

SERIES 2 A TOTAL SAFETY SOLUTION

The Series 2 range is designed to maximise the safety and productivity of excavators on site.

FLEXIBLE, MODULAR SAFETY CONTROL SOLUTIONS

The next generation of the GKD Series 2 products are versatile, adaptable systems designed specifically for the construction sector. The first GKD civils product to be Network Rail approved, one for use in low performance zones and one for high performance zones.

For use on sites where height, slew and load need to be monitored and controlled to keep people safe, protect machines and other infrastructure.







SAFETY FOCUSSED INNOVATION

GKD has been a leading supplier of Rated Capacity Indicators to the construction and rail industry for **over twenty years**. Series 2 is specifically developed for the construction industry, drawing on our experience of delivering robust, intuitive systems for this ever evolving market and its increasing safety requirements.

A COMPLETE SAFETY SOLUTION

The GKD Series 2 range of Envelope Control and Rated Capacity Indicators offer a practical and effective way of monitoring and controlling the working height, rotation and load capacity of machinery. They enable machine operator or site manager to set safe working limits for machinery, ensuring site hazards or risks are avoided and that the machine productivity is maximised.

Developed **using our most reliable and recently enhanced rail software as a base**, the Series 2 range is designed to prevent incidents with overhead dangers and those around the machine, protecting the machine and any personnel on site, as well as ensuring the machine is working within its safe lifting parameters.

Using dedicated, high accuracy sensors and a consistent easy-to-use interface, the system provides visual and audible warnings when limits are approached. The system is designed to pre-empt movement, **ensuring that limits are anticipated**, and motion cuts are implemented so that the pre-set limits are not breached. Most importantly the move to a standard screen across the range will give end users complete flexibility, while minimising training requirements for operators.



WHAT'S THE RIGHT SOLUTION FOR YOU?



INTELLIGENT HEIGHT AND SLEW LIMITING

Network Rail Approved for LOW Performance Zones (ALO and OLE)



INTELLIGENT HEIGHT AND SLEW LIMITING

Network Rail Approved for **HIGH** Performance Zones (ALO and OLE)



A COMPLETE LOAD, HEIGHT AND SLEW SOLUTION

Network Rail Approved for LOW Performance Zones (ALO and OLE)



A COMPLETE LOAD, HEIGHT AND SLEW SOLUTION

Network Rail Approved for HIGH Performance Zones (ALO and OLE)





SAFETY BUILT IN

Advanced Envelope Control and Rated Capacity Indicator, Series 2 offers three solutions that are built on a platform that has delivered safety to the most highly regulated industry for plant and machinery, the UK rail sector. To meet these specific requirements and the expectation of customers, Series 2 from GKD offers the following features:

INTUITIVE USER INTERFACE

- Full colour, graphical touch screen display with fast start up and screen refresh time (ensuring absolute accuracy and no lag between machine movement and display).
- Designed to show the machine's position against all parameters so that the operator has absolute visibility of the machines position and status
- Visual and audible alerts for the operator.
- Ability to dial in or manually set height and slew limits.



PRECISION CONTROL

Up to 36 predefined lifting zones that maximise the productivity of your machine, giving you control and the most efficient use of your machine in any lifting position.

- Pre-emptive stopping algorithms with slow down zones for a smoother approach to slew or height limits.
- Cab protect feature that prevents attachments hitting machine cabs.

Unique flexibility of **parallel or multipoint virtual walls**, providing full envelope control, enhancing safety of operation whilst maintaining flexibility all whilst under full motion control.

 Ideal for working in confined surroundings or close to open traffic lanes and when combined with height limits for working under overhead obstructions.







ADAPTABLE



- Suitable for tracked or wheeled excavators, backhoe loaders and other articulated boom machines.
- Multiple boom configurations, including multi-section, swing, and offset.
- Pilot and electro hydraulic control systems.
- The GKD solution engineered specifically for JCB Hydradig.

The JCB Hydradig is an innovative machine incorporating the latest in electro-hydraulic controls for optimum performance. GKD has worked closely with JCB for two years to develop and test an RCI system that provides true safety features, whilst optimising the Hydradig's performance. GKD are proud to have developed one of the first RCIs to work with electro-hydraulics, experience that has facilitated the development of a system that truly integrates with the JCB Hydradig.

DIG MODE AND DIG DEPTH INDICATION

With simple switching between Lifting and Digging modes, the Series 2 offers the additional advantage of monitoring and setting dig depth limits, supporting efficient, accurate digging.

