

DAC basic/classic Service Instructions

*Software version: B03.0
or later*

IMPORTANT
READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

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1 About these instructions

These instructions for the **DAC basic/classic** control were compiled with the utmost care. They contain information and notes to enable long-term and reliable operation.

Should you notice any discrepancies or if you have improvement requests, we would be glad to receive your feedback through Customer service ( S. 45).

Consider these instructions part of the product and keep it on hand at all times.

1.1 Target group of these instructions

These instructions are intended for:

- Technicians:
This group has the appropriate technical training for performing maintenance or repairing malfunctions.

Instructions for use are supplied separately.

With regard to minimum qualification and other requirements to be met by personnel, please also follow chapter *Safety* ( S. 7).

1.2 Representation conventions – symbols and characters

Various information in these instruction is represented or highlighted by the following characters in order to facilitate easy and quick understanding:



Proper setting

Indicates proper setting.



Malfunctions

Specifies the faults that can occur due to an incorrect setting.



Cover

Specifies which covers have to be removed in order to access the components to be set.

**Steps to be performed when operating the machine (sewing and equipping)****Steps to be performed for service, maintenance, and installation****Steps to be performed via the software control panel**

The individual steps are numbered:

1. 1. First step
 2. 2. Second step
- etc. The sequence of the steps must always be followed.
- Lists are identified by bullet points.

**Result of performing an operation**

Change to the machine or on the display/control panel.

**Important**

Special attention must be paid to this point when performing a step.

**Information**

Additional information, e.g. on alternative operating options.

**Order**

Specifies the work to be performed before or after a setting.

References

Reference to another section in the instructions.

Safety

Important warnings for the machine operator are specially designated. Since safety is of particular importance, hazard symbols, levels of danger and their signal words are described separately in the chapter *Safety* ( S. 7).

Orientation If the figure is unclear, indications of **right** or **left** are always from the operator's point of view.

1.3 Other documents

The control includes components from other manufacturers. Each manufacturer has performed a hazard assessment for these purchased parts and confirmed their design compliance with applicable European and national regulations. The proper use of these components is described in each manufacturer's instructions.

1.4 Liability

All information in these instructions were compiled with consideration to the state of the art, and applicable standards and regulations.

Dürkopp Adler cannot be held liable for damages resulting from:

- Breakage and transport damages
- Failure to follow the instructions provided
- Improper use
- Unauthorized modifications to the control
- Use of untrained personnel
- Use of unapproved replacement parts

Transport

Dürkopp Adler will not be held liable for any damage during transport. Inspect the delivery immediately upon receiving it. Report any damage to the last transport manager. This applies even if the packaging is undamaged.

Leave controllers, equipment and packaging material in the condition in which they were found when the damage was discovered. This will ensure any claims against the transport company.

Report all other complaints to Dürkopp Adler immediately after receiving the product.

2 Safety

This chapter contains basic information for your safety. Read the instructions carefully before setting up or operating the control. Make sure to follow the information included in this chapter. Failure to do so can result in serious injury and damage to the machine.



2.1 Basic safety instructions

The **DAC basic/classic** control may only be used as described in these instructions.

The instructions should be available at the control's location at all times.

Work on live components is prohibited.

The control was built and tested in compliance with all valid ordinance and safety regulations, and left the factory in proper working order.

The control will only work safely and reliably when the control is used as intended.

Before leaving the workplace:

- Switch off the control
- Wait until the machine stops
- Wait until the LEDs go out

Obligations of the operator

Observe the country-specific safety and accident prevention regulations and the legal regulations concerning industrial safety and the protection of the environment.

All warnings and safety signs on the control must always be in legible condition and may not be removed. Missing or damaged labels should be replaced immediately.

Requirements to be met by the personnel

The control may only be set up by qualified technicians. Qualified technicians are personnel with electronics and mechanical training.

The following work may only be performed by qualified technicians.

- Maintenance work
- Repairs
- Work on electrical equipment

Only authorized persons may work on the machine. Anyone working on the machine belongs to the operating personnel. Operating personnel must have read and understand the manual before working on the system.

Setup Control setup and start-up must be performed carefully by qualified technicians to ensure no health risks for operating personnel.

The power cable must have a plug authorized for the country in which the machine is being used. The power plug may only be connected to the power cable by a qualified specialist.

Operation Inspect the control while in use for any externally visible damage. Stop working if you notice any changes. Report any changes to your supervisor.

A damaged control should no longer be used.

Conversions or changes to the control are prohibited.

2.2 Signal words and symbols used in warnings

Warnings in the text are distinguished by color bars. The color scheme is oriented towards the severity of the danger. Signal words indicate the degree of risk:

Signal words Signal words and the hazard that they describe:

Signal word	Hazard
WARNING	Performing an action can have serious or hazardous consequences.
CAUTION	Performing an action can have undesirable consequences, such as loss of data or damage to hardware.
NOTE	Tips or more detailed information to make operation easier for the user.

