

## Safety Grounding

This product must be grounded to ensure safe and correct operation. To achieve this both the kiosk and the keyboard must be safety grounded in accordance with the appropriate safety regulation, e.g. EN60950 Safety of Information Technology Equipment.

Failure to do this may constitute a safety risk and result in incorrect operation of the keyboard which is not covered by our warranty terms.

## ESD Protective Grounding

The J86-4400 keyboard range features an all-metal enclosure construction, which makes it easy for Electro-Static Discharges (ESD) to occur from the user to the keyboard. The ESD rejection performance of the host PC's ports may be insufficient to cope with the discharges received via the keyboard cables, resulting in a loss of function of the keyboard and/or pointer. The Safety Grounding previously discussed will improve the ESD performance and protect the ports of the host PC. It is recommended that the grounding strap is connected to the keyboard at the designated grounding point shown in Figure 6.

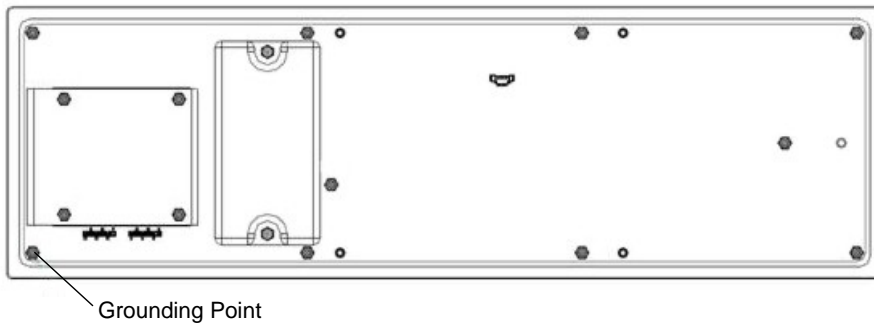


Figure 6 – Protective grounding strap for J86-4400 keyboards.

### Recommended Ground Strap Design:

- Material Tinned Copper braid or cable with a minimum current rating of 30A
- Length <300mm
- Resistance <1 Ohm between the keyboard enclosure and chassis ground point.

When attaching the protective ground strap, DO NOT OVERTIGHTEN THE NUT.

For further information and technical assistance please contact:  
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Fax: (262) 942-6566  
Email: [keyboardsupport@cherrycorp.com](mailto:keyboardsupport@cherrycorp.com)  
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Cherry Electrical Products reserves the right to improve or change the specification without prior notice.  
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## J86-4400 Kiosk Keyboard Installation & User Guide

### CTRL+ALT+DEL Functionality

J86-4400 series keyboards provide connections for an external switch. This allows the kiosk owner/operator to access the 'Ctrl+Alt+Del' command for boot-up and operating system access, while preventing the kiosk user from accessing the command via the keyboard.

Fabricate a suitable cable assembly with a momentary action switch.

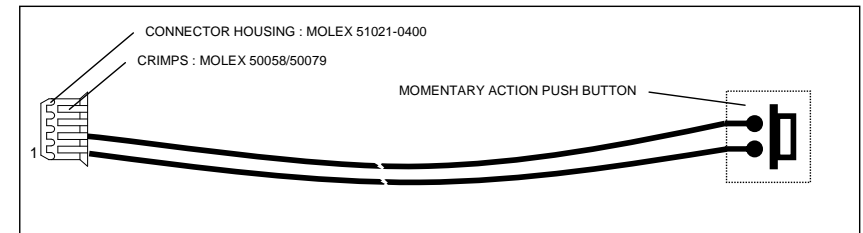


Figure 1 – Cable assembly with momentary action switch

Alternatively, cables may be soldered directly to the keyboard PCB at position 'S1'.

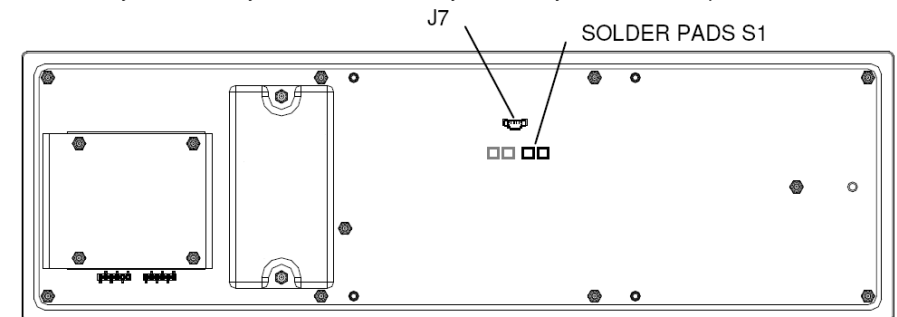


Figure 2 – Position of J7 & S1

Ensure that the host PC is switched off. Connect the external switch assembly to the keyboard at position 'J7' and locate the switch in the desired position within the kiosk. Start up the host PC.

