

ADJUSTMENT AND INSTRUCTIONS FOR THE DPA SENSOR BOX

DPA by speed sensor for T15, T17, T18 and T20.

Before using your control box with sensor, please calculate the flow rate by referring to the settings table for your machine.

1. Thanks to the graduated potentiometer, set the flow rate of your machine, as indicated on the setting table.

2. Install your sensor on a rotating element and switch on your machine, sowing and ventilation ON and start seeding.

3. After adjusting your flow rate on the graduation, start sowing until you reach your desired working speed, press the memorised speed switch (just one press). You are now programmed in DPA. The red light will stop flashing and the green light will come on.

4. The “amorçage” switch is used to turn the seeding rotor without moving it forward (this is useful for seeding field corners).



The red light comes on if your DPA is deprogrammed or if you are stopped with the tractor.



POSITIONING THE SENSOR ON THE SOIL-WORKING WHEEL :

The sensor supplied with the control box must be positioned on a wheel with at least one metal stud (screw, etc.) allowing the forward speed of the tool to be calculated. It must be installed at least 5 mm from its metal stud and at most 1 cm from it.

RECOMMENDATIONS FOR USE :

The flow rate is set manually at the start. There are 2 solutions for calculating your flow rate in kg/hour.

- You can do a weighing in 1 minute and obtain grams/minute then convert into kg/hour to obtain your flow rate (weighing is done using a big bag). To do your weighing, press the “amorçage” switch for 1 minute (this switch allows you to turn the seeding rotor without moving forward).
Once you have your flow rate in kg/hour, look on the settings table for the flow rate that is closest to your result (the settings tables are inside the seed drill manual or on the Excel document). The number opposite the chosen flow rate in kg/hour gives you the setting number on which to position the graduated potentiometer on the control box.
- Or you can calculate the flow rate based on your data (working width x speed x dose/hectare). To calculate the flow rate simply, we have an Excel table which calculates the flow rate automatically and gives you the result depending on your speed. On the Excel table, you need to click on the sheet corresponding to the model of your seed drill and follow the steps for using it. The first table at the top left is used to enter your data (width/speed/dose) and give you the result of the flow rate obtained in kg/hour. The second table below indicates the setting number to be used on the control box and gives you the numbers for each rotor. The choice of rotor is made using the “seeder document” (*the seeder is a document that suggests the type of rotor to use depending on the seed and seeder*). Finally, using the results obtained, choose the setting closest to your flow rate.

Once you have the position of your setting, simply turn the switch manually to the number. Then you install your sensor on a rotating element and switch on the seeder, activate seeding and ventilation (press ON) and start seeding (as indicated in step 2).

Sow until you reach your desired working speed, then press the memorised speed switch (just one press). The red light will stop and the green light will come on, flashing and then fixed, indicating that the DPA is operating and programmed. At this point, if you speed up or slow down, the flow rate will adapt; it is proportional to the forward speed.

ADDITIONAL INFORMATION :

- **Memorised speed:** The speed will always remain memorised on the DPA box even if you disconnect it from the tractor. The speed will always remain memorised unless the "memorised speed" switch is pressed again.
- **“Amorçage” :** The amorçage switch allows you to turn the seeding rotor without moving forward, which is useful for stopping distribution in the corners of the field or for weighing. As soon as you release the switch, the DPA starts to operate normally.
- **Switches:** The seeding and ventilation switches are toggle switches (ON/OFF) and the memorised speed and “amorçage” switches are pushbutton switches. The dimmer switch is a potentiometer allowing you to adjust your flow rate.
- **Red light:** The red light comes on when the tractor is stopped or when the DPA is not programmed. This does not mean that your motor is faulty, it indicates that the motor is at a standstill because the tractor has stopped.
- **Lift cut-off:** With the DPA sensor you have automatic cut-off if your sensor is positioned on the tool. When you lift the tool at the end of the field, the sensor gradually stops turning and distribution stops automatically. If you can't place the sensor on the tool, you can use the lift cut-off option to cut off the distribution.
- **Settings tables :**

There are 3 different motors for our seed drills giving 3 setting tables.

- The 40/60 rpm motor is the standard motor fitted as standard on all seed drills.
- The 15 rpm motor is specifically for seed drills fitted with slow motors on request.
- The 150 rpm motor is specifically for seed drills fitted with high-speed motors on request.

EXAMPLE :

Example using a standard T18 seed drill with 40-turn motors

You want to sow micro-pellets at 4 km/h, with a working width of 4.80 meters and a dose per hectare of 10kg. Your flow rate is 19.2 kg/h. For micro-pellets, we use the green groove, so choose the setting number from the table for the corresponding groove. Choose the nearest setting number, so position 10 or 11. Turn the graduated wheel on the control box to number 10 or 11.

For the best use of this equipment, please follow these recommendations. The DELIMBE team would like to thank you for your trust.