LV12x Operation and Technical Details

The LV12x operates twelve low-voltage controlled chain-hoist motors in staging and rigging applications. It features heavy duty connectors and controls housed in a compact 3U 19" rack-mount steel chassis making it ideal for both touring and installations. The LV12x fully conforms to European EMC and LVD requirements.

An input MCB provides protection against output overload faults. The MCB is rated at 40A with D characteristic providing 10 - 20 times normal rating for start-up surges.

Phase direction and power on indicators show incoming mains status. The phase reversal switch (on rear panel) should be set so this green Phase neon is lit, to ensure that the motors run in the correct direction and that the hoist's limit switch function is maintained.

Local Up/Down switches allow the hoists to be selected on the LV12x front panel. Hoists are activated to this assignment by the frontpanel GO button or Remote GO via GO Link In. Selection can also be made on the optional RC12 or RCX remote handsets and activated from their GO button. Up/Down switches are protected by a crash bar and direction is indicated by green and red LEDs.

With the Mode switch in Pickle position all motors are energized enabling operation from a pickle. In Normal position the LV12x will only power the motors when channel Up/Down switches are assigned and GO is activated.

The inlet MCB protects against internal faults and compound external overload - the inlet MCB does not provide protection for individual cables and hoists connected to the controller outputs. Additional external protection may be specified by a qualified site electrician, based on the quantity, rating and loading of the hoists in the installation and the topology, length, material and cross-section of the cables.



NB: Emergency Stop automatically self-tests by tripping the Main Breaker on connection to supply. Reset Main Breaker to restore operation

Remote operation of the LV12x is available using the optional RC12 remote control handset, which provides Up/Down switches, GO and E-Stop. The RC12 handset connects to the LV12x via a detachable multicore cable. Programmable control systems such as the IBEX PHC+ can also connect to this Remote Control socket to automate the LV12x. Optional RCX interface Ethercons

for **RCX SMART Remote** digital remote control handset.

After selecting Up/Down on the LV12x front-panel, hoists are activated using the front panel GO switch or by using the GO Link facility. The GO Link feature allows the LV12x to be controlled from an optional handheld Remote GO button, and also allows any number of LV12x's to be controlled from a common GO command. To initiate a Remote GO, pins 2 & 3 are shorted together on the 'GO Link In'. This causes an internal relay to link pins 2 & 3 on the 'GO Link Out' for daisy-chaining to the next unit. To connect multiple LV units together, standard 3 pin XLR cables connect the 'GO Link Out' of the first LV12x to the 'GO Link In' of the next. The first unit's front-panel GO or Remote GO switch (connected to the GO Link In) will now control the others.

Breaker when activated. Also activated by the E-Stop button on the RC12 or RCX handset, and also optional remote push-to-break Remote E-Stop button connected across pins 2 & 3 of the E-Stop Link In XLR. Multiple LV units can be linked via E-Stop Link Out & In. Remote E-Stop and RC12 E-Stop Disable recessed switches must be activated when Remote E-Stop or RC12 are not connected. Shows green LED when Disabled. E-Stop function self-tests by tripping breaker on connection to supply.



ONLY TO BE OPERATED BY A QUALIFIED RIGGING PROFESSIONAL. ONLY USE WITH PERSONS IN THE HAZARD ZONE IF RISK
ASSESSMENT HAS BEEN CARRIED OUT BY A QUALIFIED RIGGING ENGINEER.

Connections to hoists are arranged on four female 19-way Socapex connectors, in groups of three channels of Up/Down control and 3-phase power/earth mixed on each.

The Phase Reverse switch should be set so the frontpanel green Phase neon is lit to ensure that the motors run in the correct direction and that the correct Limit Switch function is maintained. Main's power inlet on 1.5m flying lead terminated with a 5 pole 63A CeeForm cable plug carrying 3 phase L1/2/3, N + E.

Dimensions: H: 3U (13.34cm) x W: 19" (48.26cm) x D: 31cm. Allow 10cm for rear chassis connectors and inlet cable bend radius.

Shipping Weight: 12kg

out board

LV12x Low Voltage Control Chain Hoist

Controller





- Selectable Normal multichannel mode or Pickle mode
- Industry standard Ceep (Socapex-style) control/power connectors. Optional trussmount CeeForm Splitter Boxes
- Input voltage phase indicators and reversal switch
- Optional compact and ergonomic RC12 handset for remote control, with built-in Emergency Stop
- Optional Remote GO and E-Stop, linkable to multiple units
- Optional RCX SMART Remote Ethercon digital interface
- Integral Emergency Stop button, link-able across multiple units. E-Stop circuit features power-up self-test function.
- Internal sub-assemblies designed for optimum serviceability
- Fully compliant with CE directives



