FarmManager

Basic

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2. Forword
    a. The Farm Manager system is developed over a long period of time, by listening to farmers, about what wishes they would like to see implemented and methods of feeding.
    b. The system can be set up to feed as the farmers does and not that the farmer has to change his way of feeding to accommodate the system.
    c. Buttons and functions are only available when they are to be used and buttons that have no relevance are hidden until the right season is selected and buttons for the given season will be visible.
    d. This manual/user manual contains only Basic information and not all the advanced menus/functions are described here.
    e. To get the most out of the manual, it should be read from the icons that always go out from the Main Menu. The main menu is the menu where in the upper left corner it says version number (ex: Ver 4.xx).
    f. When the computer boots up and finishes initializing, it will end its cycle by displaying the main menu.
    g. The user manual should be used with the system as screenshots are referred to directly.

3. System Introduction
    a. The Farm Manager system counts on the propulsion wheel using a sensor that translates to cm through a calibrated distance factor. This constantly measures how far you have driven forward and also how far you reverse back.
    b. A barcode must be mounted at the entrance in a row, which determines which hall and row you drive into. Subsequently, the machine counts cm while driving and thereby the cage numbers change automatically every time the distance of the next cage is met. You learn each row on the entire farm first, so that the system knows the design of the row, i.e. cage number total and per subject, firebreaks and stays, holes in the substrate, cage sizes and feed positions.
    c. If all cages are put in a row to the same portion size, a portioning is obtained that does not feed on time/break, but which feeds on cm and the rate of feeding can be varied during feeding.
    d. If you choose to detect cages that are empty, the system will remember it and skip the cages itself during feeding (same as releasing the feed pedal). If you choose to register an empty cage, you can advantageously insert a reverse drive on the feed pump which takes the pressure off the feed hose, which thereby does not drip with the feed at empty cages, stays and when exiting a row.
    e. Since the system constantly keeps track of where on the farm it is, you can use follow-up / after feeding, where you can feed the cages that have empty wire and skip the rest. The system will remember which cages received a follow-up/after feeding and you can thereby increase the amount of feed individually at cage level. The cages that received an extra portion during follow-up/after feeding can have their head portion increased by e.g. 10% and at the next feeding of the main meal, these cages get more than the other cages. Of these, individual feeding is available.

4. Booting up the machine
    a. Before the machine can be put into operation, the distance counter must be calibrated and the feed pump must also be calibrated.
    b. The distance calibration is done by measuring a distance of at least 15 meters, in a place on the farm where the surface/substrate is as firm as possible. It is recommended that you measure a minimum of 20 meters in a hall, in a row with good solid ground. During distance calibration, the barcode reader's red light is switched on, on the right side of the feed cart and the measurement can be done using the light, by plotting on the nest boxes on the right side. Make a vertical line on the first nest box in subject no. 2 in a row and measure from here about 20 meters down the row, where a vertical line is drawn on the nest box and the number of cm is written on the nest box so that the measurement can be used again.

c. Go to the main menu and press the following 3 buttons:  and press the "Start Distance Calibration" button. Follow the on-screen instructions. After the distance calibration is completed, a distance factor is shown, which on a soffie 1500 feed truck should be between 2.6 and 2.9.
d. The distance factor is the resolution of the machine in cm, which gives the accuracy of the machine when measuring distance when driving, forward or backward.

5. Feed pump calibration
   a. In order to calibrate the feed pump, you need a bucket and a weight that can weigh up to 10 Kg. The calibration is in grams. Calibrate with full tank, operate hot hydraulic oil, RPM should be as close as possible with the same RPM as when feeding, the machine should be on a level surface and if the machine is equipped with a mixer, this should be turned on.
   b. Go to the main menu and press the following 3 buttons  and press the "Start Calibration" button. Follow the on-screen instructions.
   c. During feeding, the system will online calibrate by measuring the amount of feed coming out of the feed hose. The system needs a minimum of 20 portions before the online calibration is adjusted.
   d. So if you want to check feed calibration, you should first pump 20 portions back into the tank of, say, 200 g and then 20 portions of 200 g into a bucket. Then weigh the bucket, which should weigh 4 Kg. By repeating the calibration, an operating hot machine with new pump can get below 5% deviation.

