



elevation

SYSTEM

VARIABLE SPEED CHAIN HOIST
AND TROLLEY CONTROL SYSTEM



IN CONTROL



Elevation1+ is a variable speed controller designed to work with customised versions of the most popular models of chain hoist, such as Liftket and Lodestar. It will also control several different trolley types.



Array PD-ES is the perfect marriage of Power Distribution and Emergency Stop control. This distribution and safety module provides a SIL2/3 emergency stop system, individual MCBs for each output and an adjustable RCD with status indicator.

KINESYS HAS A SIMPLE GOAL:
TO PROVIDE **EXCEPTIONAL** AUTOMATION EQUIPMENT THAT ALLOWS VENUES
TO BE **OUTSTANDING** AND AUDIENCES TO BE **AMAZED**.

KINESYS is focused on being the market leader in providing the perfect combination of features, usability and reliability that complies with or exceeds the many and varied safety standards across the world.

We are a global company with a long history of providing the right solutions to companies worldwide.

We are one of the few companies that provide truly integrated solutions incorporating hoists, winches, load monitoring and control software that can be purchased outright. We look forward to working with you to provide the right solution to take your company, production or venue into a world of automation.



The **LibraCELL** is a load measuring shackle with a highly visible LED display which allows users to view the live load being placed on the shackle. Switching between kg and lbs as well as inputting a tare value is all achieved via an easy to use menu system.



The **Rigger** handset is a smart, user-friendly remote control which allows full variable speed operation during set up of a show. It is available in 8, 16 and 24 way versions.



Vector is a software program that allows cues to be built and run with a variety of linking options. The amount of cues that can be built and channels that can be controlled are limited only by your imagination.

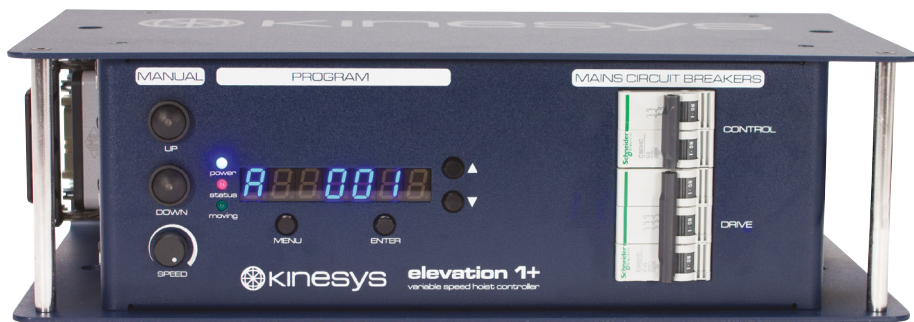
elevation SYSTEM

ELEVATION is a truss mounting **variable speed** chain hoist and trolley control solution.

Designed to be located locally to the chain hoist or trolley that it controls, this innovative approach removes the need for large quantities of cabling and permits a number of motors and controllers to be supplied by single power and data cables.

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elevation 1 +



The **Elevation1+** removes the need for large quantities of cabling and permits a number of motors and controllers to be supplied by single power and data cables.

Elevation1+ together with customised versions of the most popular models of chain hoist and trolley, such as Liftket, Lodestar, EXE and DST, represents the most flexible and reliable **variable speed** 'open system' available in the market.

Easy to install, simple to configure and with an ergonomic and compact design, it has the ability to ramp start, ramp stop, position and vary the speed of a chain hoist or trolley for maximum creative effect.

With the addition of a simple adapter cable, the converted motors can be used as standard fixed speed machines allowing maximum flexibility of motor use.

The Elevation1+ can be controlled by K2 or Vector software packages and interfaces with other Kinesys products for a **totally integrated** show control system.

Elevation1+ is available in both US and European voltage variants, with multiple fixings for hook clamps or half couplers which allow for a variety of mounting orientations.

