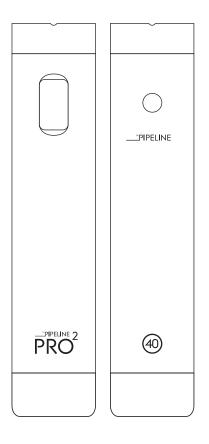
PIPELINE PRO 2 MANUAL

PIPELINE-PRO.CO.UK







01 PIPELINE PRO 2

The PIPELINE PRO 2 is a German made high-end mod for use with 18650 batteries and has **5 different modes**.

Variable Watt, Temperature Control (with various wires possible), Variable Watt with Heat Protection, Variable Watt with Power Boost and Bypass (unregulated, electronic overload protection).

We recommend operation with high current carrying IMR and high drain batteries (eg Samsung 25R) with a discharge current of 20 amps (unprotected).

For optimal function of the temperature control we recommend the Dicodes wire Resistherm (NiFe30).

02 FEATURES

- -5 to 40 Watts
- -Up to 12V output voltage
- -Up to 15A output current
- -OLED display
- -Temperature controlled vaping (possible with various wires)
- -Heat Protection Function
- -Power Boost Function
- -Unregulated vaping possible
- ('Bypass' electronic overload protection)
- -Battery shutdown voltage adjustable from 2.5V to 3.0V $\,$
- -Resistance check
- -Displays battery voltage under load
- -Adjustable brightness display
- -Set the length of time the menu is displayed
- -Set the standby time
- -Personalise click setting from 0-5 to activate device
- -Info menu
- -Battery capacity measurable
- -Atomizer resistance range from 0.05 $\!\Omega$ to 5 $\!\Omega$ is possible
- -Atomizer resistance from 0.2 Ω to 3.5 Ω (40W)
- -Reverse polarity protection
- -Abnormal temperature protection
- -Serial Number
- -2 year warranty on the electronics
- -Design by Thomas Wilms
- -Made in Germany by Dicodes

03 MAIN MENU

Click once to enter the menu. There you can navigate by clicking through the menu items. After a short wait at the desired menu item you will be able to change the values by further clicking.





Power Up and Power Down (Change Power)

Power Up gradually increases the power up to the set power limit Power Down decreases the power.

Factory setting 10W

The power limit value is set in the extended functions submenu 'Temp Menu' and provides a power limit for less powerful atomizers or a desired power limit.





Temperature Up and Temperature Down (Temperature Adjustment)

These menu items are visible only when the temperature control is enabled (see Mode menu).

The menu items allow you to set the maximum temperature for temperature controlled vaping in 5 °C increments from 120 °C to 280 °C (or 250 °F - 540 °F). For precise control you need the atomizer to be at room temperature (about 20 °C) Calibration (Calibr). For this purpose a suitable wire with a high temperature coefficient is needed. Enter the temperature coefficient of the wire in the Extended Functions submenu> Temp menu> Temp Cof.

Factory setting: 190 ° C



Calibration (Manual Coil Temperature Calibration)

These menu items are visible only when the temperature control is enabled (see Mode menu). The calibration measures the coil resistance as a reference value for the temperature control, this should only be done at room temperature (20 ° C). The calibration is a process with 3 steps: Init, Confirm and Process. Each of these 3 steps must be confirmed by pressing the button, so that the calibration is actually executed. We recommend heating the coil to the "evaporation phase" a second time to calibrate, since the resistance of the wire may vary.



Coil resistance and temperature

In this menu item, the resistance (R) of the coil is shown. The display ranges from 0.0Ω to 9.90Ω .

When temperature controlled vaping is enabled, the actual temperature of the heating coil is also displayed (T).



Battery Status

The "Battery Status" shows the battery voltage with low current drain (Bat) and the battery voltage under load of the atomizer used (BatL). If the difference between the two values shows a strong drop in the voltage this is an indication of a low battery or contact problems.



Mode

The PIPELINE PRO 2 provides 5 different modes that can be selected in this menu

Power (VW), TmpCtrl (Temperature-Controlled vaping), PowerHP (VW with Heat Protection activated), PowerBO (VW with Power Boost activated), and Bypass (unregulated mode, electronic overload protection). You can disable the "Expert Mode" in the extended functions menu (> System menu) PowerHP, PowerBO and Bypass disable.

