



Instruction Manual

Read this manual carefully before using your weigh scale



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Getting Started

Display

There are 4 display screens:

1. Weigh
2. Setup
3. Statistics
4. File List

These are selected using the SETUP / WEIGH key and STATS / FILE key

Weighing

There are 3 Weigh Modes:

1. Fine
2. Lock-on (normal)
3. Fast lock-on

Recording

There are 3 Record Modes:

1. Manual record
2. Auto record
3. Off

Lock-On

There are 3 types of lock on algorithm

1. Static - for weighing static loads
2. Start 10lb - for weighing livestock. Starts weighing at 10lb
3. Start 20lb - for weighing livestock. Starts weighing at 20lb.

The indicator records up to 16,000 records in up to 99 files.

The recorded data consists of the EID, Weight, Weight Gain, Date and Time. Optional recorded data includes VID, PID, 3 condition codes and 2 health modes.

The scale requires an EID number or VID number to record with the weight. If an EID scanner is not used a VID can be entered using the keypad.

Operation

Turn on using the ON/OFF key.

Select the weigh mode (lock-on), record mode (manual record), algorithm mode (10lb start or 20lb start for livestock) and load bar settings from the setup menu. Turn auto zero on.

BAR ERROR displays when no load bars are detected.

When in record mode, select an existing file from the file list or create a new file.

In manual record, when the animal stands on the platform, scan the EID tag or enter the VID number. Use the left or right direction keys to select VID, PID and codes 1 to 3 if you wish to enter data in these fields. When the weight is locked on and all data is entered, press the record key.

In auto record, when the animal stands on the platform, scan the EID tag. Release the animal after the weight has locked on and the scale will automatically record the data as the animal leaves the platform. If data is entered using the keypad while in auto record, i.e. entering a VID, PID, or codes, the scale resorts to manual record for that animal and the record key needs to be pressed.

The RECALL key recalls the last weight.

The REWEIGH key reweighs the animal without changing the EID and other data.

The CLEAR key clears all data from the screen.

In the STATS screen use the SELECT key to select which column to sort. Use the BACKSPACE key to change the sort direction.

In the WEIGH screen you can change draft direction by using the direction keys to highlight DRAFT and then using the SPACE key to change the draft direction.

The indicator can record data when no loadbars are connected.

Setup Menu

Press the SETUP key and use the direction keys to scroll through the setup menu. Use the RECORD/SELECT key to change a setting or to save a setting.

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SET DATE FORMAT:	MM/DD/YY or DD/MM/YY
SET DATE/TIME:	Enter the date and time and press RECORD
SET DRAFT INDICATOR:	ARROWS (< ^ >), NUMBERS (1,2,3) or LETTERS (L,M,H)
SET DRAFT TYPE:	By WEIGHT, by WEIGHT GAIN or OFF
DRAFT L1< VALUE:	Enter a value
DRAFT H3>VALUE:	Enter a value i.e. Weights under value L1< draft left, weights over value H3> draft right and weights in between L1< and H3> draft in the middle M2^.
HEALTH MODE:	HEALTH 1 ON, HEALTH 2 ON, HEALTH 1+2 ON or OFF
SET HEALTH 1 TYPE:	Enter the name of the drench/vaccine
HEALTH 1 ML/220LB:	Press the select key to display either fixed dose or dose by weight. Enter the fixed dose size or dose rate
SET HEALTH 2 TYPE:	Enter the name of the drench/vaccine
HEALTH 2 ML/220LB:	Press the select key to display either fixed dose or dose by weight. Enter the fixed dose size or dose rate
WEIGHING MODE:	FINE, LOCKON or FAST LOCKON
WEIGHT RECORD:	MANUAL, AUTO or OFF
AUTO ZERO:	ON or OFF
WEIGHT GAIN:	TOTAL GAIN or GAIN PER DAY

