

FUTURA S Service Manual

The JABLOTRON FUTURA S unit service manual is intended for distributors and installation partners of JABLOTRON LIVING TECHNOLOGY CZ s.r.o.

The manual applies to FUTURA S





Version 1.0 EN

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Symbol used in the manual

Please pay close attention to the symbols used and, for your safety and the proper operation of the ventilation unit, follow the instructions given for each symbol.

Symbol	Meaning
	IMPORTANT
	WARNING, DANGER!
	WARNING, ELECTRICAL EQUIPMENT!
	DANGER, CAUTION? RISK OF HAND INJURY.

Recommended equipment

1. Connect LITE – web application (www.jablonet.net) for remote management and monitoring. For full control of the unit, we recommend asking the owner to increase the permissions. See the menu “Device settings – Service technician access” to change to “ALL” in the MyJABLOTRON application (Warning – this is not a sharing setting).
2. Phillips screwdriver
3. Flat screwdriver
4. Dry cloth
5. Vacuum cleaner
6. Multimeter
7. Airtight tape
8. Anemometer

Functionality check

1. Visually inspect the unit and the installation location. Check that there has been no unauthorized intervention in the unit (removed cover, disconnected cables, etc.). Record any interference, damage, or dirt.
2. Before continuing, check that the unit does not report any warnings or errors and eliminate any problems.
3. Check that all ventilation power levels of the unit (0, 1, 2, 3, 4, 5, A) are controlled using the connected controller. Record any unusual symptoms (increased noise, etc.).

Filter check

1. Check the date of filter replacement and the percentage of clogging. (Connect LITE).
2. In the event that the filters are quickly clogged, inform the owner of the possible causes and how to prevent them. The most common cause is the use of humidifiers with tap water, which can cause clogging very quickly, for example after two weeks. When using humidifiers, we recommend using distilled or demineralized water.
3. Turn off the unit and check the presence of filters (visually) after stopping the fans.
4. If necessary, install new filters at the end of the service inspection to prevent them from becoming dirty during further service activities. Confirm the installation of new filters by pressing the button.



Note: The exhaust filter (right) is usually more clogged with fine dust from the interior and causes a higher pressure drop. The result may be higher unit consumption, higher fan speeds to overcome the pressure drop and increased noise.

Heat exchanger check

Check and clean the heat exchanger.



Only authorized person may intervene in the electrical installation. Strictly follow local legal requirements.

1. Remove the cover (crosshead screwdriver)
2. Remove all four metal sheet connectors to unmount EPP body parts.
3. Release and remove middle section with heat exchanger
4. Inspect the exchanger visually and record any contamination
5. Remove any dirt and dust with a vacuum cleaner
6. Once every two years, or in case of contamination, rinse the exchanger with warm soapy water without any aggressive or corrosive agents. Let the exchanger drain and dry.
7. Reassemble the unit body and secure the middle section using the sheet metal connectors.



Figure 1 - Metal sheet connector

Electrical installation check



Only authorized person may intervene in the electrical installation. Strictly follow local legal requirements.

1. Switch off the power supply to the unit
2. Check and tighten the power supply and bus terminals (cross and flat screwdriver) if necessary
3. Switch on the power supply to the unit and check the 24 VDC supply voltage on the power supply. If necessary, adjust the voltage (by turning the trimmer) so that the output is 24 ± 0.2 VDC (multimeter).
4. Check that all peripherals are connected. Check their correct function
 - a. Boost buttons – check whether the ventilation capacity is increased (Connect LITE)
 - b. Overpressure button – check whether the supply fan capacity has been increased (Connect LITE)
 - c. VarioBreeze flaps – when the ventilation is switched off (0 = Standby), all flaps are closed. Use a strong lamp (you can use a mobile phone, for example) to shine through the individual flap and check their correct function.
 - d. VarioBreeze buttons – press the buttons one by one to check whether the Boost function is activated (Connect LITE)
5. If some devices are not connected or not communicating, check the supply voltage on the communication bus (24 VDC x GND) (multimeter). The communication bus voltage (A x GND, B x GDN) ranges between 2 – 2.5 VDC. If a short circuit occurs, the protective varistors of the VarioBreeze flap or button are most often damaged and check for a possible short circuit according to the following procedure.
 - a. Disconnect the communication bus
 - b. Use a multimeter to “beep” A x GND on the device terminal block
 - c. Use a multimeter to “beep” B x GND on the device terminal block
 - d. If it beeps, the varistor is damaged and needs to be replaced
6. Install the cover

