



I-MOTION EXPERT-T System Controller

According to BGV C1 and SIL 1 to SIL 3 / EN 61508 (depending on configuration)

The I-Motion Expert-T System Controller is the high-end product for the systemic control of kinetic drives for larger and more complex projects. Developed for applications of all kinds (including rigging) requiring the control and supervision at fixed or variable speeds of up to 240 D8, D8 Plus and C1 drives. Even the control in mixed mode of D8, D8 Plus and C1 to SIL3 / EN 61508 drives is possible. A further option is the integration of existing drives and other stage machinery.

In its basic configuration, the controller complies with BGV C1 but it can be upgraded if desired for applications as high as SIL 3 and therefore for the overhead movement of scenery.

The Expert-T System Controller supervises and controls the Movecat MPC 4ID8 and 4IC1 as well as V-Motion Power Controllers via I-Motion Network to form a closed safety network. Failure in any one unit is evaluated and visualized centrally,

leading to the shutdown of the hoist or drive affected, the group to which it belongs, or indeed the entire system, depending upon the system configuration.

The entry and modification of all important operation and run parameters is facilitated by an application-optimized backlit keyboard with tactile feedback and a multi-function data entry wheel, making the programming and control of the system intuitive, swift and safe. The interface is further enhanced by the 19" flippable (horizontal/vertical) touch screen, which is responsible for the visual representation of all operating, input and system parameters in 2D or 3D according to choice. This gives the user a bird's-eye view at all times of the entire system as well as instant access to all parameters as well as the minutiae of the system. Depending upon the configuration of the hoist or

drive, complex target and group runs can be programmed and played back. Realtime intervention is also supported.

Two dynamic joysticks are provided for direct operation as well as five cue keys for the running and recall of scene changes and shows.

The integrated hard disk permits the storage of all system parameters and a large number of shows (the exact number depending upon the size of the hard disk). Data can also be exported and stored externally.

The I-Motion Expert-T System Controller is recommended for use with the MPC 4ID8 and 4IC1 as well as V-Motion Power Controllers and is particularly suitable for professional kinetic applications in the trade fair, events and entertainment, studio and touring sectors.

FEATURES

- BGV C1 compliance (in standard configuration)
- optional dual channel joystick / safety computer complying with SIL 3 / EN 61508
- energy saving Centrino CPU technology
- passive cooling system
- 32-bit high performance bus system
- safety processor with risk architecture
- operating conditions stored in non-volatile RAMs
- self-testing of all relevant functions prior to system launch
- suitable for night use; all keys and input devices illuminated
- simple, intuitive operation by means of direct input via function keyboard, multi-function data entry wheel and 19" touch screen
- user hierarchy implemented by user ID chip card
- group-transcending error monitoring when connected to network
- monitoring and display of all operating conditions* of connected hoists and drives such as operating voltage and phase; motor protection switch, run direction and main protection on "stick" and correct run direction, load and run groups, position, operation and emergency limit, temperature as well as dynamic load evaluation
- multi-user operation, 2 devices

Software

- operating system Windows XP Pro
- software: MOVECAT I-MOTION
- management of up to 240 drives or network controllers with IP address* internal USV (3 minutes) with neffilter
- zoomable display switchable between 2D and 3D
- unlimited number of shows and scene changes/cues
- extended operation and display level on second monitor (XGA Out)
- operation with or without server connection
- image rotation (flip TFT)
- chip card evaluation with user level
- evaluation of external system signals*
- selection of Movecat hoists from stored database
- speed way points for fixed profile
- profile and snapshot recorder
- input of software operation limit positions
- management of open and closed drive groups
- during way and synchronous group runs, the tolerance of individual hoists/axes and groups is programmable
- programmable group synchronous runs (simultaneous raising and lowering of pre-selected hoists) with multiple groups
- programming and playback of complex cues, sequences and shows

- Objectmodus with 3-D-Objekt-Group-Funktion
- acceleration and deceleration of drives and groups (cues)
- checking of run direction and predetermined speed as well as additional overload assessment through evaluation of the nominal speed during encoder operation
- simple setup option for under- and overload definitions* including evaluation of the summed load of a load group
- drive patch for the global exchange of hoists/drives during shows
- display and export of log files
- import / export of show files on server and USB memory stick.

*The availability of the listed functions depends upon the specific configuration of the relevant hoists, drives and whose Motion Power Controller

Hardware

- flippable 19" TFT touch screen
- extending alphanumerical keyboard
- special keyboard for night use
- emergency stop button, illuminates when activated
- multi-functional data entry wheel
- two dynamic joysticks with dead-man function
- two incremental limit controls

- two additional dead-man keys
- 5 cue keys
- main switch for central start-up incl. bypass function
- hard disk with shockmount suspension and self-latching park position
- constructed from industrial components
- document rest in full A3 format
- robust housing with handle

Technical specifications

- 230 V / 50 Hz switching power supply
- I-Motion Net output connector
- 2 USB ports for additional mouse / memory stick etc.
- connector for dead-man footswitch
- XGA output SUB-D15 for second monitor
- Dimensions 660 x 512 x 150 / 500 mm (W x D x H with lowered/raised touch screen)
- Weight 19 kg
- CE, BGV C1 compliance (optionally up to SIL 3 / EN 61508 depending upon equipment)

Options / Accessories

- I-MOTION NDB-6/12 Network Distribution Box
- V-MOTION Motion Power Controller
- MPC 4ID8 and 4IC1 Motion Power Controller