



**Translation of the
original operating manual**

1.2

Read carefully before initial operation!

Version: 12/2018, V.1.2.1



Order no.: 00601-3-135

It may NOT

seem inconvenient and unnecessary to read and observe the operating instructions. It is not enough to hear and see from others that an implement is good, and then to buy it and believe that everything takes care of itself. The person concerned would then not only cause damage to himself, but also make the mistake of assuming that the cause of any problems is due to the implement, instead of himself. To ensure success, one has to go into the spirit of things, and instruct oneself about the purpose of all equipment on the implement and gain experience with its handling. Only then can one be satisfied both with the implement and oneself. These operating instructions aim to achieve this.

Leipzig-Plagwitz 1872

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1 Warranty

Please check the implement for any transport damage immediately upon receipt. Later claims regarding transport damage can no longer be considered.

We provide a one-year factory warranty as of the date of delivery (your invoice or the delivery slip serve as a warranty certificate).

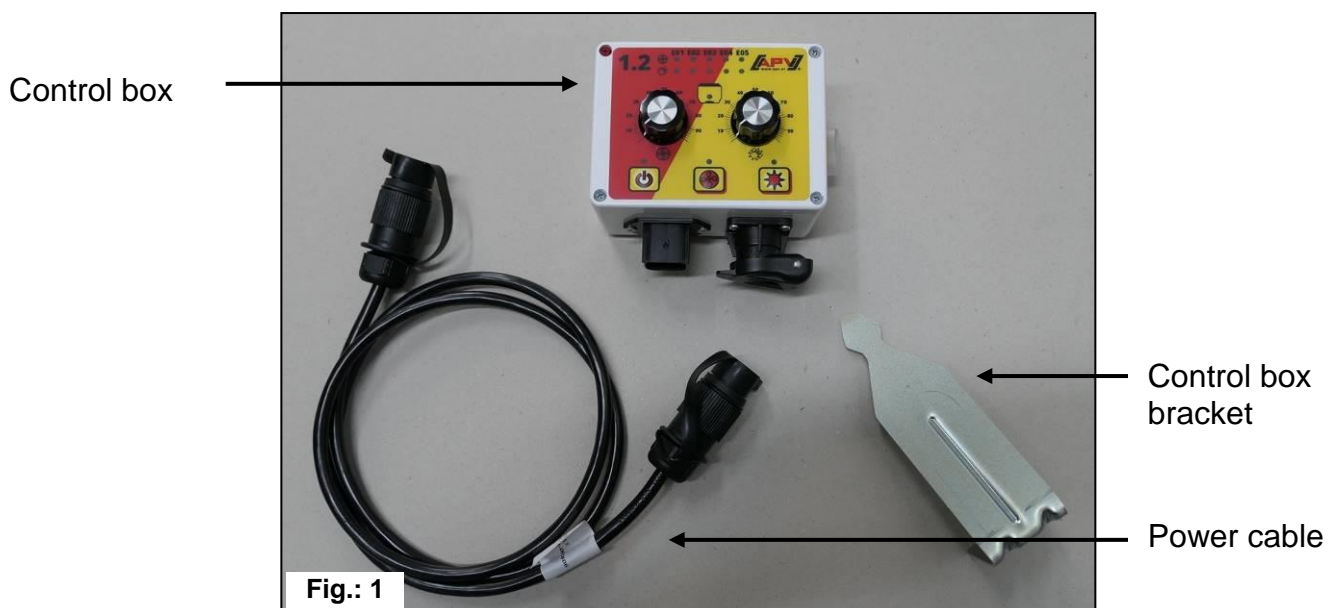
This warranty is applicable for cases of material or construction faults and does not include parts that are damaged by normal or excessive wear.

The warranty expires

- if damage is caused by external forces (e.g. opening of the controller),
- if the control box is opened,
- in cases of operating errors,
- if the prescribed requirements are not met,
- if the implement is modified, expanded or equipped with third-party spare parts without our permission.

2 Quick start

2.1 Scope of delivery and attachment



Fasten the standard supplied bracket with two bolts in the tractor cab.



TIP: Pay attention to the angle at which you look at the control module, to be able to read the display optimally. If necessary, bend the bracket slightly to adjust the angle as required.



CAUTION: if possible, do **not** roll up the cable into a coil!

2.2 Electrical connection



Fig.: 2

The standard supplied cable can be directly connected to the 3-pin standard socket of the tractor in the cab. The other end is connected to the control box.

The fuse (25 A) is located on the right side of the control box.

Stow the excess cable in the driver's cab to avoid pinching.