COM PORT 1 MODE:	Select OFF, or REAL TIME WEIGHT sends weight data when the weight is recorded, REAL TIME EID + WGT sends EID and weight data when the weight is recorded, PROFILE UPLOAD RAW sends raw data continuously, PROFILE UPLOAD KG sends weight data continuously, EID READ/PC CONNECT for an EID reader or for uploading data to a PC
COM 1 BAUD RATE:	Match to the PC or reader
COM 1 POWER:	Select OFF. For supplying power through the RS232 connection.
COM PORT 2 MODE:	EID READ / PC CONNECT currently is the only selection
COM 2 BAUD RATE:	Select 9600 for most readers
COM 2 POWER:	Select ON to power the reader
TEXT HIGHLIGHT MODE:	SHADED NORMAL, BLACKOUT INVERSE, FLASH INVERSE
LOADBAR MODEL:	Select a preset load bar or create a custom setting
mV/V SETTING:	In custom setting enter the mV/V load cell rating
LOADBAR FULL SCALE:	In custom setting enter the suggested rating on the loadbar
LOADBAR mV:	Displays loadbar output in mV/V
AUTO CALIBRATION:	If calibration is required, enter the known weight and press select to start. Place the weight on the bar and press select. The indicator will calibrate to the known weight. Set the weighing mode and algorithm before auto calibration.
ALGORITHM MODE:	START 10LB for weighing livestock START 20LB for weighing livestock STATIC for static loads
BACKLIGHT MODE:	ON, OFF or AUTO
TARE WEIGHT:	Enter the container weight

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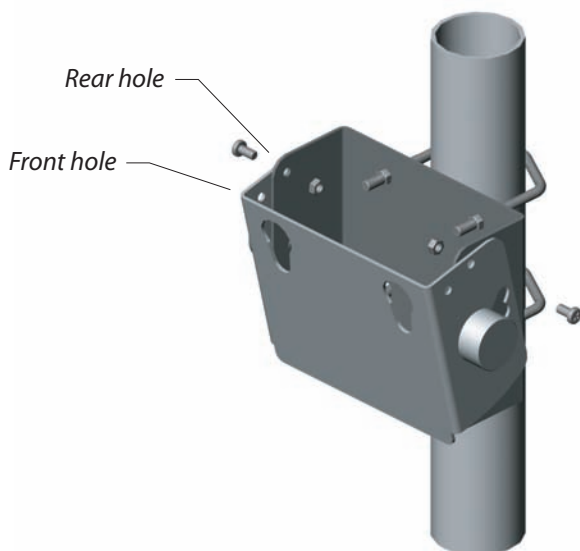
ID MODE:	EID ONLY, VID ONLY, EID + VID or NO ID QUICK WEIGH
ENABLE AUTO VID:	OFF or ON
AUTO VID START:	Enter VID starting code i.e. 0001
ENABLE PID:	YES or NO
PID DEFAULT:	Enter the Premise Identity
ENABLE CODE 1:	YES or NO
CODE 1 DEFAULT:	If the code is common for the weighing session, enter the text and this will be recorded with each weight. If the code varies for each weight then leave this blank. Default codes can be used for recording additional fixed dose health medication.
ENABLE CODE 2:	YES or NO
CODE 2 DEFAULT:	Enter common text or leave blank
ENABLE CODE 3:	YES or NO
CODE 3 DEFAULT:	Enter common text or leave blank
WEIGHING UNITS:	KG or LB

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BLUETOOTH POWER:	OFF or ON
BT BAUD RATE:	Select 9600 typically
BLUETOOTH SEARCH:	Turn on the bluetooth EID reader. Press select on the indicator to search for the bluetooth reader. The bluetooth reader will be added to the list of BLUETOOTH KNOWN TARGETS.
SELECT READER:	Press select to select the reader
PASS KEY:	Enter the bluetooth reader pass key
CONNECT TO READER:	Press select to connect to the reader
PC DISCOVERY:	Press select so the PC can discover the indicator
BROWSER INTERFACE:	Select ON to connect to the PC

Installation

1. Ensure the weighing site is level, sheltered from wind and the weighing platform does not touch the surrounding alleyway.
2. The indicator is supplied with an adjustable bracket. The bracket has 2 assembly positions to allow different pivot angles. Use the rear hole if the bracket is mounted at eye height. Use the front hole if the bracket is mounted at chest height. For external use it is recommended to mount the bracket at eye height and to position the screen so it is out of sunlight.
3. The bracket can be mounted to a horizontal or vertical rail using the U bolts supplied, or it can be screwed directly to a wall or post.
4. Mount the bracket to a rigid structure that doesn't move when the platform is loaded. This makes the indicator easier to operate.



4. Connect the loadbar connector to the indicator.
5. Connect the external 12v power pack if required.
6. It is recommended to check the calibration of the system using a known weight.

Horizon Browser

The Horizon browser allows you to transfer files between the indicator and a computer.

Installation

Load the CD supplied.
Double click on HB.exe to install.
Accept the default settings.

Downloading

To download a file from the indicator, connect the null modem cable supplied, to either com1 or com2 on the indicator and to either com1 or com2 on the computer. In the indicator setup menu select EID READ / PC CONNECT for the indicator com port and a baud rate of 9600. If using com2 on the indicator, ensure com1 is set to OFF.