Symbols The following symbols indicate the type of risk to personnel:

Symbol	Type of danger
	General risk
	Electric shock
	Puncturing
	Crushing
	Environmental damage

Examples Examples of the layout of the warnings in the text:

WARNING



Type and source of risk!

Consequences of non-compliance.

Measures for avoiding the risk.

- ↪ This is what a warning looks like where non-compliance could result in serious or hazardous consequences.

CAUTION



Type and source of risk!

Consequences of non-compliance.

Measures for avoiding the risk.

- ↪ This is what a warning looks like where non-compliance could result in undesirable consequences, such as loss of data or damage to hardware.

NOTE

Tip.

- ↪ This is the more detailed information to simplify operation for the user.

3 Individual settings

Every machine requires that you complete the specific settings described below.

3.1 Initial start-up

Before starting up the control for the first time, be sure to read chapter  2 *Safety*, S. 7.

CAUTION



Overload from faulty connection!

Possible hardware damage.

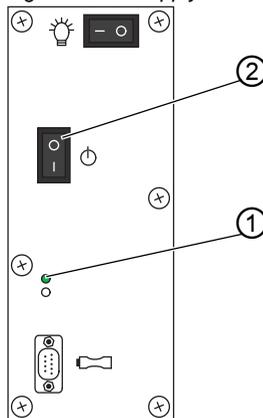
If connecting additional devices or equipment to the control, operate them at low voltage only.

You need to ensure correct parameters for the:

- Selection of the machine class
- Position settings

3.2 Switching on the control

Fig. 1: Power supply



(1) - POWER-LED

(2) - Main switch

To switch on the control:



1. Press and hold buttons  and  on the control panel at the same time.
2. Press the main switch (1) down to position I.
 - ↳ The POWER LED (2) illuminates. The POWER LED on the control panel illuminates green.
3. Release buttons  and .
4. Press the A+ button.
 - ↳ The technician level has been enabled.

NOTE

The technician level will only remain enabled for as long as the control is switched on.

You can now adjust the individual settings.

3.3 Verifying the machine class

All basic functions specific to the machine have already been factory-installed on the machine ID of the machine head. For your safety, verify if the set machine class corresponds to the machine class specified on the serial tag.

To display the machine class:



1. Open parameter `t 51 04`.
2. Press .

If you find that the displayed machine class is incorrect, you need a dongle containing the current software version to alter the machine class ( 6.2 *Performing the update*, S. 36).

3.4 Positions

You need to set the following positions after setting up the machine:

- Reference position
- Position 1
- Position 2
- Indicator position
- Threading position

3.4.1 Setting the reference position

The reference position is used to align the synchronizer with the actual mechanical position.

To set the reference position:



1. Open parameter *t 08 10*.

2. Press .

↳ *Syn?*: appears on the display.

3. Turn the handwheel.

↳ *Ref. Pos?*: appears on the display.

4. Turn the handwheel in the throat plate feed direction of the needle.

5. Confirm with .

3.4.2 Setting position 1

Position 1 (bottom dead center) identifies the position where the sewing machine needle is set to its lowest position.

To set position 1:



1. Open parameter *t 08 12*.

2. Press  .
 - ↳ The LED of the  button flashes. The display shows the position set at the factory.
 3. Turn the handwheel in the throat plate feed direction of the needle until the desired position has been reached.
 4. Confirm with  .
-



Information

Apart from using the handwheel, you can also use the plus and/or minus buttons (except **A**) to set the position values.

3.4.3 Setting position 2

Position 2 (top dead center) identifies the position where the sewing machine needle is set to its highest position.

To set position 2:



1. Open parameter *t 08 13*.
2. Press  .
- ↳ The LED of the  button flashes. The display shows the position set at the factory.
3. Turn the handwheel in the throat plate feed direction of the needle until the desired position has been reached.
4. Confirm with  .

3.4.4 Setting the indicator position

The indicator position helps the operator find the ideal insertion point for the beginning of the seam.



Important

The indicator position must be the function assigned to the function button ( 4.3 *Setting up the function button*, S. 27).

To set the indicator position:



1. Open parameter $t\ 08\ 14$.

2. Press .

 The LED of the  button flashes. The display shows the position set at the factory.

3. Turn the handwheel in the throat plate feed direction of the needle until the desired position has been reached.

4. Confirm with .

3.4.5 Setting the threading position

The threading position helps the operator thread the sewing thread without starting up the machine. All machine functions will be blocked while the threader is activated.



Important

The threading position must be the function assigned to the function button ( 4.3 *Setting up the function button*, S. 27).

To set the threading position:



1. Open parameter $t\ 08\ 15$.

2. Press .

 The LED of the  button flashes. The display shows the position set at the factory.