FEATURES

- 32A mains input and output connections allow 'daisy-chain' operation
- Robust multipin connector for hoist connection – includes motor, brake, limit switch and encoder connections
- Remote control input allows full variable speed operation using a Kinesys pendant
- LED display, intuitive menu system and rugged manual control buttons allow for easy setup

HOIST CONNECTIONS

8 + 24-pin 'Harting' connector

MAINS INPUT/OUTPUT

5-pin 32A 'Ceeform' type plug and socket to IEC60309

CONTROL CONNECTIONS

7-pin male XLR connector with female link out

Rigger



LibraCELL



Designed to mimic industry-standard handheld controllers the **Rigger** offers an instantly recognisable method of operation with minimal training required.

A Rigger can operate variable speed chain hoists and trolleys and can be used in place of, or in conjunction with, a computer control system such as Vector or K2.

Using the flexible menu system on the Elevation1+ along with the on-board speed control, the Rigger can be used as a controller for simple **set up operations** where only basic movements are required.

It is not recommended to run shows using a Rigger handset unless allowed by your risk assessment.

An Emergency Stop button built into the handset and group halt functionality means that the Rigger provides a safe method of movement for set up purposes.

The Rigger will **automatically scan** and recognise all connected Elevation1+ units, further enhancing ease of use and operation.

FEATURES

- The ability to enable and disable the software limits using a bypass key
- Integrated speed control for use with variable speed hoists
- Positive, direct action toggle switches as well as separate Up, Down and Status indicators provide intuitive and instant feedback
- Integrated Emergency Stop button, multifunction key switch and a group halt feature ensure the unit can be operated safely and securely
- A single XLR7 cable provides the power and data connection required to operate the unit

CONTROL CONNECTIONS

7-pin male XLR connector

The **Libra** load cell is a load measuring shackle, which when combined with the other elements of the Libra system produce accurate, real time load information.

The Libra system when combined with the Elevation1+ provides fully integrated load monitoring with **overload** and **underload** functionality.

LibraPRO, LibraWIFI and LibraWATCH are fully compatible with the Elevation variable speed control system.

CONTROL CONNECTIONS

4-pin male XLR connector with female link out

Array PD-ES



Mini Array PD-ES



SIL2 EMERGENCY STOP

Array PD-ES (excludes Mini) provides a SIL2 PLd Emergency Stop function to an Elevation1+ system.

The Emergency Stop system conforms to the following standards:

EN ISO 13849-1:2006 Safety of machinery – Safety-related parts of control systems.

Part 1: General principles for design

Emergency stop circuit complies to PLd

EN 62061:2005 Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems

Emergency stop circuit complies with SIL2 as standard or SIL3 when used in conjunction with an appropriate Kinesys Mentor safety module

This 6U 19" rack module provides 125A of emergency stop switched power through four 32A three-phase Ceeform outlets. All three-phase outlets are protected with an **adjustable RCD**. A single-phase auxiliary outlet is provided along with **dual XLR7** data outputs for connection to Elevation1+ controllers.

The unit includes Transform 485 functionality providing an interface between Vector or K2 and Elevation1+.

The front panel features an integrated Emergency Stop button, status indicators, individual MCBs for each Ceeform outlet and an adjustable RCD. 'Power Present' status indicators are provided on both front and back panels.

FEATURES

- Power distribution and emergency stop system contained in a 6U 19" rack enclosure
- Single-phase auxiliary outlet
- 4 x 32A three-phase individually switched Ceeform outlets
- Adjustable RCD
- Integrated Emergency Stop button

CONTROL CONNECTIONS

Ethercon for connection to Vector/K2 • 2 x XLR7 outputs

MAINS INPUT/OUTPUT

Powerlock or CamLok E1016 type single-pole connectors with through outlets • 4 x 32A "Ceeform" type IEC60309 5-pole connectors • 1 X 16A "Ceeform" type IEC60309 3-pole connector • 1 x Outlet suitable for local territory e.g. Schuko/Edison

This unit provides 32A of emergency stop switched power through two 32A three-phase Ceeform outlets.

A single-phase auxiliary outlet is provided for technical use. The three-phase outlets are protected with an **adjustable RCD**. Along with power and status indicators, the unit includes Transform 485 functionality providing an interface between Vector or K2 and Elevation1+.

Multiple fixing points for hook clamps or half couplers allow for a variety of mounting orientations.