A single switch press will send the 'Ctrl+Alt+Del' command to the PC.

## Mechanical Installation

The J86-4400 range of keyboards has been designed for front mounting into a recessed panel. Internal M3 threaded bosses are provided on the rear of the keyboard enclosure for securing to the panel with 'U' shaped brackets, or similar, from the rear. This installation method allows the silicone rubber membrane to perform as intended, preventing the ingress of dust and liquid into the keyboard from the front face.

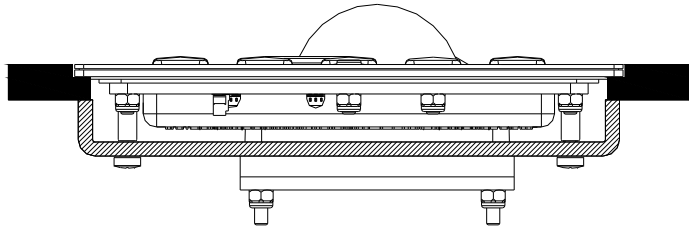


Figure 3 – Recommended mechanical installation for J86-4400 keyboards.

The specific dimensions and style of the 'U' shaped securing bracket may vary to suit individual customer panel design and thickness. Figure 4 shows the recommended bracket design as a guide only.

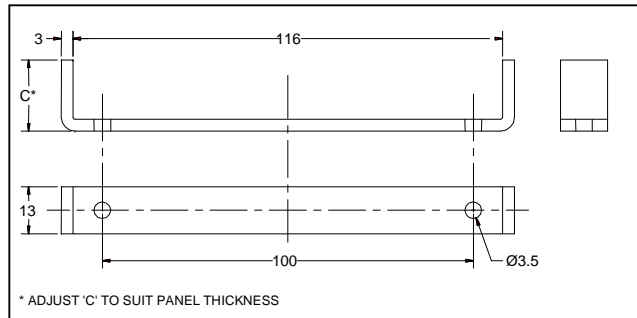


Figure 4 – Recommended U bracket (all dimensions in mm).

## Recommended Panel Cut-out

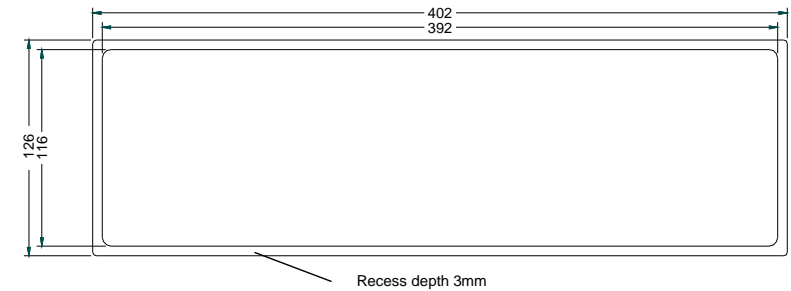


Figure 5 – Recommended Panel Cut-out (all dimensions in mm).

## Keyboard Dimensions

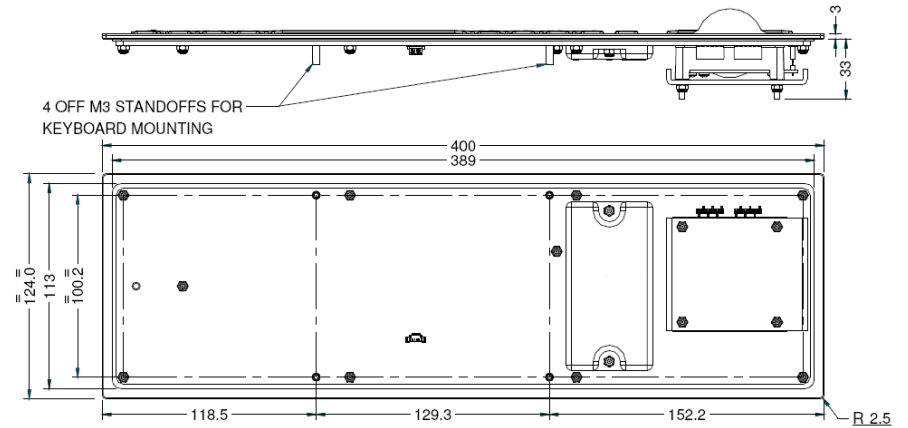


Figure 6 – J86-4400 keyboard dimensions (all dimensions in mm).

## Federal Communications Commission (FCC) Radio Frequency Interference Statement Information to the user:

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Adjust or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Caution: Unauthorized changes or modifications could void the authority to operate the equipment.