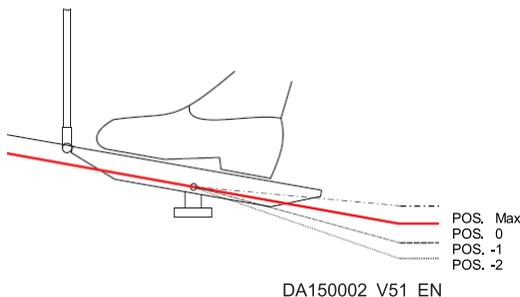
3. Turn the handwheel in the throat plate feed direction of the needle until the desired position has been reached.

4. Confirm with .

3.5 Calibrating the pedal

The next step following the installation of the setpoint device is the calibration of the pedal. The operator can also set a speed curve affecting the acceleration of the machine head. The speed curves are based on the set maximum speed, the minimum speed and the subsequent pedal positions.

Fig. 2: Pedal positions



To calibrate the pedal:



1. Open parameter $t\ 08\ 20$.

2. Press .

↳ The LED of the  button flashes. $POS\ -2?$ appears on the display.

3. Press pedal to position -2.

4. Confirm with .

↳ $POS\ -1?$ appears on the display.

5. Press pedal to position -1.

6. Confirm with .

↳ $POS\ -0?$ appears on the display.

7. Press pedal to position -0.

8. Confirm with .

↳ $POS\ Max?$ appears on the display.

9. Press pedal all the way forward.

10. Press .

↪ The display returns to parameter $t\ 08\ 20$.

You can move on to the next parameter and modify the pedal speed stages.

Modifying the pedal speed stages

You can use the pedal speed stages to specify how quickly you want the machine to achieve its maximum speed. The fewer the number of pedal speed stages you set, the faster the machine will reach its maximum speed.

To change the pedal speed stages:



1. Open parameter $t\ 08\ 21$.

2. Press .

↪ The LED of the  button flashes. The display shows the number of pedal speed stages that is currently set.

3. Press the $D+$ or $D-$ button repeatedly until the desired number appears on the display.

4. Confirm with .

You can move on to the next parameter and modify the speed curve.

Modifying the speed curve

To change the speed curve:

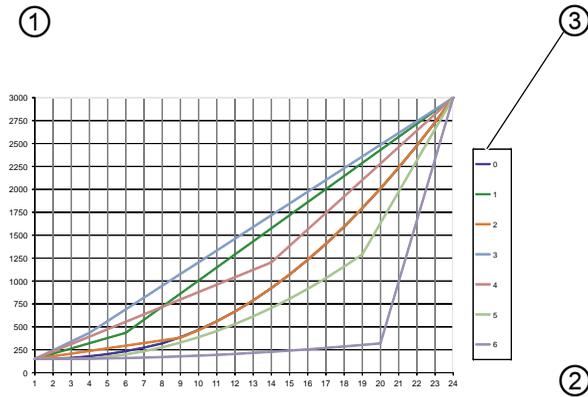


1. Open parameter $t\ 08\ 22$.

2. Press .

↪ The LED of the  button flashes. The display shows the value for the currently set speed curve:

Fig. 3: Speed curves



(1) - Speed

(3) - Speed curve

(2) - Pedal speed stage

Once the desired value has been reached:

Press the *D+* button repeatedly until the desired value appears on the display.

3. Confirm with .

If you do not need to adjust any additional settings, press  to exit parameter mode.

3.6 Switching off the control

WARNING



Risk of injury from sharp parts!

If switched on unintentionally mild injuries can occur by puncturing.

Before leaving the workplace and shutting down the machine for an extended period pull the power plug.

To switch off the control:



1. Switch off the control using the main switch.
↳ *PowerOff* appears on the display.
The POWER LED on the control panel illuminates red.
The MESSAGE LED on the control panel illuminates red as well.
The LEDs will go out afterwards.

4 Service settings via the software

The **DAC basic/classic** control is operated exclusively using the **OP1000** control panel.

The following description assumes that you are familiar with the basic functions of the machine (see  *Instructions for use*).

4.1 Advanced operation

In this section you will learn the advanced control options available for working with the control. These include:

- Switching the user level
- Enabling and disabling the button lock

4.1.1 Switching the user level

The only level activated by default is the user level. This limitation keeps you from accessing a great number of additional functions. To access these additional functions, enable the technician level.

To enable the technician level:

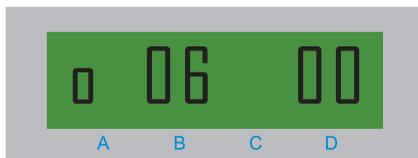


Important

The control must be switched off.

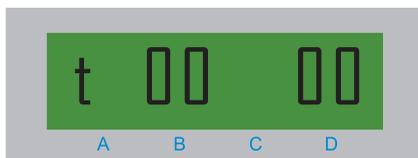


1. Press and hold buttons  and  at the same time.
2. Switch on the control using the main switch.
 - ↳ The POWER LED illuminates. The POWER LED on the control panel illuminates green.
3. Release buttons  and .
- ↳ The following appears on the display:



4. Press the $\Delta+$ button.

↳ The following appears on the display:



The technician level has been enabled.