6. Learning farm
    a. The rows in the Halls must be measured 1 time before the system can feed on cm in them. Once they have been measured it is not necessary to do this again unless you change the number of cages in a row or if you change the surface in the row significantly.
    b. Before measuring the rows, you should consider numbering the cages and which cage should have the lowest number and what should be the A and B rows. If you already have numbers on the cages, you can use the numbers you have. If there are no numbers on the cages, you can use a marker and write the number. There must not be 2 identical cage numbers in the same row, but preferably in 2 different rows or 2 different halls.
    c. The halls themselves must also be named with a sequential number and a barcode card must be mounted at the beginning of a row on the right side, approximately 85 cm above the surface. The barcode card should be reversed so that the lines in the barcode are horizontal, like the steps in a ladder.
    d. The barcode card must be placed before the first challenge position on the first cage, but to protect the barcode card it can advantageously be placed on the door frame before the first nest box or directly on the nest box in the first cage.
    e. There are no requirements for barcode type, if you hold a barcode card in front of the barcode reader and the red light goes out, it is a barcode that can be used. However, the farm must not have 2 barcode cards that have the same number/characters.
    f. The barcode cards must be "programmed" to determine the hall and row. Go to main menu and press the following 3 buttons  . The barcode reader now starts up and the barcode card is held in front of the barcode reader until the red light goes out. Best reading distance is 20 to 25 cm. If the barcode card is already mounted on the entrance to the hall, drive the feed truck in front of the barcode card so that the red light goes out.
    g. When the barcode card is read, the red light goes out and a shield appears on the screen indicating that the barcode has been read. Only now can you change the values on the screen and save the "programming" of the barcode card.
    h. The top field determines where the barcode card is located and should be coded to be the "Start" type. The middle field is the number of the Hall and the bottom field is the letter of the row. When the correct values are all selected, press the "Save" button.
    i. If you are in doubt whether the barcode card is correctly "programmed", you can get the barcode reader to read it again and the screen will show what the barcode card is "programmed" to be. . Go to main menu and press the following 3 buttons  . Then read the barcode card.
    j. When learning/measuring each row, it is important that the barcode reader's light or that the feed trolley is located behind the barcode card before the learning/measurement begins. The learning/measurement can be done several times as desired, but the first time it is important to choose "From scratch". If you do not choose from the front but instead choose "Keep", it means that the

number of cages, the number of animals in each cage and the portion size are retained.

k. Otherwise, there is a difference between learning/measuring endless rows or whether it is a 2-row hall that you have to learn/measure. For endless rows, the system is used directly, while for 2 rows of halls you have to take into account that the first cage must be fed behind the normal feeding position, i.e. the end wall is in the way of the feeding hose and therefore you have to drive further forward before the feeding position can be achieved.

l. At 2 rows of halls, you must therefore learn the first subject separately and pretend that there is a gap between the first subject and the number 2 subject. Here it is also important to overdo the feeding position at the first cage. (about 10 cm)

m. Go to the main menu and press the following 3 buttons:  . Follow the on-screen instructions. Remember never to enter the same cage number 2 times.

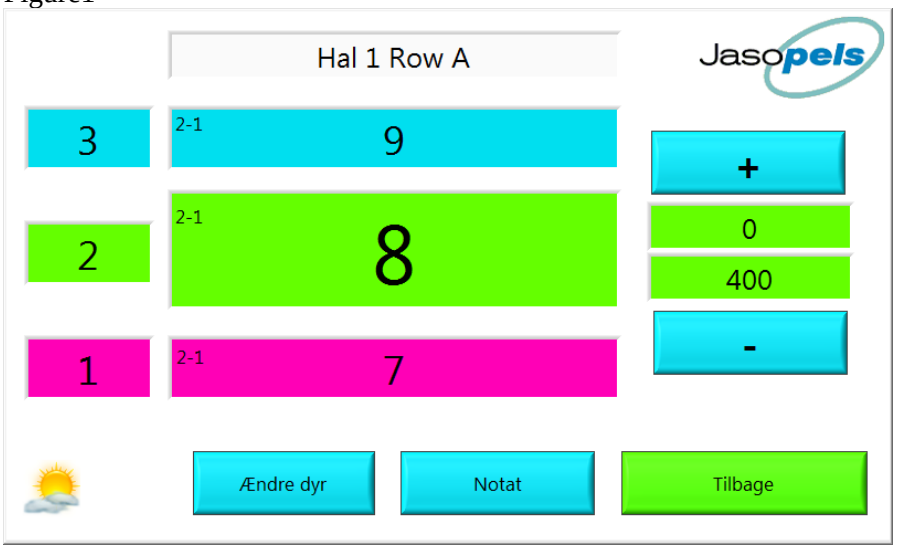
7. Portioning in cm

a. Go to the main menu and press the following button  . As a new machine, the system is set up to feed 1 time per day, it is shown by that next to  stand 100% press this button. Drive forward so that the barcode reader can read the barcode card. Drive forward to the first cage feeding position and activate the feed pedal/switsen. The pump will feed out a portion. Keep the feed pedal/swits activated while the feed trolley is started and moving forward. When the distance to the next cage is reached, the system will set the feed pump in motion and the next portion will be fed.

b. The learning/measuring calculates the distance between the position of each feeding and thereby generates a mask that is fed after. The position of the mask (thereby feeding position) can be changed while driving as often as needed.

c. Best way to change the mask/feed position is to drive to the desired position and press the next cage (blue box in the middle) or on the previous cage (red box in the middle). Continue pressing in these boxes until the correct cage is in the middle (green box in the mite).