FEATURES

- Power distribution and emergency stop system contained in a compact case
- Two 32A three-phase Ceeform outlets protected with an adjustable RCD
- Single phase auxiliary outlet
- Adjustable RCD
- Multiple fixing points for hook clamps or half couplers

CONTROL CONNECTIONS

Ethercon for connection to Vector/K2 • 2 x XLR7 outputs

MAINS INPUT/OUTPUT

5-pin 32A Red 'Ceeform' type plug to IEC60309 • 2 x 5pin 32A 'Ceeform' type socket to IEC60309 • 1 x 16A 'Ceeform' type IEC60309 3 pole connector

Array 485



Array IP8



Array 485 is a 1 in 8 out RS485 distribution unit for use with Elevation1+.

The rear panel features 1 in 8 out XLR7 data connections for outputting RS485 data to Elevation1+ units. The front panel offers link, data and emergency stop status indicators as well as the facility to plug a **Rigger remote** in for local control.

FEATURES

- 1 in 8 out XLR7 RS485 distribution unit
- Rigger input on front panel for local hoist control
- Emergency stop LED indicators on front panel
- 1U 19" rack mountable case

CONTROL CONNECTIONS

8 x XLR7 female outputs • 1 x XLR7 male input

Array IP8 is a rugged 8 port 10/100 Ethernet switch that is designed to work with Kinesys products.

Ethercon connectors on the rear of the unit provide increased protection for 8 x RJ45 connections. Standard RJ-45 connectors can also be plugged into these outputs. LEDs on the front panel of the unit indicate if power is present, provide a channel by channel breakdown of activity and whether each channel is operating at 10 or 100 BASE-T.

FEATURES

- 8 port 10/100 BASE-T Ethernet switch
- Ethercon connectors
- LED activity lights on the front panel
- 1U 19" rack mount unit

CONTROL CONNECTIONS

8 x 10/100 BASE-T Ethernet Ethercon

Liftket



Variable speed chain hoist system

- Liftket chain hoist
- Use with Elevation 1+ 2.2kW
- Fitted with Chain Bag
- Elevation ready
- Double brakes
- Overtravel and Emergency limits
- Completed with LibraCELL and LibraPRO
- 500kg (1100lbs) at 24m/min (80fpm) - D8
- 1000kg (2200lbs) at 12m/min (40fpm) - D8
- D8+ versions also available

Lodestar®



Variable speed chain hoist system

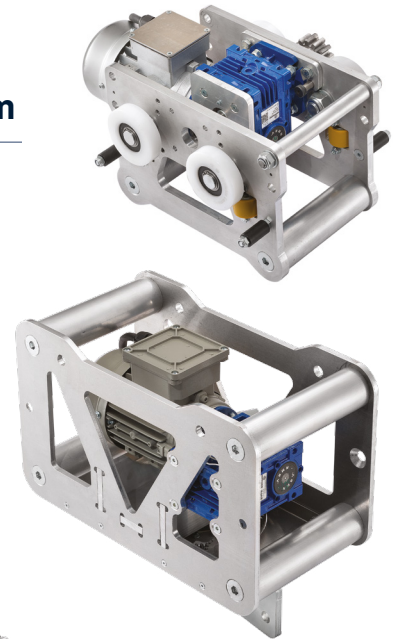
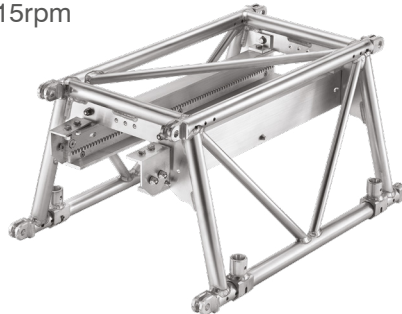
- Lodestar chain hoist
- Use with Elevation 1+ 2.2kW
- Fitted with Chain Bag
- Elevation ready
- Double brakes
- Overtravel limits
- Completed with LibraCELL and LibraPRO
- 500kg (1100lbs) at 30m/min (100fpm) - D8+ *
- 500kg (1100lbs) at 21m/min (69fpm) - D8+
- 1000kg (2200lbs) at 10m/min (33fpm) - D8