Factory setting: Power



Switching Off the PIPELINE PRO 2

In addition to the auto-shutdown the user can turn off the power manually. We recommend the unit is switched off before changing the battery, only then are the statistics stored, otherwise the changes since the last save will be lost by removing the battery.



Extended Functions Menu

The "Extended Functions" menu has 3 sub-menus:

- Temp Menu> Settings for the coil
- System Menu> Settings to customize the PIPELINE PRO $2\,$
- Info Menu> Statistical display

DISPLAY OPERATION

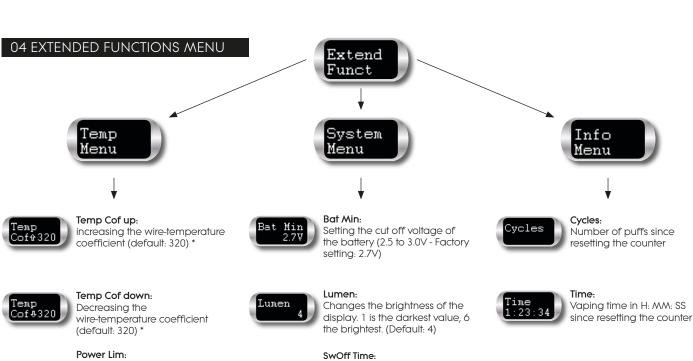
The PIPELINE PRO 2 has a graphical OLED display which provides all the important information about the status for 4 seconds after each vape.

In temperature controlled mode displays the temperature at the end of vape. In all other modes displays the battery voltage (under load)

Battery Voltage after vaping



Power Display In Direct-Mode (Bypass) it shows the actual power applied to the coil Coil Resistance after vaping including temperature dependent increase.





Set the power limit. The intensity of "Power Boost" is also defined by setting the Power Limit (factory setting: 40W)



HP Set:

Heat Protection mode selected (More information at 06 - Factory setting: 6)



Power Boost:

Power Boost mode selected (More information at 06 - Factory setting: 3)



Automatic shutdown of the device after a given time. When setting the switch off time the value in

the switch off time, the value in the display appears in "minutes". (Factory setting: 5 minutes)





Sets the number of clicks to activate a switched off device. (Factory setting: 0 - Ready for

(Factory setting: 0 - Ready for vaping)



MenuOn Click:

Sets the number of clicks needed to display the menu. (Factory setting: 1



Click Speed:

Key velocity (Animation appears at 4 and 5) (Factory setting: 3)



Half Watt:

Power increment 1W / 0.5W (<20W), 2W / 1W (20-40W) (factory setting 1)



Temp Unit:

Unit of temperature display in ° C or ° F (Default ° C)



Auto Cal:

Enables (1) or disables (0) automatic calibration (factory setting: 0) **



Display Dir:

Display orientation for right or left hand (default: R)



Expert Mode:

Unlock (1) or Disable (0) the HP, BO and bypass modes (factory setting: 1)



Reset:

Reset to factory settings



Reset Cntr: Reset the counter



BatCap 1796Ah

TotCycl:

Energy:

BatCap:

Energy consumption since

Capacity of consumed battery

battery if synchronized with the

since reset (Capacity of the

replacement of the battery)

resetting the counter

Total amount of puffs on PIPELINE PRO 2 (not resettable)



TotTime:

Total vaping time of PIPELINE PRO 2 (not resettable)

- * The temperature coefficient of the wire material used for correct operation in the range 100-650: 320 = Dicodes wire (Resistherm), 620 = nickel, approximately 105 = Stainless Steel, 350 = titanium,
- 480 = tungsten (value = coefficient * 10E + 5K)
- ** If auto-calibration is active, then a reference measurement is carried out when switching on the device or when changing the atomizer.



Battery Voltage Too High



Atomizer not found



Error In temperature calibration



Overload caused by high voltage to the atomizer (resistance too high for the voltage supplied)



Short due to bad connection or overload from high voltage



Battery Voltage Too Low



Overheating



Maximum vape time exceeded



Overload caused by high current (resistance too low for the selected power)

Keep the button pressed to acknowledge the error.

06 HEAT PROTECTION AND POWER BOOST SETTINGS



HP-Set:

"Heat Protection" prevents overheating of the heating coil.

This preserves the flavour of liquids, even at higher watt settings. Here you can select 10 different settings: Time in ms,

Power factor = On-time / (on-time + off-time).

