

## **Micro 4000 general operating instructions**

Before switching on the Micro 4000 make sure that the weighing platform is level and has been correctly setup. After switching on, the Micro 4000 will cycle through a display test which will take approximately 60 seconds during which time certain internal diagnostics checks are made such as testing the keyboard and checking for any memory corruption, any fault condition found that could affect the operating performance is reported in the form of error codes. Should an error code be reported then the Micro 4000 will not continue until the fault condition is rectified.

### **Overload error conditions:**

The Micro 4000 will display the following to indicate that the weighing platform has exceeded the allowable weighing range.

The display will show "-----" if the maximum capacity of the scale is exceeded.

The display will show "---err" if the weighing platform becomes excessively underweight.  
(ie: caused by removing the weighing plate)

### **Data entry keys:**

0 - 9 numerical keys = Numerical entry of data.

Decimal point key = Entry of a decimal point.

Clear key = To clear any previous entry or mistake.

Enter key = To enter any data input into the Micro 4000.

**Please note:** When in normal weighing mode all data entry routines or sequences will auto cancel if there is a delay of longer than 4 seconds between any consecutive key entry.

## **Basic indicator operations**

### **Zero key:**

Conditions of use:

- 1). Will only operate within +/- 2% of scale capacity.
- 2). Weighing platform must be stable.
- 3). No tare's must be in operation.

The [zero] key can be used to re-zero the display to compensate for any sources of zero drift such as residue build up on the weighing platform. On pressing the [zero] key the display will show all bars and then revert to normal weighing mode with the zero lamp on to indicate that the scale is at true gross zero. A check on the weighing platform stability is performed and should the weighing platform not be stable then the display will continue to show all bars until the weighing platform is stable for at least 1 second.

### **Semi-Auto tare key:**

Conditions of use:

- 1). No preset tare must be valid.
- 2). Weighing platform must be stable.
- 3). Gross weight must not be at or below gross zero.

The semi-auto tare key can be used to tare off a container placed on the weighing platform. On pressing the [Semi-Auto] tare key the display will show all bars and then revert to normal weighing mode with the display now showing zero and the semi-auto tare lamp on to indicate a net weight. The zero lamp indicator will also come on to indicate true zero of the tared weight. A check is made on the weighing platform stability, if the weighing platform is not stable the display will continue to show all bars until the weighing platform is stable.

### **Preset tare key:**

(Note: A preset tare can be entered after a Semi-Auto tare but not vice-versa.)

Conditions of use:

- 1). Entered value must be non-zero and within the capacity of the indicator.
- 2). Entered value must be a multiple of the displayed division of the indicator.
- 3). If there is a delay of longer than 4 seconds between any consecutive key entry, the preset tare function will auto cancel and revert back to normal weighing mode.
- 4). If an attempt is made to enter an invalid tare then the preset tare function will be cancelled and the display will revert back to normal weighing mode.
- 5). The decimal point position is not fixed but you cannot exceed the decimal point position of the indicator. (eg: If the indicator display is to 3 decimal places you can enter 1.5 or 1.500 as a valid tare but you cannot enter more than 3 decimal places.

If the weight of a container is known, the preset tare can be used to tare off the container. To enter a preset tare press the [Preset] tare key, all indicator lamps will blank and the display will start to flash a single "0" preceded with 5 underscores. The preset tare weight can now be entered subject to the above conditions. Once the correct preset tare weight has been entered press the [Enter] key to enter the preset tare weight into the Micro 4000. If the entered value is a valid entry then the preset tare lamp will now come on to indicate a net weight, if however the entry is not correct, the preset tare function will be cancelled and the display will revert back to normal weighing mode.

### **To recall the current preset tare value in use**

If the preset tare indicator lamp is on, the value of the current preset tare in use can be recalled by pressing the [Preset] tare key. All indicator lamps will blank except the preset tare indicator lamp which will remain on, the display will now flash the current preset tare value in use for 4 seconds before reverting back to its previous weighing mode.

### **Clear tare key:**

This key is self explanatory and cancels all current tares in use.

## Auxiliary key functions

### Print key: (Print on demand)

Conditions of use:

- 1). Optional printer software/interface must be active.
- 2). Weighing platform must be stable. (Green stability lamp indicator must be on).
- 3). Displayed weight must be positive and greater than 2 divisions from zero.
- 4). Only one print operation is allowed per weighing, the display must return to within 2 divisions of zero to reset the cycle.
- 5). Printer must be on-line otherwise error code 06 will be displayed when the [Print] key is pressed, this will be displayed for 4 seconds before returning to normal weighing mode.