On the computer start the Horizon Browser (for Vista see note 1) and under File, Port Settings, select the com port connected to on the computer (see note 2) and a baud rate of 9600.

Press the 'Retrieve File Information From Indicator' key.
The indicator files will be displayed.

(If no files are displayed and a coms timeout box appears, either the indicator is turned off or the wrong coms port setting has been selected)

Select which files to download.

Next to the 'Download Selected Files' key, select the filename to download to either by typing a file location on the computer or by using the browse key to setup a file name and type.

Press the 'Download Selected Files' key.

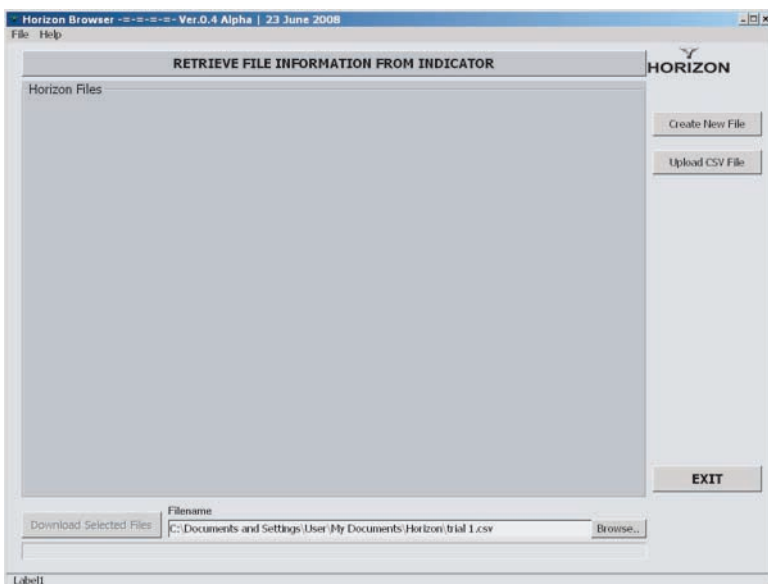
The Horizon Browser will create either Access Database or Excel CSV files (see note 3).

Horizon Browser cont

Note 1 - In Vista, under Programs, right click on the Horizon Browser and select Run as Administrator.

Note 2 - To see what com port is being used on the computer, go to the Device Manager (press Start, Settings, Control Panel, System, Hardware, Device Manager) and Ports.

Note 3 - In some CSV spreadsheets to display the EID number, right click on the EID column, select Format Cells and change Categories to Number with no decimal places.



Uploading

To upload a file from the computer, connect the null modem cable as when downloading.

Turn the indicator on.

On the computer start the Horizon Browser and select the com port setup as when downloading.

Press the 'Upload CSV file' key and select which files to upload by using the browse key.

(The data format in the CSV file needs to match the format of a downloaded file or an error box will appear. Use a downloaded file as a template).

Press the 'Upload CSV to Indicator' key.

On the indicator press the recall key to display the uploaded file.

USB Adapter

Use the USB adapter when there is no serial port on the computer.

To install the serial cable USB adapter, put the driver disk in the computer, in My Computer open the disk, select the USB232 folder, then select the HL340 folder, then double click on HL340.exe and press install driver. Connect the USB adapter and note which port it is connected to.

To change the port number on the computer go to Device Manager, select Ports, right click on CH340 and under Properties, Port Settings, Advanced, change the port to another available port.

Horizon browser connects to ports 1 - 9.

Tips

Weighing

To improve weighing accuracy ensure:
The animal isn't handled during weighing.
The operator isn't touching the chute.
The chute isn't touching another animal or part of the race.
The loadbars and underside of platform are free from dirt.

The indicator will auto zero when the animal leaves the platform.
Ensure that the chute is free during this time.

Always zero after clearing or moving the platform.

Operation

Back up the indicator files to computer using the Horizon Browser.

Take a record of the loadbar settings after auto calibration and any other specific settings.

In auto VID start, enter the starting VID as 0001 rather than 1.

If an EID is recorded twice in 24 hours, it is classed as a duplicate EID and the indicator will display a warning box.

In data only mode (no loadbars connected) previous weight and weight gain are displayed as 0.

If a file name is changed, the new file needs to be selected for the indicator to record to.

To edit the last record, press recall, change the data and press record.

Turn the coms power off if not in use.

The ID mode NO ID QUICK WEIGH is useful for quickly drafting or collecting statistics on a group of animals.