Index	On	Off	Power Factor
01	400	100	0,80
02	600	100	0,86
03	800	110	0,88
04	1000	120	0,89
05	1350	150	0,90
06	2000	200	0,91
07	2000	180	0,92
08	2000	150	0,93
09	2000	100	0,95
10	2000	80	0,96

06 HEAT PROTECTION AND POWER BOOST SETTINGS



Power Boost:

Accelerated heating of the coil. The intensity of boost can be defined under "Power Limit". Here you can select 10 different settings:

Index	Boost time in ms	Nominal output in ms
00	-	-
01	300	
02	450	-
03	600	-
04	50	500
05	80	600
06	120	700
07	160	800
08	200	900
09	250	1000
10	300	1000

07 BASICS OF TEMPERATURE CONTROLLED VAPING

Temperature controlled vaping is a complex issue. We would like to try to explain to you some important basics in order to avoid problems.

Why temperature controlled vaping?

The food flavourings contained in e-Liquids develop different flavours at different temperatures. You can imagine it as cold or lukewarm cola. The taste will vary depending on the temperature of the beverage.

It is now also known that high temperatures may cause undesirable side effects.

With a functioning temperature controlled setup dry hits are effectively excluded. So you can use an atomizer without a window to the last drop of liquid.

To use the temperature control, you need an atomizer with a heating wire, which has a high temperature coefficient (we recommend the Dicodes wire Resistherm NiFe30). Due to the high temperature coefficient, the resistance of the wire is increased as soon as the coll is heated. It is necessary for the atomizer to be at room temperature to calibrate, so that on the basis of resistance changes the PIPELINE PRO 2 can determine the temperature of the heating coil.

Please ensure that the wraps of the coil do not touch and the contacts of the 510 port and within the atomizer used are clean. Corrosion or contamination of a contact area can lead to low resistance variations, which are then erroneously interpreted by the electronics as temperature changes. Therefore, all contacts should be cleaned regularly with alcohol.

With the PIPELINE PRO 2 you can find the optimum temperature and thus the optimum flavour.

07 BASICS OF TEMPERATURE CONTROLLED VAPING

TERMS:

Dry Hit

A "Dry Hit" refers to bad or nonexistent liquid flow to the heating coil which will cause a very unpleasant taste.

Wire types

The thickness of the wire determines how quickly the coil reaches the set temperature. You can compensate for the deficiency of a sluggish coil with higher power, but this also increases the power consumption.

Also you will require different wire for different types of atomizer for example a Dripper has a different process. Changing your wick material often will require a firmer wire. The Dicodes wire Resistherm NiFe30 is much more stable than the well known temperature-controlled vaping nickel wire Ni200. The PIPELINE PRO 2 can use any wire with a high temperature coefficient by adjusting the temperature coefficient.

Please do not forget to enter it in the extended functions menu (Temp Menu> Temp COF).

Temperature control

Depending on the setting will determine a temperature control or a temperature limit.

If the power is set low with good liquid flow but does not reach the selected temperature, the PIPELINE PRO 2 limits the temperature to avoid a dry hit. If the power is set high and the selected temperature is reached, the PIPELINE PRO 2 adjusts power to maintain a stable temperature.

Temperature Coefficient

This value describes how much the resistance of the heating wire changes with increasing or decreasing temperature.

Calibration

During calibration, the zero point of the measurement is accurately determined. As with a speedometer in a car, when at rest it must show 0 mph. If the calibration is not carefully carried out a reliable measurement of the temperature is impossible.

The PIPELINE PRO 2 has automatic or manual calibration.

We recommend calibrating the coil manually. It is important that the atomizer is at room temperature at the time of calibration (eg. 20 $^{\circ}$ C). We recommend heating the coil to the "evaporation phase" a second time to calibrate, since the resistance of the wire may vary.

Caution: When auto-calibrating, make sure to wait a few minutes before changing the battery so that the atomizer cools.

08 NOTES

Care must be taken when inserting the battery into the PIPELINE PRO 2. Hold the device at a slight angle and carefully insert the battery (positive terminal first).

BATTERY RECYCLING

You have purchased from us a battery / a battery-powered product. The battery will provide you with long service and when it reaches the end of its life it must be disposed of responsibly.

Batteries cannot be disposed of in household waste and must be taken to a recycling point, alternatively you can return the battery to:

PIPELINE-UK LTD, 19 Watergate Street, Chester, CH1 2LB.

Batteries contain valuable raw materials that can be recycled. The environment and PIPELINE say thank you.

WEEE Reg no. DE10791500

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WWW.PIPELINE-STORE.COM