You can adjust settings on the control panel.

4.1.2 Enabling and disabling the button lock

The button lock allows you to prevent certain groups of buttons from being used (inadvertently). This option also lets you lock the buttons controlling the start bar tack and the end bar tack.

CAUTION



Undesired operational limitations by locking the *Programming* button group!

The button lock can only be disabled by means of a software update.

Enable the button lock only after careful consideration.

Turning on the button lock for individual groups of buttons

The example below is intended to illustrate how you can turn on the button lock for a specific button group.

To lock the button group *Seam program*:



1. Press  .
- ↳ Parameter mode is started.
2. Open parameter *t 52 43*.
3. Press  .
- ↳ The LED of the  button flashes. *0* appears on the display.
4. Press the *D+* button.
- ↳ *1* appears on the display.
- ↳ Confirm your selection with  .
- ↳ The button group *Seam program* has been locked.
5. Exit parameter mode with  .
- ↳ *Ready* appears on the display.

To turn the button lock back off, go to category *52* and set parameter *43* to *0*.



Information

Refer to the  *Parameter list* if you wish to lock additional groups of buttons.

4.2 Thread settings

The following description of the settings available for the *Thread* button group assumes that you are currently in parameter mode. You can adjust the following settings:

- Darning program
- Soft start
- Sewing foot lifter
- Light barrier (if present)

4.2.1 Enabling the multiple start bar tack as a darning program

If the operating personnel are supposed to use the multiple start bar tack as a darning program, you need to enable this function accordingly.

To enable the multiple start bar tack as a darning program:



1. Open parameter $t\ 00\ 23$.
2. Press .
 - ↳ 0 appears on the display.
3. Press the $D+$ button.
 - ↳ 1 appears on the display:
4. Confirm your selection with .
 - ↳ The darning program has been enabled.

4.2.2 Activating soft start

You can set the number of stitches for which you wish to activate soft start.

To activate soft start:



1. Open parameter $t\ 05\ 01$.
2. Press .
 - ↳ The display shows the number of stitches set at the factory.
3. Press the $D+$ repeatedly until the desired number of stitches appears on the display.
4. Confirm your selection with .

4.2.3 Activating the sewing foot lifter

You can set a delay for the lifting of the sewing foot. This option also lets you adjust the holding force of the magnet used to lift the sewing foot.

Activation delay during a machine standstill

To set the activation delay during a machine standstill:



1. Open parameter $t\ 03\ 11$.
2. Press .
3. Press the $D+$ button repeatedly until the desired duration appears on the display.
4. Confirm your selection with .

You can set the activation delay applicable for the end of the seam.

Activation delay at the end of the seam

To set the activation delay for the end of the seam:



1. Open parameter $t\ 03\ 12$.
2. Press .
3. Press the $D+$ button repeatedly until the desired duration appears on the display.
4. Confirm your selection with .

This option also lets you adjust the holding force of the magnet used to lift the sewing foot.

Holding force of the magnet

The sewing foot is fully controlled and lifted by a magnet. The control will switch to partial power after a certain period to reduce the load on the magnet.

CAUTION



Magnet overload due to excessive load!

Possible hardware damage.

Observe the maximum permissible activation period of the magnet.

To change the holding force of the magnet:



1. Open parameter $t\ 03\ 51$.
2. Press .
3. Press the $D+$ button repeatedly until the desired duty cycle for the duration of period t_1 appears on the display.
A value of 100 corresponds to full power.
4. Confirm your selection with .
5. Open parameter $t\ 03\ 53$.
6. Press .
7. Press the $D+$ button repeatedly until the desired duty cycle for the duration of period t_2 appears on the display.
8. Confirm your selection with .

4.2.4 Setting the light barrier

Activating the filter for knitted fabrics

The filter for knitted fabrics keeps the light barrier from being tripped.

To activate the filter for knitted fabrics:



1. Open parameter $t\ 16\ 03$.
2. Press .
 ↳ 0 appears on the display:
3. Press the $D+$ button.
 ↳ 1 appears on the display:
4. Confirm your selection with .

4.3 Setting up the function button

You can save your favorites on the function button . What you can activate with the function button is set at the factory depending on the machine class. You can modify this setting.

The example below is intended to illustrate how you can assign a function module to the function button.

To activate function module 1:



1. Open parameter $t\ 52\ 20$.
 2. Press .
 3. Press the $D+$ button repeatedly until β appears on the display.
 4. Confirm your selection with .
- ↳ The display switches automatically to parameter $t\ 11\ 00$ ( S. 27).

Refer to the section below to learn how to define which machine functions you can execute using the function modules.