TIP: If your tractor does not have a standard socket, it can be fully retrofitted with the complete cable set for power socket, tractor retrofitting, 8-m long (item no. 00410-2-022) (accessory).



IMPORTANT INFORMATION:

The 12 volt power supply must NOT be connected to the socket for the cigarette lighter!



CAUTION: If these instructions are not observed, damage may be caused to the control box!



CAUTION: If your battery is charged by a charger that is in "Start" operating mode, there can be voltage peaks! These can cause damage to the electrical system of the control box if it is also connected when the battery is being charged!



Fig.: 3

1 2 3

1	6-pin connector: connection to the seed drill (implement cable)
2	3-pin connector: connection to the battery (power cable)
3	25 A fuse

2.3 User interface of the control box



Fig.: 4

No.	Meaning / use
1	Display LEDs: display error messages, software version and settings
2	Adjust the speed of the blower fan or spreading plate
3	Lights up when the control box is switched on
4	On/off button ("on/off"): switches the implement on and off.
5	Lights up when the blower fan or the spreading plate is switched on.
6	Blower fan button : turns the blower fan or spreading plate on or off. (Not possible with hydraulic fan!)
7	Seeding shaft button : turns the seeding shaft on or off. When pressing the seeding shaft button, the seeding shaft starts rotating and the control lamp lights up.
8	Lights up when the seeding shaft is switched on The LED flashes when 0 is set as the speed on the rotary knob and the motor is switched on.
9	Adjust the speed of the seeding shaft
10	Lights up when there is no more seed in front of the fill level sensor.

2.4 Starting up the implement

After switching on the implement with the on/off button, the control lamp above the button lights up. This shows that the supply voltage is available.

As long as the on/off button is held, the software version is displayed. E01 =Software 1.1; E02= Software 1.2. This may be necessary in case of customer service.

You can now use the rotary knob on the left to adjust the speed of the blower fan / spreading plate. The rotary knob on the right is used to adjust the speed of the seeding shaft.

When you press the blower fan button, the fan motor (or the spreading plate on the MDD) will start running.

As soon as you press the seeding shaft button, the seeding shaft starts rotating at the set speed and you can start seeding.

2.5 Operation on the field

To begin sowing, press the seeding shaft button.

1st Stage: the LED control lamp beside the blower fan button flashes (the blower fan motor or spreading plate is starting up).

2nd Stage: after a few seconds, the LED control lamp beside the blower fan button lights up (blower fan motor is running).

3rd Stage: when the green LED control lamp beside the seeding shaft button lights up, the gear motor that turns the seeding shaft and conveys the seed is switched on.

When you are turning at the headlands, you only have to press the seeding shaft button so that the green LED control lamp is turned off. This stops the seeding shaft and only the fan motor is still running.

When finishing work, press the on/off button on the control box to switch off the fan motor and the seeding shaft. The LEDs are turned off and the control box is switched off.

2.6 Calibration test

First determine the required speed for the seeding shaft based on the calibration table (this can be found in the operating manual for the spreader).

The calibration test is started by pressing and holding the seeding shaft button for 3 seconds. The implement beeps once.



PLEASE NOTE: Always ensure that the blower fan is switched off before starting the calibration test.

After starting, the seeding shaft begins rotating without the fan motor for exactly one minute.

The calibration test can be terminated at any time by pressing the seeding shaft button or the on/off button on the control box.

If necessary, correct the seeding shaft speed and repeat the procedure.



TIP: refer to the respective operating manual of the seed drill to find out how to prepare the seed drill for the calibration test.

2.7 Emptying the hopper

You can begin draining the hopper by pressing and holding the seeding shaft button for 6 seconds when the seeding shaft is powered off. After 3 seconds, the calibration test begins (1 short beep). By pressing and holding the button for an additional 3 seconds, the module switches to drain mode - the seeding shaft turns at full speed (short beep 2 times)

You can stop a running function at any time by pressing the blower fan button or on/off button.

2.8 Spreading disc speed chart

This table shows you the spreading disc speed depending on your control box's setting:

Setting 1.2	"MDD" motor speed	"UD" motor speed
2	100	50
10	300	150
20	600	300
30	900	450
40	1300	650
50	1600	800
60	1900	950
70	2250	1100
80	2600	1300
90	2800	1400
max.	3000	1500

2.9 Automatic implement shut-off







When the control box is switched on and no button is pressed and the seeding shaft is not switched on within 1.5 hours, the control box is switched off automatically.

3 Status messages and possible solutions

3.1 Controller messages

Error messages must be acknowledged with the on/off button and the spreader is then switched off.

