# **SK-Keypad Remote Installation Sheet**

## 1 Introduction

The SK-Keypad Remote is an inexpensive numeric LED display. The SK-Keypad Remote emulates the keypad of the drive and has the same user interface to show the status of the drive, and the value of the currently selected parameter.



The SK-Keypad Remote is intended for use only when mounted on a cubicle door with the drive, it is not suitable for hand-held use. Operation in any other fashion may cause a hazard and invalidates the warranty.

#### NOTE

The SK-Keypad Remote will assume 'RTU' master protocol. When connected to the RJ45 serial communications port of the drive the watchdog will automatically be enabled. If the communications are lost or disconnected the drive/keypad will trip SCL.

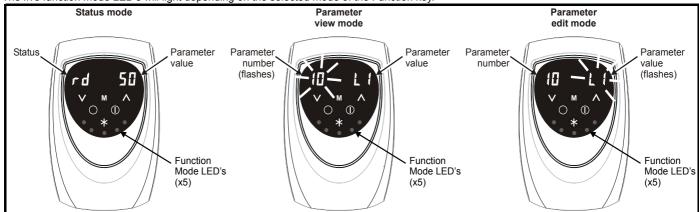
#### NOTE

The SK-Keypad Remote is rated to IP65 when panel mounted and the seal fitted as described overleaf.

# 2 Understanding the SK-Keypad Remote

### 2.1 Display

The display consists of a six-digit display, which will show different information depending on the display mode selected as shown below. The five function mode LED's will light depending on the selected mode of the Function key.



### 2.2 Control buttons

| Button                 |  | Description  |
|------------------------|--|--|
| Up and Down key        |  | The Up and Down keys are used to select parameters and edit their values. In keypad mode, they are used to increase and decrease the speed of the motor.                     |
| Mode key               |  | Used to change the mode of operation of the drive.   |
| Start key (green)      |  | Starts the drive in keypad mode.*  |
| Stop / Reset key (red) |  | The Stop key is used to stop and reset the drive in keypad mode. It can also be used to reset the drive in terminal mode.  |
| Function key           |  | The Function key provides one of five functions selectable by Pr <b>6.13</b><br>Forward / Reverse toggle (1), Run reverse (2), jog (3), Auto (4), user defined function (5). |

\*Keypad control mode is selected by setting Pr **05** = PAd (4) on the drive.

#### **Function key**

The Function key can be selected by Pr 6.13, the selected function is indicated by an associated function LED on the SK-Keypad Remote. Setting Pr 6.13 to 0 will disable the Function key. Pr 6.11 will be continuously updated by the state of the Function key for all selected modes (Pr 6.11 = state of the Function key).

#### Modes:

0. No function (Function key disabled)

 Forward / Reverse toggle Pressing the Function key will toggle between the forward and reverse direction of the motor.



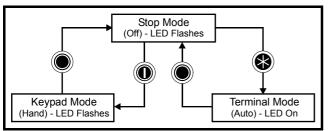
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- 2. Run reverse
  - Pressing the Function key will run the drive in the reverse direction, the start button will run the drive in the forward direction.
- 3. Jog

Pressing the Function key will jog the drive. As with the normal jog function the drive needs to be stopped for the jog function to operate. Giving the drive a start command when jogging will cause the motor to run at the speed reference selected in menu 1.

4. Auto

On power up of the SK-Keypad Remote, Stop (off) mode is assumed. The following modes are entered with the appropriate key press in each mode.



The Function key LED flashes to indicate waiting for a user action in Stop (off) mode and Keypad (Hand) mode .

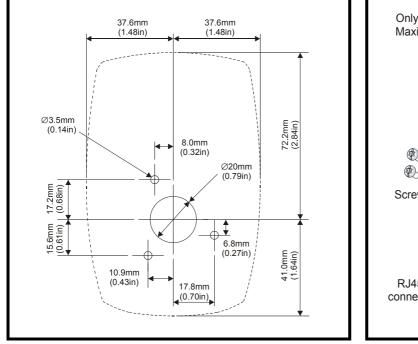
The Function key LED stays on when in Terminal (Auto) mode.

- 5. User defined function
  - In this mode no function is assigned to the Function key, this mode allows the user to define their own function. This would normally be done through a user program in a LogicStick using Pr **6.11** to monitor key presses (Pr **6.11** = state of Function key).

## 3 Panel mounting the SK-Keypad Remote

Figure 3-1 shows the dimensions of the cut out required to mount the SK-Keypad Remote on a panel or cubicle door.

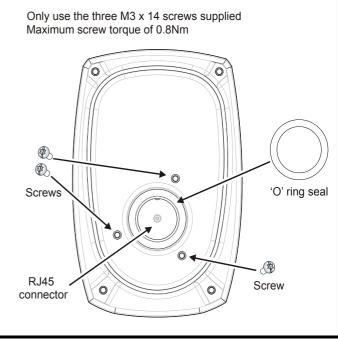
Figure 3-1 Panel cut-out



In order to meet IP65 rating:

The rubber 'O' ring must be fitted around the RJ45 connection. The required screws and seal are provided in a bag with the SK-Keypad Remote.

#### Figure 3-2 Rear of the SK-Keypad Remote and accessories



The SK-Keypad Remote is connected to the drive by a straight-through shielded RJ45 to RJ45 cable, from the socket on the rear of the keypad to the RJ45 serial communications connection on the drive. For EMC compliance the cable shield should be clamped to the panel upon which the SK-Keypad Remote is mounted so that it makes a good electrical connection. The maximum cable length allowed is 30m (100ft). More information on serial communications and RJ45 pin configuration is available in the drive Advanced User Guide.

#### **Communications auto configuration**

The SK-Keypad Remote will scan and identify the current drive communication settings on power-up and auto configures the drive to establish the communications link with '19200'-baud rate, leaving the drive to retain EEPROM stored parameter values.

To ensure the EEPROM communications parameters are correctly restored, the drive must be in status mode and powered down before the SK-Keypad Remote is unplugged.

#### NOTE

It is only possible to connect the SK-Keypad Remote to one drive at a time.



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