4.4 Function modules

4.4.1 Setting function module 1



1. Open parameter $t\ 11\ 00$.
2. Press .
3. Press the $D+$ button repeatedly until the desired machine function appears on the display.
4. Confirm your selection with .

4.4.2 Setting function module 2



1. Use parameter *t 11 30*.

4.4.3 Setting function module 3



1. Use parameter *t 11 60*.

4.5 Saving and loading data

You can use a dongle (see  *Instructions for use, optional equipment*) to save or load sewing data and seam programs.

4.5.1 Saving data



1. Connect a **DATA**-type dongle.
2. Open parameter *t 51 11*.
3. Press .
4. Press the *D+* button repeatedly until *1* appears on the display:
5. Confirm your selection with .
- ↳ The sewing data is stored on the dongle.
The display shows *Store* and *Pl. Wait!*.
The MESSAGE LED flashes until the process is complete.
6. Press the *D+* button repeatedly until *3* appears on the display.
7. Confirm your selection with .
- ↳ The seam programs are stored on the dongle.
The display shows *Store* and *Pl. Wait!*.
The MESSAGE LED flashes until the process is complete.

CAUTION



Storing will be canceled if dongle is removed prematurely!

Loss of data.

Do not remove the dongle until the MESSAGE LED has gone out.

8. Remove the dongle when the MESSAGE LED has gone out.

4.5.2 Loading data

1. Connect a **DATA**-type dongle.



2. Open parameter $t\ 51\ 10$.

3. Press .

4. Press the $D+$ button repeatedly until 1 appears on the display:

5. Confirm your selection with .

↳ The sewing data is loaded from the dongle.
The display shows *Load...* and *Pl. Wait!*.
The MESSAGE LED flashes until the process is complete.

6. Press the $D+$ button repeatedly until 3 appears on the display:

7. Confirm your selection with .

↳ The seam programs are loaded from the dongle.
The display shows *Load...* and *Pl. Wait!*.
The MESSAGE LED flashes until the process is complete.

8. Remove the dongle when the MESSAGE LED goes out and the parameter display comes up.

If the data stored on the dongle is unusable, you can perform a master reset, i.e. reset the control to its factory settings.

4.5.3 Performing a master reset



1. Open parameter *t 51 10*.
 2. Press  .
 3. Press the *D+* button repeatedly until *4* appears on the display:
 4. Confirm your selection with  .
- ↳ The factory settings are loaded from the machine ID.
The display shows *Load...* and *Pl. Wait!*.
The MESSAGE LED flashes until the process is complete.
5. Switch off the control when the MESSAGE LED goes out and the parameter display comes up.

5 Electrical connection

WARNING



Risk of death from live components!

Severe injuries to life and limb can occur by electric shock.

Work on the electrical equipment may only be performed by qualified technicians or personnel who have undergone the necessary training.

ALWAYS pull the power plug before working on the electrical equipment.

5.1 Connecting the power supply

Connect the control to a grounded AC voltage supply network as specified in the wiring diagram ( S. 49). Always use a multi-terminal plug with circuit breaker to make the connection.

The control can be connected to the following types of power supply networks:

- TN mains
- TT mains
- IT mains

5.2 Connecting the sewing lamp

The control offers the option of connecting sewing lamps, which can be switched on using the switch at the front (see  *Instructions for use, Components and functions*).

The following connections are available:

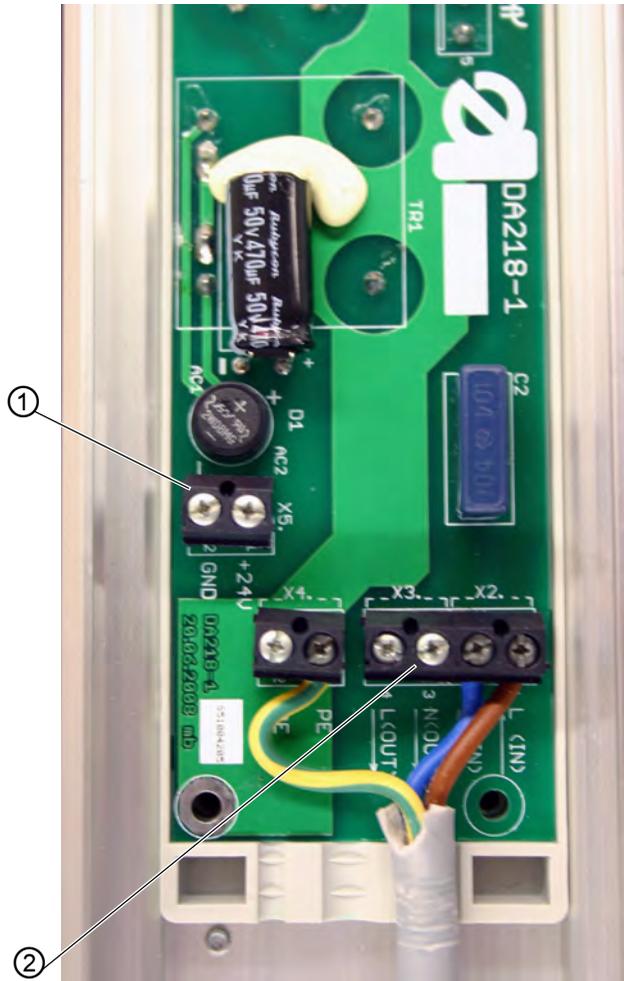
- Terminal X5 (24 V)
- Terminal X3 (230 V)
- Terminal X4 (ground wire)



Important

Terminal X5 is only intended for sewing lamps designed for specific machines by Dürkopp Adler.