Supporting a dig once, move once approach, GKD's Series 2 Rated Capacity Indicators can also be used to increase accuracy.

PROXIMITY WARNING SOLUTIONS

The Series 2 range can be integrated with the GKD SensorZone proximity warning system. SiteZone are the technology partner for this technology in the UK.





TRACK-SIDE WORKING

Series 2 supports working in high and low performance zones and is fully certified by Network Rail. Diagram shows straight track.



ALWAYS IN CONTROL

- Integrated supervisor key switch enables limits to be set and not overridden.
- Disable key switch allows the system to be switched off when not required.

FULLY INTEGRATED REAL TIME DATA-LOGGING

- Records system and limit settings, operation and events.
- Providing detailed management information for improving safety and performance.
- Talk to us about SafetyZone, the future for remote monitoring and information dashboards.

SAFETYZ



| SERIES 2 FEATURES | 2 HS | 2 LHS |
|---|--------------|--------------|
| Height | \checkmark | \checkmark |
| Slew | \checkmark | \checkmark |
| Load | | \checkmark |
| ALO Compliant - LOW Performance Zone | \checkmark | \checkmark |
| ALO Compliant - HIGH Performance Zone | 2 HS+ | 2 LHS+ |
| Optimised, intuitive user interface | | |
| Robust IP67 Display | \checkmark | \checkmark |
| TFT colour touch screen user interface | \checkmark | \checkmark |
| Real time system monitoring of height, slew and load position in a single view | \checkmark | \checkmark |
| Fast start system and screen refresh | \checkmark | \checkmark |
| Optimised for performance & safety | | |
| 360 degree lifting capacity, up to 36 zones around the machine | | \checkmark |
| Full intelligent motion cut of boom & Slew on overload | \checkmark | \checkmark |
| Pre-emptive stopping algorithms with slow down zones | \checkmark | \checkmark |
| Full envelope control including multi point, virtual walls | \checkmark | \checkmark |
| Integrated supervisor key switch | \checkmark | \checkmark |
| Cab protect feature | \checkmark | \checkmark |
| Dig mode c/w dig depth indicator | \checkmark | \checkmark |
| Remote hydraulic shut off (RCU) | 2016 | |
| Steering lock | 2 HS+ | 2 LHS+ |
| Suitable for machine pilot or electro-hydraulic control systems, including JCB Hydradig | \checkmark | \checkmark |
| System active beacon (magenta) | \checkmark | \checkmark |
| Data & integrations | | |
| Data logging | \checkmark | \checkmark |
| SafetyZone ready | \checkmark | \checkmark |
| SiteZone (PWS) ready | \checkmark | \checkmark |
| | | |

SERVICE AND SUPPORT

GKD has a proven track record of delivering high quality products and customer centric services. We listen, understand and support our customers whilst letting our products and approach do the talking. Core to all of our products is a philosophy that puts the customers requirements and needs first and foremost; this includes supporting our products in the field.



Scan this **QR code** to access our online support services, or call **+44 (0) 1202 971 971** or email **info@gkdtec.com**

With a global network of installers, after-market service and support partners who specialise in the installation and maintenance of our products, expert product support is never far away.

Find your nearest GKD distributor at www.gkdtechnologies.com





TECHNICAL DESCRIPTION

| Display | 15cm TFT touch screen | |
|-------------------|--|--|
| | IP67 rated | |
| | RAM mount options (glass fixing if required) | |
| | 10 - 32v DC | |
| | 1 x CAN bus | |
| Sensors | 3 axis, gyro-compensated, boom angle sensors; IP67 rated; | |
| | Proximity based and/or rotary encoded slew sensing. | |
| | Pressure transducer: 400bar, 4-20mA, IP67 rated | |
| | Swing boom sensor measures offset swing angle when fitted. | |
| Control Modules | Local I/O control modules - 8 or16 input/output, 4A, IP67 rated | |
| Motion Cut | Compatible with 12V or 24V coils | |
| System Controller | Data controller with 53 inputs, 26 outputs, 3 CAN bus. 8-32V DC. Short circuit protection. IP65 rated. | |
| Cabling | PUV encapsulated multi-core with industry stand M12 connectors. High resistance to oil, weather and mechanical wear. | |
| Tandem Lift Modem | Fully CE compliant 2400MHz wireless modem with link range of at least 100m. | |
| Key Switch | Switch to allow settings to be changed and the system to be overridden. Removeable keys. | |

To find out more about the Series 2 products, contact your local GKD Dealer or visit: www.gkdtechnologies.com



Series 2 Dealer:



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