Care, Maintenance and Storage

The indicator can run on either the internal rechargeable batteries or the 12v power adaptor. Use only the supplied Franmar power adaptor to power and charge the indicator. The power adaptor is rated for indoor use only. Charge at temperatures between 0 to 30 C (32 to 86 F). Charge time is 4 hours. Run time is 8 hours at 24 C with the back light on.

Operating temperature is between -10 to 40 C (14 to 104 F). If operating below 0 C ensure the battery is fully charged.

The indicator is environmentally sealed and water proof to IP66. Do not submerge in water. Do not tamper with or remove the case screws, this will void the warranty.

Store the indicator in a clean, dry place, out of direct sunlight. Storage temperature is between -10 to 35 C (14 to 95 F). Store above 0 C for optimum battery performance.

The lens has a scratch resistant coating however take care when cleaning. Clean the LCD lens and keypad lightly with a soft clean cloth and a glass cleaner suitable for use on polycarbonate plastic.

FCC Notice

This device complies with part 15 of the FCC rules for class A digital devices. It can generate, use and radiate radio frequency energy, and if not used in accordance with the instructions may cause harmful interference to radio communications. In a residential area it may cause harmful interference, which will be required to be corrected by the user at the their own expense.

Bluetooth

Bluetooth EID Reader

To connect to a bluetooth reader:

Turn on the bluetooth reader.

Turn on the indicator and in the setup menu page 4 turn on the BLUETOOTH POWER. For BLUETOOTH SEARCH press select to search for the bluetooth reader. The reader will be added to the list of BLUETOOTH KNOWN TARGETS. For SELECT READER press select to select the reader. Enter the pass key and then press CONNECT TO READER. The indicator will beep when connected.

The pass keys are:

Aginfo link 1 2 3 4

Allflex default

Destron-Fearing the last 5 digits of the bluetooth ID on the reader

Y-tex 1 2 3 4

When connecting to a bluetooth EID reader, the indicator is the master and the reader is the slave.

If the bluetooth reader is turned off or moved out of range, the reader will need to be disconnected on the indicator using DISCONNECT READER in the setup menu and then reconnected using CONNECT TO READER.

If the indicator is turned off then the reader will need to be reconnected using CONNECT TO READER in the setup menu.

Bluetooth Computer

When connecting to a bluetooth computer, the indicator is the slave and the computer is the master.

Connection to the computer will vary depending on the type of bluetooth that the computer is using. As an example:

In the indicator setup menu page 4 select BLUETOOTH POWER to ON.

On the computer bluetooth menu, search for the device (Horizon).

On the indicator select PC DISCOVERY.

On the computer select the device (Horizon) and connect using the bluetooth serial port service. The indicator will beep when connected.

To transfer files turn the BROWSER INTERFACE on.

On the Horizon Browser match the port setting to the bluetooth port (see note 2).

Warranty

Horizon warrants that the product you have purchased is free from defects in materials or workmanship under normal use during the limited warranty period.

The warranty period starts on the date of purchase from Horizon or an authorized Horizon agent. Please keep the dated sales receipt for proof of purchase as you may be required to provide proof of purchase as a condition of receiving warranty service.

The indicator is entitled to a 2-year limited warranty. The rechargeable batteries are entitled to a 1-year limited warranty. The battery warranty does not cover changes in battery charge capacity and is limited to defects in materials or workmanship resulting in battery failure.

During the limited warranty period, Horizon will repair or replace the defective component or product. All components removed under this warranty become the property of Horizon. The replacement component will take on either the remaining warranty period of the removed component or a ninety (90) day limited warranty for the spare part, whichever is longer. The replacement component may be manufactured from new or used materials equivalent to new in performance and reliability. Horizon reserves the right to improve or modify products from time to time without assuming obligation to modify products previously manufactured.

Horizon is not responsible for damage that occurs as a result of (1) failure to follow the instructions that came with the product; (2) accident, misuse, abuse or other external causes; (3) voltage surge or lightning strike; (4) modification, tampering or service by an unauthorized service provider.

Horizon is not liable for any damages or personal injury caused by the product or the failure of the product to perform, including any damage or loss of data on the product or computer.

The maximum liability of Horizon under this limited warranty is limited to the lesser of the cost of repair or the replacement of the product.

In the event of the product requiring servicing under the terms of the warranty, contact your authorized dealer. The product is to be returned to the service center at the expense of the purchaser.

These conditions constitute the complete and exclusive warranty and supersede all other warranties, representations or conditions relating to this product.