Fig. 4: Connections on the control



(1) - Connection for 24 V

(2) - Connection for 230 V

5.3 Specifying the input / output functions

The input / output functions of the control are set at the factory depending on the machine class. You can modify this setting.

Specify the input / output functions of the control as specified in the wiring diagram ( S. 49) and the  *Parameter list*.

6 Software update

The software of the **DAC basic/classic** and the standard parameters of the machine can be updated.

A software update requires a dongle (see  *Instructions for use, optional equipment*) and the utility **Dongle Copy**.

This optional equipment is available for download on [Dürkopp Adler's website](#):



Observe the correct **order** when performing the software update:

1. Checking the version
2. Switching off the control
3. Performing the update

6.1 Checking the version

The control offers the option of checking the installed software version to determine if it corresponds to the latest version available.

To check the installed software version:



1. Open parameter $t\ 51\ 00$.

2. Press  .
 ↳ The control type appears on the display.
3. Press  .
 ↳ The software version appears on the display.
4. Press  .
 ↳ The software release date (YYYY,MM,DD) appears on the display.

You can now switch off the control to perform the update. Do not perform the update if the installed version is newer than the version stored on the dongle.

NOTE

You can use the utility **Dongle Copy** to find out which version is stored on the dongle.

6.2 Performing the update

CAUTION



Control malfunction if dongle is removed prematurely!

Loss of data.

Check the version of the installed software before performing the software update.



Important

Before beginning with the update, make sure that the control is switched off.



To perform a software update:

1. Connect the dongle containing the downloaded software.

2. Switch on the control.
↳ The two LEDs on the control (POWER and MESSAGE) flash. The display indicates the current progress of the update.

When the update is complete, the display will read *Default?*.

CAUTION



Control malfunction if dongle is removed prematurely!

Loss of data.

Do not remove the dongle until the control is switched off.

You can choose from the following options:

- Keep settings (recommended)
- Load default values
- Select machine class

Keeping the settings

1. Press .
2. Switch off the control.
3. Remove the dongle when the LEDs on the control's control panel have gone out.

Loading default values

1. Press .
2. Switch off the control.
3. Remove the dongle when the LEDs on the control's control panel have gone out.

Selecting the machine class



1. Select the machine class using button *A+* or *A-*.



2. Press  2 times to confirm your selection.



3. Confirm the prompt with .

↵ The display shows *Load...* and *Pl. Wait!*.

4. Switch off the control when the parameter display comes up.

5. Remove the dongle when the LEDs on the control's control panel have gone out.

7 Inspection

A hardware test allows you to determine the actual condition of the control and the corrective measures necessary, if any, for future use. You can carry out the following tests:

- Analog input
- Digital input
- Digital output

7.1 Checking the analog input

Use the analog test to check all analog inputs.

To perform a hardware test:



1. Open parameter *t 51 12*.

2. Press .

↳ *1. Analog* appears on the display.

3. Press .

4. Press the **A+** button repeatedly until the desired input appears on the display.

5. Press .

You can check additional inputs or continue with the test of the digital input.

7.2 Checking the digital input

WARNING



Risk of injury from sharp parts!

If switched on unintentionally mild injuries can occur by puncturing.

Use extreme caution when performing the input test.

Use the input test to check all digital inputs. Varying with the machine class, these inputs can be:

- Key block
- Knee lever
- Light barrier

To perform the test:



1. Open parameter *t 51 12*.
2. Press .
3. Press the *A+* button repeatedly until *2 Inputs* appears on the display.
4. Press .
- ↳ The display shows an input.
5. Press the appropriate button.
6. Press .

You can check additional inputs or continue with the test of the digital output.

7.3 Checking the digital output

CAUTION



Risk of breakage from collisions with other machine components!

Possible hardware damage.

Prior to switching on each output, check if collisions can occur.

Use the output test to check all digital outputs.

To perform the test:



1. Open parameter *t 51 12*.
2. Press  .
3. Press the *A+* button repeatedly until *3 Outputs* appears on the display.
4. Press  .
- ↳ The display shows an output.
5. Press the *A+* button repeatedly until the desired output appears on the display.
6.  Press.

A press on the *D+* button enables the output.

A press on the *D-* button disables the output.