* use Elevation 1+ 3.0kW

DST Trolley & Rotator

Variable speed motorised trolley and rotation system

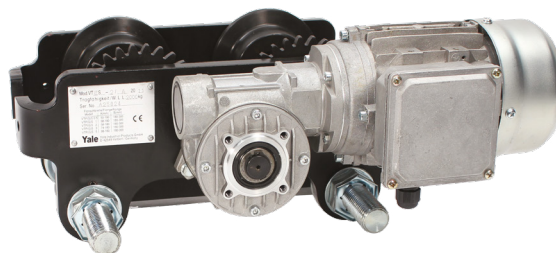
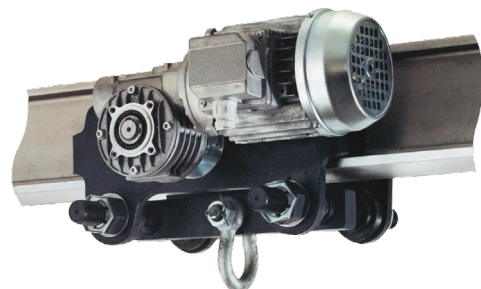
- DST Trolley and DST Rotator
- Use with Elevation 2.2kW
- Track integrated into DST stacking truss system
- Secondary trolleys and cable carriers available
- Track truss available in straight and curved sections
- DST Trolley: 600kg (1320lbs) at 27m/min (89fpm)
- DST Rotator: 900kg (1980lbs) at 15rpm
- Other trolley speeds available



Beam Trolley

Variable speed motorised beam trolley system

- VTE Beam Trolley
- Use with Elevation 2.2kW
- Compact, robust frame with low overall height
- Wheels manufactured from fracture-proof steel
- 2000kg (4400lbs) at 19m/min (63fpm)
- 3000kg (6600lbs) at 12m/min (40fpm)



Vector



K2



Vector has a wealth of cue creation and editing features designed to allow the rapid programming of cues. Advanced linking features allow complex cue sequences to be easily constructed while maintaining maximum flexibility over the overall operation of the devices in motion.

Four cue playbacks to allow cues to be run simultaneously and manual running features make all aspects of movement easy and safe. Vector runs on compatible Windows computers with the option of a USB keypad for faster editing and operation.

SOFTWARE FEATURES

- Integrates seamlessly with other Kinesys hardware to provide easy setup, operation, real time feedback and remote configuration
- Advanced linking and timing features allow complex cues to be built and run simultaneously with four colour coded playbacks
- Safety features include three levels of login access, 'Dead Man's Handle' on a channel by channel basis, group halting and error windowing
- Manual mode allows ease of use during installation or maintenance periods without the need for cues to be written

MINIMUM SYSTEM REQUIREMENTS

1GHz or faster processor with 2GB RAM • 100GB hard disk (1GB free space)
• Supported for Windows 7, 8 and 10 • 1 x Ethernet Port, additional Ethernet port required for media server interface • USB port required for external Vector Keypad

A control platform that combines the best aspects of traditional programming methodologies with intuitive 3D programming concepts.

K2 is Kinesys' motion control console and employs an intuitive approach to automation programming. The operator uses 'click and drag' to move objects on the screen within a 3D world rather than typing positions into a table. This gives instant feedback as to the object's position in relation to other moving items.

SOFTWARE FEATURES

- 3D graphical programming environment
- "Look-ahead" collision detection system
- 3D world and object import from CAD
- Offline working for cue programming and visualisation
- Unlimited channel and cue capacity
- Status monitoring of all Kinesys drives

MINIMUM SYSTEM REQUIREMENTS

2GHz or faster processor • 2GB RAM • 100GB Hard Drive (2GB Free Space)
• 1366x768 Display (1680 x 1050 recommended minimum, Nvidia Quadro or similar graphics recommended for 3D graphics operation, multiple monitors supported) • 1 x Ethernet Port; additional Ethernet port required for media server interface • Supported for Windows 7, 8 and 10



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Green = 100M
Yellow = 10M
Flash = Action