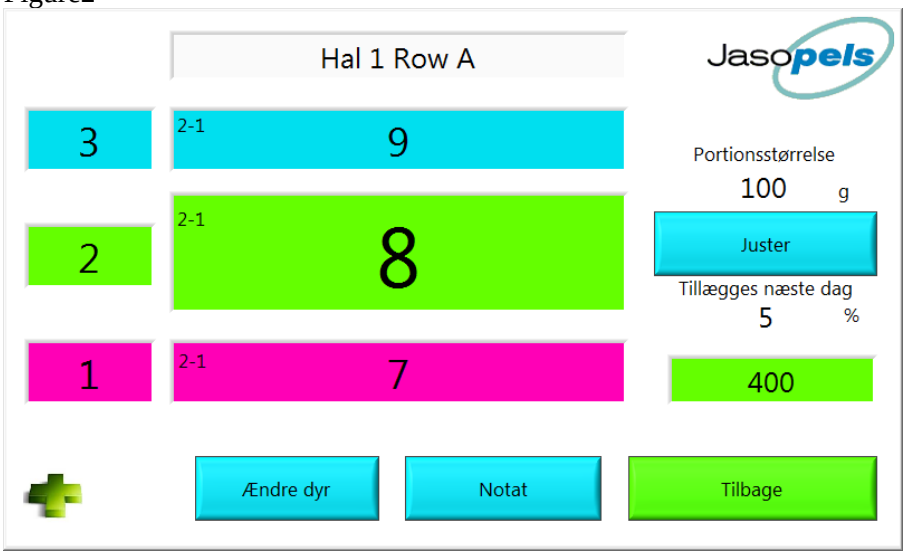
d. Figure1



e. At the top of the screen will be written which hall and which row you are in.
f. The 4 green boxes in the middle are the cage you are facing, at the moment, where the green field on the left is the feed order number and the green center field contains the cage number. At the top left of the same field is the number of males and the number of in the cage, separated by a hyphen.
g. The top green box on the right side shows how many grams the cage has already received and the bottom one shows how large a portion the cage is set to get.
h. The top 2 blue boxes show the next cage in the feeding order and the 2 red boxes show the previous cage.
i. When the feed trolley is in motion, the cage numbers will change according to the learned/measured distances.
j. If the full amount of feed is not fed, a marking will appear next to the cage and it is not possible to feed the full portion again, unless you press the top green field on the right side, then the system will set the portion to 0 and feeding the cage can be done again.
k. If a fishbone gets stuck in the pump, you can change the 0123 switch to 2 and chastise the feed pump and then set the switch to 1 to manually feed the cage. Switch to 3 again to use the automatic.

8. Individual feeding
   a. Read carefully Section 8.a and see Figure 1. The blue button at the bottom left (Change animals) is used, among other things, to change the number of animals in each cage. The change you make by pressing the button takes effect on the cage you are placed next to (Green center field). Here it is possible to detect empty cages, or to move an animal, or to register a dead animal
   b. If you want to do follow-up / feed after, this is done by going to the main menu and pressing the following 2 buttons . Drive into the row and let the barcode reader read the barcode card.

c. Figure2



d. The blue button on the right side (Align) Can be used to change the follow-up/post-feeding values. If the value "portion size" is set to e.g. 5000g, the system will start feeding the pump when the feed pedal/switsen is activated and stop when the pedal/switsen is released. This manually determines the amount of the cage gets. The system remembers which cage the feed pedal/switsen was activated next to and the main meal for given cages is increased by 5%.

e. A marking will appear on the cages you mark with feed pedals/switsen. The decision to increase the amount can be reset by clicking on the green box to the right, where the main meal's portion size is also indicated.

9. Portioning on time

a. Go to the main menu and press the following button  . In the menu you can insert a portion and a time. If activated the feed pedal/switsen the system will start feeding the pump and stop it again when the entered amount is fed. Then the time starts and after the end of the break the feed pump starts again.

10. Farm management menus

a. Go to main menu and press the following 2 buttons  . The control buttons can regulate the entire farm or if you press a hall, the hall can be regulated. When regulating, a choice is made to regulate (add, subtract) or to "set" a fixed portion. By fixed portion, you can put in the animals in every other cage or in all cages. Here you can also decide that parts of a row should be different one, a whole row.

b. Go to main menu and press the following 2 buttons  . In the menu you can monitor your death registration and you can remove the different curves by pressing the round button on the right side with the corresponding color.

c. Go to main menu and press the following 2 buttons  . In the Menu you can monitor your feed consumption.

11. Related menus
    a. Setup Servings. Go to main menu and press the following 3 buttons  . Here you can divide the main meal into up to 3 feedings. Remember that follow-up/after feeding can be done as often as you wish.
    b. Set Lapels/Ramp Up. Go to main menu and press the following 3 buttons  . Here you can put up feed lapel / ramp. If the values are all 0, the feed reverse is turned off. The size of the values must be determined based on the viscosity of the feed
    c. Minimum and maximum serving. Go to main menu and press the following 3 buttons  .
    d. Service mode. Go to main menu and press the following 3 buttons  . Here all inputs and outputs to the machine are represented. If the system troubleshoots, use this menu.