7.4 FLASH test

During a FLASH test you can have the system display a checksum and compare this sum to the checksum listed on [Dürkopp Adler's website](#).

To perform the test:



1. Open parameter *t 51 12*.
2. Press  .
3. Press the *A+* button repeatedly until *4 Flash* appears on the display.
4. Press  .
- ↳ A checksum appears on the display.

Contact customer service if the checksums are not identical ( S. 45).

8 Disposal



Do not dispose of the control in the general household waste.

The control must be disposed of in a suitable manner in accordance with all applicable national regulations.

CAUTION



Risk of environmental damage from improper disposal!

Improper disposal of the control can result in serious environmental damage.

ALWAYS comply with the national regulations regarding disposal.

When disposing of the control, be aware that it consists of a range of different materials (steel, plastic, electronic components, etc.). Comply with the national regulations when disposing of these materials.

9 Troubleshooting

9.1 Customer service

Contact for problems, repairs, or if the control is damaged:

Dürkopp Adler AG
Potsdamer Str. 190
33719 Bielefeld, Germany
Tel: +49 (0) 180 5 383 756
Fax: +49 (0) 521 925 2594
E-Mail: service@duerkopp-adler.com
Internet: www.duerkopp-adler.com



9.2 Error messages

The **DAC basic/classic** control has 3 types of error messages displayed by the control panel.

Error table

Type	Code	Description	Remedial action
Error	Err XXXX	Serious error: Work cannot be continued	<ul style="list-style-type: none"> • Switch off the control • Contact trained technicians to correct the error
Warning	Wrn XXXX	Error Work cannot be continued	<ul style="list-style-type: none"> • Correct the state that resulted in the error
Information	Inf XXXX	Information: Work can be continued	<ul style="list-style-type: none"> • Press 

XXXX is the placeholder for the respective numerical code

A list of numerical codes can be found in the  *Parameter list*.

Contact the manufacturer if an error occurs that is not described in the  *Parameter list*. Do not attempt to correct the error yourself.

10 Technical data

The technical data will change depending on the sewing motor.

Rating and usage conditions

Data / motor type	Unit	9800 170038	9800 170040	0281 100453 (built-in motor, 281)	0867 103203 (built-in motor, M-Type)
Rating					
Voltage	[V]	190 – 250, single phase			
Frequency	[Hz]	50/60			
Power	[W]	375	600	375	400
Speed	[RPM]	6000	4000	5000	3400
Operating mode	S5 (Intermittent periodic duty with electric braking, relative duty cycle 40 %, length 2.5 s)				
IP class	IP40				
Insulation class	E				
Usage conditions					
Ambient temperature	[°C]	+ 5 – 50			

