Initial start-up of the KIPI pellet burner

1. Assembly the burner acc. to the instruction of the burner (see Para. 5 Assembly)

2. Connection of the set

- Check the connection of all wires and cables
- Check the correct positioning of the feeder relative to the pellet box, the optimum setting is the angle of inclination of the feeder relative to the tray is 45 °
    - inclination of the feeder at a lower angle increases the efficiency of the tray.
    - inclination of the tray at a higher angle reduces the efficiency of the tray.

Feeder can not have a smaller capacity than:

	Burner output:	Feeder capacity:
1.	16 kW	≥4 kg/h
2.	20 kW	≥5 kg/h
3.	26 kW	≥6 kg/h
4.	36 kW	≥8 kg/h
5.	50 kW	≥12 kg/h

Note: if the capacity is less than specified above or very close, check the feeder angle of inclination relative to the tray. The optimum angle is 45 ° or less. And again prevail pellet - described in the startup burner point in the instruction.

3. External feeder - filling

> Main Menu
>> Manual
>>> Feeder ON / OFF
>>> Run function and wait until an external feeder will be filled with pellets. You will need to start (repeat) this function 2-3 times depending on the angle of inclination the feeder relative to the tray.
>>> After filling of the feeder wait until the feeder gives pellets (about 2-3 minutes) - for this purpose under the pipe put a container (box, bucket) into which will fall pellet).

4. Feeder test

> Main menu
>> Boiler settings
>>> Power modulation
>>>> Feeder test
> Run the feeder test.

Note: The feeder test takes 6 minutes. Feeder gives pellet in a continuous mode. According to this are seted parameters of pellet dosing during burner operation. It is essential to accurately execute the commands from point 3. Failure to comply with these guidelines will result in an incorrect calculation of the dose of pellets and the bad operation of the burner.

5. The mass of the fuel in the test

> Main menu
>> Boiler settings
>>> Power modulation
>>>> Mass of the fuel in the test

> Enter the value of the fuel from the feeder test.
Note: The entered value \ has a very significant impact on the dosing of pellet, entering an incorrect value can cause an incorrect operation of the burner. Entering a higher value of the fuel in the test will result in a smaller amount of dosed pellets during the burner operation. Entering a smaller value of the fuel in the test will result in a greater number of dosing pellets during the burner operation.

6. Starting up the burner

> Main menu
>> Boiler settings

> Preset boiler temperature
Enter the temperature we want the boiler to reach and maintain.

> Main screen
Press on the large round button and start the controller.

7. Blowing up / Airflow

> Main manu
>> Boiler setting
>>> Power modulation
>>>> Max blow in power
>>>> The intermediate blow in power
>>>> Min blow in power

The fan settings for each of burner power 30%, 50% and 100%.
For each values there are set default settings of percent load of the fan. Depending on such factors as the type of boiler, cross- sections, the length of the chimney, flow resistance and so on. these settings may differ from the default values.
Therefore, for each installation, it is advisable to carry out the features on the basis of the exhaust gas analyzer (measurement of oxygen content in the exhaust gas), or by visual inspection during the stable operation of the burner of about 0.5 to 1 hour. after firing up.

Color of the smoke:

- Gray-white - insufficient oxygenation of the deposit - increase blowing of the fan
- Invisible - flying out gases cause a dislocation of air-humidity gas is below the dew point - the correct phenomenon
- White - correct sign, smoke rising due to the condensation, but if the color is white means that there is low content of not combusted CO.

The signs of correctly selected the combustion parameters are:

- Not smoky, light yellow flame in the combustion chamber and beyond of it,
- Combustion chamber should be covered with a light gray coating,
- The wall of the first chamber of the boiler or heat exchanger (combustion chamber) covered light gray coating.

7. Problems by firing up
Whole cycle of firing up should take max 2-4 minutes.
Firing up is detected by the sensor of flame photoresistor.

The reason of the failure firing up or longer firing up than it should be can be: too high value of the airflow or incorrect dose of the pellet given to firing up.

Important!

Too high value of the airflow makes too intensive cooling of the igniter and than the failure firing up.

Too large dose of the pellet causes restricted air flow of the air through the igniter causing unreliable firing up (once it will be fired up, once not)

If you look from the front of the combustion chamber air hole firing up the pellet (igniter) should be covered by dose of fuel.

> Main manu
>> Service settings (0000)
>>> Burner settings
>>>> Firing up
- Firing up airflow
- Fuel dose