

User Manual

HR2000 Poultry Weighing System

Ver 1.1

Introduction

Congratulations on your purchase of the HR2000 poultry weighing system.

The weighing indicator has been designed to be extremely easy to operate, this manual describes how to get the best out of the system.

Power Switch / Charging

The weighing indicator is battery powered and the toggle switch mounted on the lower right hand side of the indicator should be used to power on and off.

When the switch is in the OFF position the batteries may be charged using the special external charger unit.

Ensure the supplied battery charger is kept dry and has good air circulation at all times.

The red button on the indicator is not used in this application. The user will be warned to use the main power switch.

Note: After applying power the system will take a few seconds to become active.

The initial startup screen will be visible for a few seconds and shows the following information :

Supplier :

Last Calibration date :

Next Calibration required :

It is advisable to contact the supplier for a calibration check when required.

Main Run Time Screen

After the initial start up screen the main run time screen will be displayed.

The left hand side shows

Time and Date	-	Current Time / Date
Bat Hrs	-	Battery used time
Memory	-	CURRENT memory number
Batch	-	CURRENT batch number
Hi	-	High weight limit
Lo	-	Low weight limit
Av	-	Average weight (OK weighings)
Wt	-	Dynamic scale weight with steady flag

The right hand side top line shows a title with the number of weighings in each band

The next seven lines show the data positioned in the appropriate band, this is usually the last seven weighing recorded.

Backlight Operation

The backlight on the display consumes a lot of power, so to maximise battery life it automatically turns off 10 seconds after a key is pressed.

Main Menu - (F1)

The F1 key provides the main menu as follows :

1. Adjust Contrast / Set Clock
2. Select CURRENT memory (Discussed earlier)
3. Clear CURRENT / ALL Memories
4. View CURRENT Memory
5. Upload Memory data to USB stick
6. Deadband Settle Time / Steady Div
7. Reset Battery Usage Time
8. Set CURRENT Batch number

Each of these options will now be discussed

Adjust Contrast / Set Clock - (1)

One option is to lighten or darken the display contrast. To lighten the display contrast press 1 repeatedly, and to darken the display contrast press 2 repeatedly.

Once the contrast is correct press 3 to return back to the main screen.

The other option is to set the real time clock, this is important to keep accurate as the date is used to generate the USB file names.

Select CURRENT memory - (2)

This option as discussed earlier is used to select the CURRENT memory. Other options such as :

- Clear CURRENT memory
- View CURRENT memory
- Upload CURRENT memory to USB stick

work with the CURRENT memory selected by this option.

Another way to select the CURRENT memory is to use the HOT keys 1 to 9 when the main screen is displayed.

Each memory can hold up to 500 weighings, and there are 10 memories.

Clear CURRENT / ALL memories - (3)

The first option allows the CURRENT memory to be cleared. The ZERO key must be pressed to complete the operation. Any other key will abort the clear routine.

View CURRENT Memory - (4)

This option uses the full screen to display the current memory. The top line is the title which shows the number of weighings in each band (Similar to the main screen).

The weighing Number and Low and High limits for each weighing are also displayed.

The second line has an arrow (>). Any weighing at this line will have additional date information on the last line (which also has an arrow >)

It is possible to move up and down the data with small or large movements as follows :

Move data up one line	-	1
Move data up one page	-	2
Move data up 100 lines	-	3
Move to end of data	-	4
Move data down one line	-	5
Move data down one page	-	6
Move data down 100 lines	-	7
Move to start of data	-	8

The ENT key is used to return to the main screen

Upload CURRENT Memory to USB stick - (5)

This option requests the to insert a suitable memory stick, it will then automatically upload the CURRENT memory to the stick on a file named :

PWDDMMYY.CSV

Where	PW	-	denotes Poultry Weigher
	DDMMYY	-	Is the current date
	.CSV	-	Is the format for Excel importing

A number of error messages can be displayed if the stick is not inserted correctly or if there is a problem creating or writing to the stick.

If the file does not exist it will automatically be created, if it does exist it will append the data to the end of the file.

Important note: Any memory stick used MUST be no larger than 4Gbytes

If the data is successfully transferred to the memory stick the display will give an option of pressing ZERO to clear the current memory.

The file on the USB stick may now be directly opened with Microsoft Excel and the data further manipulated.

Deadband / Settle Time / Steady Div - (6)

A password is required to be entered (0482) There are now three possible options:

Set Deadband Weight	-	1	(Typically 200g)
Set Settle Time	-	2	(Typically 5.0 sec)
Set Steady Divisions	-	3	(Typically 50 div)

The deadband may be set from 1 – 999g The weight must be above the deadband before a recording can take place. One a recording has taken place the weight must fall below this deadband to arm the system for another weighing.

The Settle Time may be set from 0.0 to 9.9 seconds. This is the time the weight must remain steady before a recording takes place. The larger this number then the more accurate the weight recording will be.

The Steady Divisions may be set from 01 to 99. This is the number of divisions which the scale may move without going unsteady. The smaller this number then the more accurate the weight recording will be.

Reset Battery Usage Time - (7)

This option records the battery usage time in hours. This allows the user to predict when the batteries need charged.

To find the maximum battery life hours the following should be performed :

1. Fully charge the batteries
2. Use this option to reset the Battery Usage Time
3. Use the system until the special internal cutout circuit switches off the indicator when the batteries reach low charge.
4. Note the MAXIMUM Battery usage time

If this maximum usage time was say 120 hours, then in future the system should be recharged at perhaps 80% of 120hrs ie 96 hrs.

Note after every battery charge the Battery Usage Time MUST be reset.

Set CURRENT Batch Number - (8)

This option allows the user to set a batch number, which may be 8 characters alphanumeric. There is a different batch number for each memory which will be uploaded as column 2 on the USB file. The user can choose any desired batch number style.

Charging the batteries

The batteries **MUST** only be charged with the supplied charger. About 3 hours maximum will achieve full charge.

The charger plugs into a compatible plug on the right hand side of the indicator.

The charger has its own user manual, the light on the front will go solid green when the batteries are fully charged.

Typically 5 days may be expected from a fully charged system.

To user should also power the system off when not in use to conserve battery life, the battery usage timer will **NOT** run during this time.

Scale Zeroing

When the system is in operation with no bird on the scale, the user may press the **ZERO** key to manually zero the scale.

The user should keep the unit as steady as possible during this operation.

Recording LAMPS

There are three front panel lamps :

- OVER** - Bird recorded which is over the High Limit
- ACCEPT** - Bird recorded which is within the Low and High Limits
- UNDER** - Bird recorded which is under the Low Limit

The appropriate lamp will flash for about one second at recording.

Delete LAST weighing ← key

When in the main run time screen the backspace key may be used to delete the last weighing from the CURRENT memory. This key may be used repeatedly to clear the complete memory. Use with care to avoid losing data !.

Setting Up the Weighing Platform

All transportation packing should be removed carefully from the integrated loadcell.

The indicator may be hung from a secure point on the roof of the poultry house.

The two stainless steel threaded rods should be assembled together after cutting to length.

The turnbuckle provides a way to precisely set the desired length, so that the platform is at the optimum height.