

XW Series | Movement Restriction System for Construction Plant Machinery

XW4 Series Height & Slew Limitation

Suitable for

- Excavators
- Backhoe loaders
- Special purpose machines



The XW4 can be configured to work on a variety of articulated hydraulic plant. Height and slew limitation is controlled using proportional soft-stop hydraulic valves providing accurate and repeatable performance without detriment to the machine.

XWATCH
SAFETY SOLUTIONS

XW4 Height & Slew Limitation

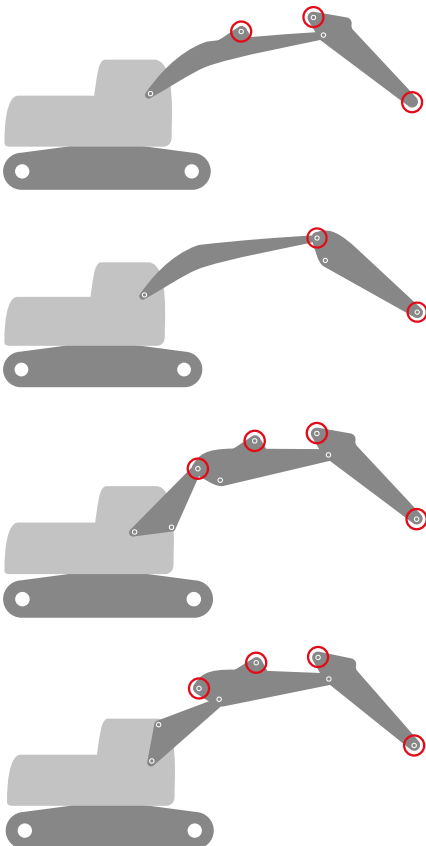


Height Limitation

Operation is fail safe and fully automatic with function selection never more than two key presses away.

All potential machine high points are monitored and appropriate motions controlled. Full power is always available to move away from a limit.

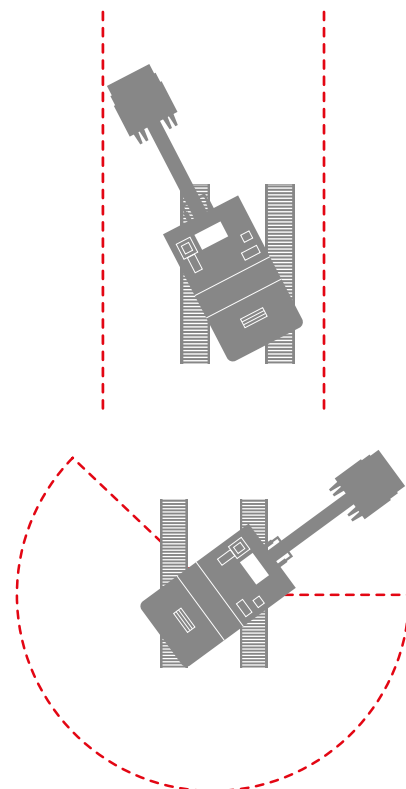
Motions are controlled with ramped slow down on approach and soft-stop. There is no machine 'bounce', overshoot, or undershoot. An optional chassis sensor can be installed to correct for terrain slope.



Slew Limitation

Single/dual parallel wall or angular limitation are available. When walls are in use, the front end equipment is also monitored and controlled for limit breach.

Limits can be either manually keyed in or set by positioning the machine. If both limits are active, the system will automatically flip to the appropriate display should a hazard approach occur. Set up is simple, quick, and can be protected with an optional access key switch. All settings are retained and will be active on start-up.



XW4 Height & Slew Limitation

Base system

Major components carry a **five year** guarantee excluding mis-use and physical damage.

IO Controller

Solid state, fully potted IP67, mounted in pump or engine bay. 4 x analogue inputs. 8 x digital inputs. 12 x output. All with full electrical protection and diagnostics, 2 x CAN bus. 11 - 30VDC. Manual key override for motion control valves. <10mS program cycle time for accurate response.

Display

Solid state, IP65, RAM mount to window or dash. 4.3" or 2.8" backlit colour LCD. 7 x backlit, tactile keys. 1 x CAN bus. 11 - 30VDC.

Cabling

Industry standard multi-core screened with M12 connectors.

Angle sensors

Compact solid state 3 axis accelerometer with gyro compensation. Stainless steel, IP67. CAN J1939. Steel mounting bracket. Can be mounted anywhere on the front end equipment in any orientation. Direct drive performance.

Up to three articulations can be monitored with the addition of chassis attitude.

Slew sensing by inductive proximity switches or incremental rotary encoder.

Hydraulics

Hydraulics Custom made super compact aluminium PWM proportional sandwich valve available in 2, 4, and 6 valve manifolds, other hydraulic options are available.

Options

Access key switch	Prevents/allows setting changes
Beacon	RCI is active indication
Reeling drum	Monitors telescopic arm extension (single proximity switch detection also available)
Offset boom sensor	Monitors offset boom position for slew control (single proximity switch detection also available)
Platform sensor	Monitors chassis pitch and roll angles
Data Logger	CAN bus mounted event recorder with SD card
12VDC Valve coils	No cost option for smaller machines

Choose your XW Series

	XW1	XW2	XW3	XW4	XW5
Height Control	✓	✓	✗	✓	✓
Slew Control	✗	✗	✓	✓	✓
Rated Capacity Indicator (RCI)	✗	✓	✗	✗	✓

Want to know more?

visit xwatch.co.uk

