

## Mixer

### Manual operation

- ⇒ Press the mixer power switch to on (below speed control panel).
- ⇒ Press select/reset to cancel the timer.
- ⇒ Set the desired speed, one push per digit or hold down to scroll.
- ⇒ Push start/stop key, after 3-4 seconds the mixer will slowly increase to set speed.
- ⇒ Speed can be altered up or down while in use if required.

### Timed operation

- ⇒ Press the mixer power switch to on. (below speed control panel).
- ⇒ Press select/reset to select hours or minutes, then increase to the required time.
- ⇒ Set the desired speed, one push per digit or hold down to scroll.
- ⇒ Push start/stop key, after 3-4 seconds the mixer will slowly increase to set speed.
- ⇒ Speed can be altered up or down while in use if required.
- ⇒ Press the start/stop key once to interrupt the cycle press again to continue.
- ⇒ To cancel the timer press select/reset.

### Pre set programs (mixing only)

- ⇒ Set time and speed as above.
- ⇒ Hold down the required program button until the second 'beep' is heard (approx 4 secs).
- ⇒ The remaining program buttons can be set or changed in the same way.
- ⇒ Once set, press the required program button, then start/stop to begin operation.
- ⇒ Speed can be altered up or down while in use if required.
- ⇒ Press the start/stop key once to interrupt the cycle press again to continue.

**Note:** In the event of a power interruption the display will flash the message **Pi** (power interrupt). Once power is restored the mixer will continue as previously set.

To cancel the Pi message press the START/STOP button, press again to continue.

## Counterweight

The counterweight is located beneath the platform carrier. It is adjustable and has 4 positions.

The counterweight should be set for the expected load to enable the mixer to operate satisfactorily.

After a short period of use, it should become evident which counterweight positions are most suitable for particular applications.

The following gives a guide to suggested positions for various loads:-

Position 1 (closest to the centre)	up to 4 kg's
2	4 to 7 kg's
3	7 to 10 kg's
4	10 to 15 kg's

**Note:** As a guide, position 2 usually gives the best results when a lightly loaded universal rack (RR15) or Tulip clip rack (TCT15) is being used.

### To adjust the counterweight

- ⇒ Loosen the 4 retaining screws (front of platform).
- ⇒ Remove the platform by pushing it towards the rear of the cabinet then lifting clear of the platform carrier.
- ⇒ Locate the counterweight under the platform carrier.
- ⇒ To adjust, push the spring loaded latch at the side of the counterweight enabling the weight to slide freely.
- ⇒ Move the weight to the required position then release the latch.
- ⇒ Refit the platform, make sure the locating blocks are located correctly with the platform carrier before tightening the retaining screws.

### Optional accessories

The OM15 platform has a Nitrile rubber mat supplied as standard and will be sufficient to hold most flask and containers, the mat is suitable for slow speed use.

For higher speeds a suitable retaining system would be required.

The following optional clips and racks are available from your Ratek Dealer

#### **RR15 Universal rack**

This rack consists of slotted channels attached to the mixers platform, and 6 stainless steel rubber covered bars. The bars can be moved horizontally enabling flasks, test tube racks and most other types of containers to be secured to the platform.

#### **TCT15 Tulip clip tray**

This tray is suitable for holding tulip clips dedicated to conical flasks.

Tulip clips are available to suit flasks from 50ml to 2000ml.

The tray consists of a stainless steel platform with 4mm threaded inserts, and is made to fit within the OM15 platform.

The following Tulip clips are available:

TC50	to suit	50 ml	flasks
TC100		100 ML	
TC250		250 ML	
TC500		500 ML	
TC1000		1000 ML	
TC2000		2000 ML	

To avoid damage to Tulip Clips, care should be taken to use the correct size clip for the flask to be shaken.

Eg: TC500 for 500ml conical flask.

Continual over bending of the spring sides will cause them to fracture.

Clips for the larger flasks are supplied with a retaining spring for added security at higher speeds.

## **OPERATING INSTRUCTIONS**

- ⇒ Place the mixer on a secure and flat surface
- ⇒ Connect the power cord to a properly grounded 3 pin socket.
- ⇒ Load the platform, for slow speed use the platform mat should be sufficient.
- ⇒ For faster speeds a suitable retaining system should be used.

### **Incubation**

Press the power switch to on (situated below temperature control)

The display will show the software version number, then indicate actual cabinet temperature.

### **To check temperature settings**

- ⇒ Push SELECT once to show set temperature (digit flashing).
- ⇒ Push SELECT again to revert back to current temperature

### **To set or change temperature**

- ⇒ To set temperature push and hold down SELECT wait for second beep, (approx 2 seconds).
- ⇒ The flashing digit may be changed as required with the INCREASE / DECREASE keys.
- ⇒ Push SELECT once to move flashing digit to the next left.
- ⇒ Push SELECT again to revert back to current temperature

**Note:** Holding down the INCREASE/ DECREASE keys will allow the display to scroll.

### **Alarm**

The over temperature alarm is incorporated as a safety feature in the event of controller failure.

The alarm will sound and the LED will flash if the cabinet temperature exceeds the alarm set point, power to the element will be disconnected.

**Note:** When the set temperature is reset lower than the current cabinet temperature, the alarm will be disabled and the heating suspended until the set temperature is achieved.

### **To set the alarm value**

- ⇒ Push and hold the SELECT and INCREASE keys simultaneously until the second beep is heard.
- ⇒ Adjust alarm value using the INCREASE or DECREASE keys.
- ⇒ Push SELECT again to revert back to current temperature