If a printer interface has been fitted to the Micro 4000, a hard copy of the current net weight can be obtained by pressing the [Print] key subject to the above conditions. Tare weights will only be printed if the appropriate tare is in use, the descriptive text used to identify the respective tare will be printed as "S-Tare" to indicate a semi-auto tare weight and "P-Tare" to indicate a preset tare weight.

### Printed ticket layout

	xxxxxx	<----- (consecutive ticket number, auto incrementing)
Batch	123456	<----- (6 digit batch/product code)
Date	00-00-00	<----- (manual date)
Net	0.00 kg	<----- (net weight)
S-Tare	0.00 kg	<----- (semi-auto tare, printed only if in use)
P-Tare	0.00 kg	<----- (preset tare, printed only if in use)

Note: The following data can be selected to be printed or not. (not user selectable)

- 1). Consecutive ticket number.
- 2). 6 digit batch/product code.
- 3). Date.

### Entering a date or batch number (if in use)

Conditions of use:

- 1). The date and batch number are held in soft ram and will be reset to "000000" if the Micro 4000 is switched off.

The date and batch/product code are entered using the [Mode] key, refer to the mode key operation on how to enter the appropriate data.

### **Functions keys:**

Four function keys are available for use by auxiliary interface/software modules to allow certain operations. These keys are inoperative if no auxiliary interface/software modules are in use.

### **Function key allocation:**

#### **Standard mode/**

Key legend:	Use:	Software module:
<b>F1</b>	----> Enter parts counting mode	(only if parts counting software active)
<b>F2</b>	----> Not used	
<b>Mode</b>	----> See Mode Key operation	(only if RS232/printer or setpoint software active)
<b>F3</b>	----> Start key	(only if setpoint software active)

#### **Checkweigher facility**

<b>Prog</b>	----> Programming of PLU data	
<b>Auto Scan</b>	----> Display current PLU in use	
<b>Mode</b>	----> See Mode Key operation	(only if RS232/printer or setpoint software active)
<b>PLU</b>	----> Recall new PLU from memory	

### **Mode key:**

Conditions of use:

- 1). The [Mode] key is normally inoperative if no auxiliary interface/software are in use.
- 2). The available functions that are displayed depend on what auxiliary interface/software are in use.
- 3). If there is a delay of longer than 4 seconds between any consecutive key entry when accessing any functions via the [Mode] key then the function will auto cancel and revert back to normal weighing mode.

The [Mode] key is used to scroll through various data functions to allow the user to change/enter various operating parameters. Depression of the [Mode] key will blank out the current displayed weight and indicator lamps, the display will now show the first available function, consecutive presses of the [Mode] key will result in the display scrolling through all available functions. When the appropriate function is displayed the [Enter] key is used to access that particular function. The currently available functions are "date", "batch", "set-1", "set-2". On pressing the [Enter] key with the appropriate function displayed, the display will start to flash and display "\_\_\_\_\_" if the function selected was "date" or "batch". If the function selected was "set-1" or "set-2" the current value in use will be recalled from memory and displayed.

Enter in the required data with the date format being entered as ddmmyy. The [Clear] key can be used to correct any mistakes, entered data will be scrolled across the display as each new digit is entered. When the correct data has been entered, press the [Enter] key to enter the data into the Micro 4000 and return back to normal weighing mode.

### **Setpoint operation**

Conditions of use:

- 1). Optional setpoint software/interface must be active.
- 2). Setpoint data is stored in non-volatile ram and will remain valid even if the Micro 4000 is switched off.
- 3). The Micro 4000 can be configured to operate in either of the two operating modes listed below but only one configuration can be in operation at any one time and is not user changeable.

### **Entering setpoint target values**

The setpoint values are entered using the [Mode] key, refer to the mode key operation on how to enter the appropriate data.

### **Operation of setpoints without a start key (mode 2)**

The relay contacts operate freely and are generally used to operate lamps etc. The relay contacts are open below the target weight and close when at or above the target weight.

### **Operation of setpoints utilising a start key (mode 1)**

If the setpoints are configured to operate using a start key then the [F3] function key is allocated as the start key. If the optional remote start key facility is used, the [F3] key will be inoperative. For the start key to initiate a setpoint cycle the displayed weight must be within +/- 2 divisions of zero. The relay contacts are normally open and on depression of the start key the relay contacts will close and will remain closed until the target weight is reached at which point the relays contacts will open, they will remain open until the sequence is reset by allowing the displayed weight to return to within +/- 2 divisions of zero. The start key will remain inactive if the sequence is not allowed to reset.