

## NBS - 20 OWNERS MANUAL

### GENERAL

The NBS-20 digital baby scale has been specially designed to overcome the problems associated with weighing babies and small infants. Advanced techniques are utilised in the design of both the hardware and microcomputer software. The result is a steady weight indication which is not susceptible to the child's movement when lying on the scale. To achieve this, the scale does not weigh continuously like a conventional scale, but rather proceeds through a weigh cycle. After turn-on the scale automatically zeroes, detects when the child is on the scale then displays the child's weight and turns itself back off. This results in considerable power savings making the scale well suited to portable battery operation.

The scale is powered by internal rechargeable batteries and may be used as a fully portable instrument. Alternatively, the scale may be connected to the battery charger and used whilst the batteries are being charged.

### CONTROLS AND INDICATORS

The scale is implemented using only simple controls. The "ON" push button is located directly to the right of the display. Depressing the "ON" push button wakes up the scale from its (low-power) dormant state, the display will illuminate all segments as a display check until the scale acquires an accurate stable zero whereupon 0.00 will be displayed. At this point the operator has approximately 60 seconds to weigh the baby. The "ON" push button also doubles as a TARE function and will automatically tare off or zero any weight on the tray (blanket, cushion, etc.) at the time of actuating the scale. It is essential therefore to wake-up the scale by depressing the "ON" push button and wait for zero (0.00) before placing the child on the scale.

N.B. It should be noted that the scale is activated only after the "ON" button is released.

The "MEM" push button is located to the direct right of the "ON" push button and is used to store and recall displayed information.

At the termination of the weighing cycle the scale will automatically store or remember the last displayed value before entering its dormant (low power) state. If the scale is activated later using the "ON" push button, then by pushing "MEM" the last stored value will be displayed. This is a handy feature if the operator had forgotten this last stored value.

Alternatively, if it is desirable to remove the child before the scale has gone dormant then the "MEM" push button can be pressed to store the current displayed weight. The child can then be removed and subsequent display updated will not be stored. The value can be recalled later in the same way as before.

#### USING THE SCALE - weighing the baby

Place the scale on a reasonably flat and level firm surface. Place any article (e.g. blanket, paper towel, rattle, etc.) on the scale which required to be tared off - i.e. anything that is to be weighed on the platform with the child except the child itself. Depress the ON push button and release it. The scale will display +1.888 as a "display-check" for a short period and then show zero (0.00). It is only at this point the child can be put on the scale for weighing. The scale will recognise that the child is on the platform and will flash (---) to indicate that it is performing a filtering operation to acquire a final steady weight. This weight will then be displayed for approximately 5 seconds and the scale will turn off.

N.B. It is important to note that the operator has only a 60 second period to weigh the child after the scale has been turned on. Also, the child should never be placed on the scale until 0.00 is displayed.

If the operator allows a complete cycle to progress then the last value displayed before turn-off will automatically be stored in memory for recall later. Should it be necessary to remove the child before the completed cycle, then the operator should push the MEM button to record the present displayed weight and then remove the child. THE CHILD SHOULD NOT BE REMOVED UNTIL THE WEIGHT HAS BEEN DISPLAYED AND THE MEM BUTTON PRESSED

The stored value in memory can be recalled by pushing the ON button turning the scale on, and then holding down the MEM button to display the last stored value. The value will be displayed as long as the push button is held down. The stored value in memory will stay there indefinitely and is only re-written by a new weigh cycle.

#### BATTERY CHARGING

Although the unit is portable and can be used from its own internal battery, the unit should be powered from mains whenever it is practicable to prolong battery life.

If the LO BAT indicator is illuminated whilst weighing (other than the initial display check) the unit should be connected to mains as soon as possible to recharge the internal batteries.

If the scale is to be used on battery supply for a prolonged period (3 to 4 days) the batteries should be charged overnight.

NEVER CONNECT OR DISCONNECT THE MAINS PLUG WHILST THE SCALE IS WEIGHING. Always make the connection whilst the scale is in the dormant (OFF) state.