the control of multiple functions on plow trucks, for integration into a Rexroth CS-550 spreader control system.

The Rexroth CS-15X joystick console is an ergonomically designed operator interface for the control of multiple hydraulic actuators, typically cylinders, on Snow and Ice Control vehicles. This console design is an extension of the well established CS-550/150 spreader controller and joystick program. The full CANbus architecture facilitates connection of the console to the Rexroth CS-550 and in turn the BODAS micro-controller which drives the system hydraulic valves and other devices.

This series is available in a 2 (CS-152), 3 (CS-153), or 4 joystick (CS-154) version, so that up to 8 double acting functions can be controlled. With the latter the 4 proportional joysticks can be configured in many ways *e.g.* 1 x three axis unit and 3 two axis units. Each joystick is fitted with a dead-man switch to prevent inadvertent actuator movement. The compact console allows installation of up to 12 rocker switches for lighting, warning and other valve functions. 6 of these are fitted under the hinged armrest.

The single console button calls up the "park" or emergency stow mode configured for the actuators selected.

Hydraulic valve nulling and trimming are easily done with the CS-550 spreader controller.

CS-15X Joystick & console features

Full CS-550 System functionality (when connected)

Low profile Hall effect joysticks (various configurations) require limited movement and low operating force

Integrated push-button interlock for additional safety

Many configurable functions: low oil & PTO control, up to 4 power floats, Scraper auto-raise with reverse, hoist limit with override, Pause & Blast console switch, *etc.*

Illuminated console legends for joystick identification

New contoured rocker switches feature LED illuminated laser-etched symbols, IP 68, different colors available

Wiring harnesses have integral molded diagnostic LEDs

RAM bracket for direct spreader control attachment

Can be used as a stand-alone device (with BODAS RC)

Technical Data

Joystick

Mechanical (for X, Y axes)	Break-out force: Operating force: Maximum applied force: Mechanical angle of movement	1.8N (0.4 lbf) 3.5N (0.75 lbf) 450 N (100 lbf) 40°	Expected life: Material: Lever action:	10 million cycles Glass filled nylon Spring centring
Mechanical (for Z axis)	Break-out torque: Operating torque: Max. allowable torque:	0.09 Nm (0.80 lbf-in) 0.121 Nm (1.07 lbf-in) 0.150 Nm (1.33 lbf-in)	Hand mechanical angle: Handle action: Expected life:	80° (40° from centre) spring centring 10 million cycles
Sealing (IP)	IP 65			
EMC Immunity level (V/M)	IEC 61000-4-3: 2006			
EMC Emissions level	IEC 61000-4-8: 1993/A1: 2000			
ESD	IEC 61000-4-2: 2008			

Console Assembly	CS-152	CS-153	CS-154
Dimensions L x W x H (includes mounting post); inches/mm	17.4 x 6.1 x 12.1 440 x 155 x 307	17.4 x 9.9 x 12.1 440 x 251 x 307	17.4 x 13.3 x 12.1 440 x 338 x 307

CS-550/CS-15X System Electrical & Environmental Specifications

Supply Voltage	9-32 VDC	
Outputs	Proportional outputs Digital Outputs	6 channels for CS-550, 18 channels for CS-550/150 2 channels for CS-550, 6 channels for CS-550/150
Inputs (All inputs protected and filtered)	Frequency Inputs Switch Inputs Analogue Voltage Inputs Analogue Current Inputs	3 channels for CS-550, 5 channels for CS-550/150 (0-10k, > 1Vrms) 6 channels for CS-550, 13 channels for CS-550/150 5 channels for CS-550, 20 channels for CS-550/150 4 channels for CS-550, 4 channels for CS-550/150
Interfaces	2 CAN ports, CAN 2.0B, 2 serial ports RS232	
GPS Tracking (when supplied)	High sensitivity −165dBm tracking; 66 acquisition/22 channel simultaneous tracking Built-in low noise/high gain active antenna	
WiFi Data Transfer (when supplied)	802.11 g/b; Security: WEP, TKIP, WPA, AES/CCMP; Transmit Power: 15 dBm typical (both 802.11 g & b)	
Temperature	Operating: −22°F to 185°F; -30°C to 85°C	Storage: -40°F to 185°F; -40°C to 85°C

RC Micro-Controller	Refer to BODAS Controller series 20 details in Rexroth data sheet Rx 95 200

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