11 Appendix

Fig. 5: Wiring diagram TN mains

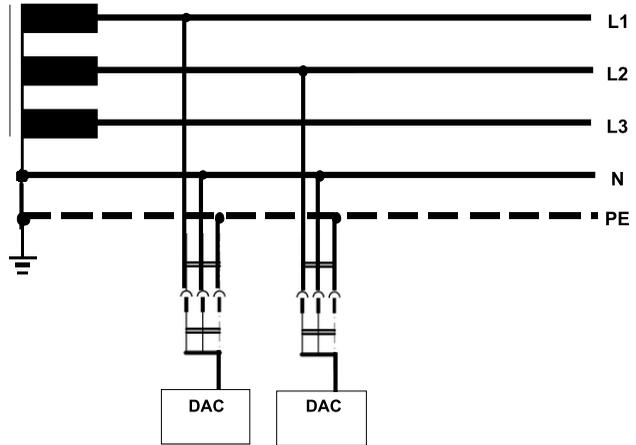


Fig. 6: Wiring diagram TT mains

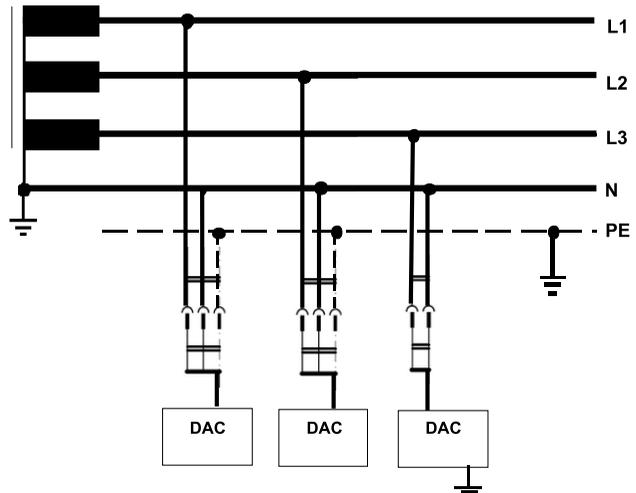


Fig. 7: Wiring diagram IT mains

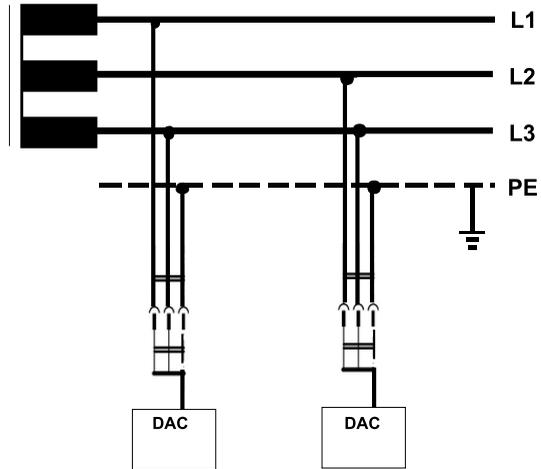
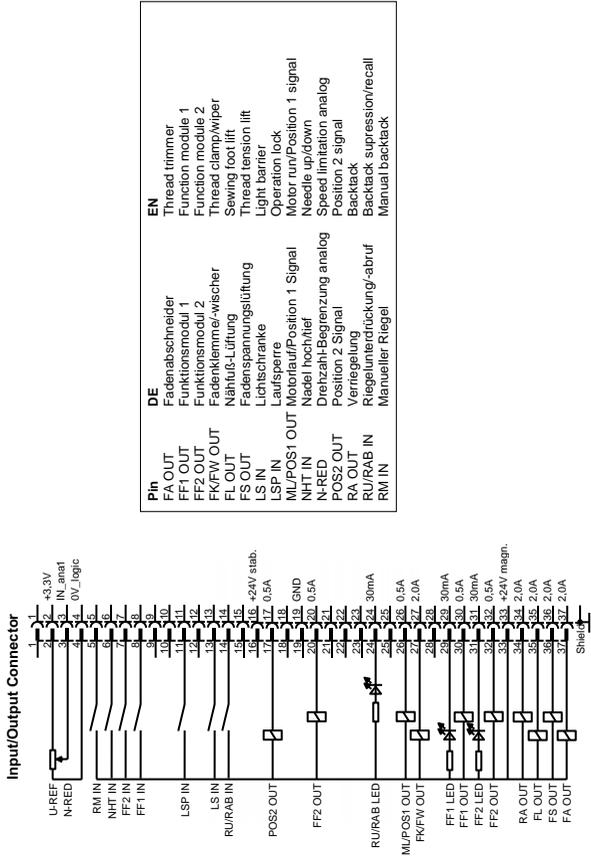


Fig. 8: Wiring diagram DAC basic

Anschlussplan DAC basic | Wiring diagram DAC basic

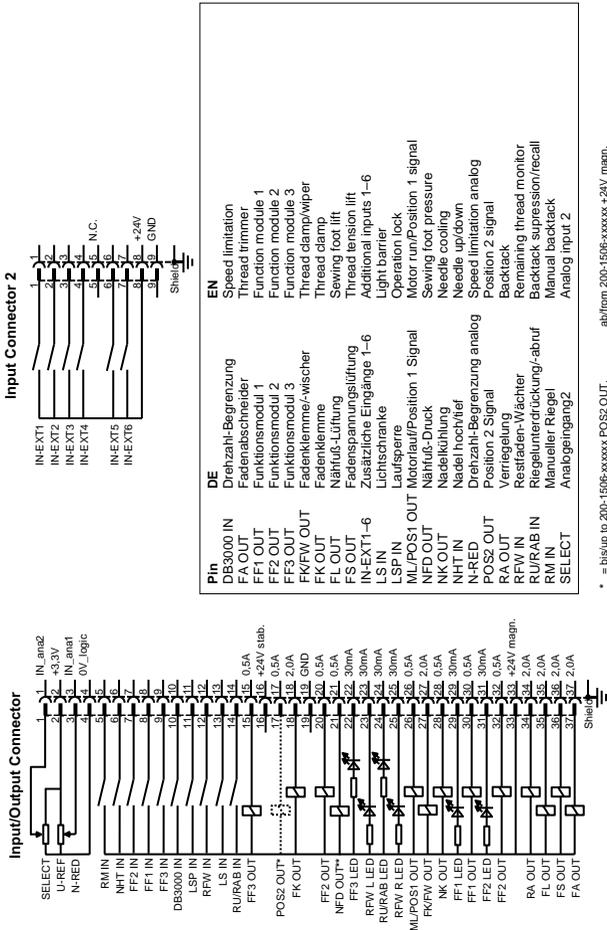


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Fig. 9: Wiring diagram DAC classic

Anschlussplan DAC classic | Wiring diagram DAC classic



* = bis/up to 200-1506-xxxxx POSZ OUT, ab/from 200-1506-xxxxx +24V magn.
 ** = bis/up to 200-1506-xxxxx NFD OUT, ab/from 200-1506-xxxxx POSZ OUT

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