The following error messages can be displayed:

Display	Cause	Solutions
E01 	Indicates that the gear motor for the seeding shaft is not connected.	Check the cables and plugs for faults or damage.
E02 	Is displayed when the seeding shaft cannot rotate or when the motor is strained for too long at its limits.	Turn off the implement and check if solid substances or similar prevent the seeding shaft or agitator from turning or impede their operation.
E03 	Is displayed when the motor (seeding shaft) is connected and not overloaded, but is still blocked.	Check if there is something blocking the seeding shaft. If this is not the cause of the problem, please contact Customer Service.
E01 	Indicates that the blower fan motor / spreading plate motor is not connected.	Check the programming (see Point 7) and the cabling or plug.
E02 	Indicates that the blower fan motor / spreading plate motor cannot rotate or that the blower fan motor / spreading plate motor is being strained for too long at its limits.	Turn off the implement and check if objects are blocking the blower fan / spreading plate or impeding their operation.
E03 	Is displayed when the motor (fan or spreading plate) is connected and not overloaded, but still does not rotate. For hydraulic fan with pressure switch or pressure sensor: the fan is not running or is not sending a signal to the pressure switch/speed sensor.	For hydraulic fan: Switch on the hydraulic fan. Please contact customer service.
E04	Is displayed when the operating voltage is too low.	Reduce the consumers, check battery; check cabling, check alternator



CAUTION: If your battery is charged by a charger that is in "Start" operating mode, there can be voltage peaks! These can cause damage to the electrical system of the control box if it is also connected when the battery is being charged!

3.2 Assistance in the event of problems

Problems:

Possible remedy:

No display after pressing the on/off button.	<ul style="list-style-type: none"> • Check whether the power cable is properly inserted into the control box and is also connected to the correct terminals on the battery. • CAUTION: Faulty connection or removal of the flying fuse on the positive terminal of the power cable can result in damage to the control box!
Hydraulic fan is running, E03 is still lit.	<ul style="list-style-type: none"> • Is there no pressure switch installed? Programming, see point 7.

4 Cleaning

Use a dry cloth to clean the control box.

Do not use any aggressive solvent! This may damage the implement.

5 Decommissioning, storage and disposal

5.1 Decommissioning the implement

Switch off the control box using the on/off button. Disconnect the control box from the power supply after use.

5.2 Storage

The control box must be stored in a dry location protected from weather conditions.

5.3 Disposal

Disposal of the implement must be performed according to the local disposal regulations for machines.

6 Accessories

6.1 Tractor cable set (Item no.: 00410-2-022)



Cable length: 8 m

Connection diagram:

Red (6 mm ² cable)	=	12 Volt
Red (1.5 mm ² cable)	=	Ignition plus
Black (6 mm ² cable)	=	Ground

For the power supply to the control box, without a standard 3-pin standard socket on the tractor, a retrofit kit is available as an accessory.

The cable is 8 m long.

It is screwed directly on the terminals of the battery on the battery side, and at the other end, a 3-pin standard socket is installed.

7 Programming menu

7.1 Blower fan / spreading plate

In this menu, you can configure if a hydraulic or PTO shaft-powered fan is set up in lieu of an electric fan or if an MDG or MDD spreader is being operated.

Perform the following actions to open the programming menu for the blower fan / spreading plate:

- Press and hold the on/off button and briefly press the blower fan button at the same time (see Fig.: 6).
- When pressing the blower fan button repeatedly, the menu points switch from E01 through E05.
- By pressing the on/off button or the seeding shaft button, the selection is confirmed.



Fig.: 6

E01	Electric fan (standard configuration)
E02	Hydraulic fan with pressure switch
E03	Spreading plate (MDD/UD)
E04	Hydraulic fan with fan speed sensor (monitoring function - no display / control)
E05	Hydraulic fan without pressure switch (OFF) or no fan (MDG)

7.2 Seeding shaft motor

In this menu, you can specify the type of motor that is installed in the spreader.

Perform the following actions to open the programming menu for the blower fan / spreading plate:

- Press and hold the on/off button and briefly press the seeding shaft button at the same time (see Fig.: 7).
- Repeatedly pressing the seeding shaft button switches between settings E01 (P8 gear motor) or E02 (P17 gear motor).



Fig.: 7

E01:	P8 gear motor (standard setting) for pneumatic seed drills PS 120-500 for multi-metering systems (MDG, MDP, MDD, MDC)
E02:	P17 gear motor: for pneumatic seed drills PS800, PS1200 and PS1600 for universal metering unit series (UD)

- The setting is saved using the on/off button or the blower fan button.

Notes

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Notes

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