Air duct check

1. Check the facade box and remove any dirt (visually)
2. Check the connection and tightness of the supply and exhaust pipes (EPP)
3. Check the connection and tightness of the silencers between the unit and the distribution box
4. Check the connection and tightness of the flexi pipes to the distribution boxes and dampers (mechanical or VarioBreeze)
5. Cover any leaks with airtight tape



Figure 2 - Air leakage

Air flow regulation

If you suspect poor ventilation, it is advisable to check the correct ventilation settings. The amount of supply and extract air must be balanced to ensure high heat recovery efficiency.

1. Check the amount of supply and extract air and adjust the ventilation balance by regulating the supply fan (Connect LITE)
2. Check the position of the mechanical dampers.
3. Check the cleanliness and opening of the distribution elements (nozzles, etc.).
4. If necessary, adjust the power settings according to customer requirements (anemometer, Connect LITE).



Note: In the case of major interventions in the air conditioning system, we recommend performing a complete analysis of the distribution with new filters.

Ventilation settings

Level	Airflow	Supply balance
1.	110 m ³ /h	0 %
2.	180 m ³ /h	0 %
3.	195 m ³ /h	0 %
4.	230 m ³ /h	0 %
5.	305 m ³ /h	1 %

Figure 3 - Supply fan balancing

End of service inspection

1. Inform the owner of any defects found and fixed
2. Replace filters if necessary.
3. Give the completed Service record to the owner and keep a copy.
4. Enter the date of the Service inspection in Connect LITE.

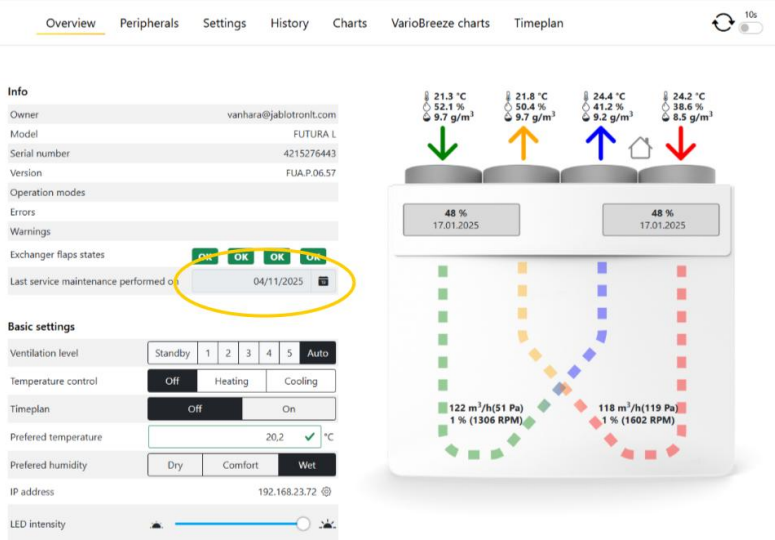


Figure 4 - Service inspection date

SERVICE RECORD – TEMPLATE

FUTURA		
Unit serial number (eg. 40031140000000)		
PCB serial number (eg. 4215278000)		
SERVICE COMPANY		
Service company name		
Name and Surname of the servicing person		
Date of service		
SERVICE RECORD		
<input checked="" type="checkbox"/>	Control action	Poznámka
<input type="checkbox"/>	Functionality check	
<input type="checkbox"/>	Filter check	
<input type="checkbox"/>	Heat exchanger check	
<input type="checkbox"/>	Electrical installation check	
<input type="checkbox"/>	Air duct check	
<input type="checkbox"/>	Air flow regulation (optional)	
<input type="checkbox"/>	End of service inspection	
Date and signature of the inspector		
Date and signature of the person taking over		