digital controlled devices

dicodes

(yogsfeifen)

Yog's E-PIPE one powered by dicodes

USER MANUAL

Instructions

Please read the following instructions carefully before using the product and keep them for future needs.

USAGE AND STORAGE INSTRUCTIONS

Do not expose the product to humid environments or extreme temperatures, it could be damaged. If water enters by accident, stop the operation to prevent a short circuit. Do not use our product more often or for a longer period than traditional cigarettes. Keep the product out of the reach of children, adolescents and pets.

CONTRAINDICATIONS

When using liquids with and without nicotine: Please note the warnings and instructions for use of the liquid products and do not mix them with other substances. Do not use the product if you have a known problem with nicotine or other liquid ingredients. In case of nausea, dizziness or rash, discontinue use and consult a medic immediately. The electronic cigarette is not for smoking cessation.

INFORMATION ON POSSIBLE ADVERSE HEALTH EFFECTS

None known, see the instructions of the liquid.

INFORMATION ON ADDICTIVE EFFECTS

If you use products containing nicotine, the following warning is displayed on the packaging of the liquids: "This product contains nicotine: a substance that is highly addictive.

INFORMATION ON TOXICOLOGICAL DATA

Overheating the liquid (over 240 ° C) in the electronic cigarette may cause toxicological substances. Please use the electronic cigarette according to the manufacturer's recommendation and operating instructions. The use of this product is at your own risk.

WARNINGS

Delivery to and use by children and adolescents under the age of 18 is prohibited. The product is not recommended for non-smokers.

This product is not suitable for pregnant women, women who are breastfeeding, people with cardiovascular and respiratory diseases, alcoholics and epileptics. Do not use the product if you have lung disease (such as asthma, COPD, bronchitis, pneumonia). The released vapor may cause an asthma attack, shortness of breath and coughing fits in the case of a previously damaged lung. If complaints occur, please seek medical attention immediately. Do not use our product if you have a known problem (allergies, intolerances, etc.) with nicotine or other ingredients of our product.

When using nicotine-containing liquids: nicotine-containing products are not suitable for people who, for medical reasons, should abstain from nicotine products. If the liquid is swallowed, contact the emergency number. You can also contact the poison emergency service in your area.

CONTACT

If you need additional information or if you have questions about the products and their use, please contact us by e-mail or visit our website:

https://www.dicodes-mods.de

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Content

1. Product description

The E-PIPE one is an electronically controlled device to be used with various atomizers of different sizes and diameters of 23mm and smaller. It is powered by a single 18650 size Li-ion rechargeable battery. The pipe allows a maximum output power of 60W (up to 10V or 18A at the coil) and, beside four different operating modes, provide temperature-controlled vaping with many different kinds of wire materials (nickel, titanium, stainless steel, and others).

The E-PIPE one has an magnetically removable OLED display and an elaborate spring-loaded center pole made of copper beryllium. The E-pipe has an intuitive, timed menu with a touch sensor.

1.1 Scope of delivery
- pipe body
- cover
- removable display
- drip tip
- gift box

1.2 Specifications
- 5 to 60W with one Li-Ion battery size 18650
- OLED display, magnetic, removable, 360 degree rotatable
- Adjustable battery discarge level (2.5 - 3V)
- Up to 10V output voltage
- Up to 22A output current
- Temperature controlled vaping modes
- Support for various wire-types
- Mechanical Mod/Bypass mode with electronic overload protection
- 10 Power boost modes
- 10 Heater protection modes
- Atomizer resistance range 0.05 – 5 Ohms, total
- Atomizer resistance range at 80W 0.17 – 1.5 Ohms
- Reverse battery protection
- Versatile menu structure
- Individual user preference selection
- Two years warranty (terms and conditions, see chapter 8)

2. Safety instructions

- Do not expose the device to extreme temperatures; Avoid exposure to direct sunlight and high humidity.
- Do not use the device in an environment that is enriched with flammable gases, vapors or dusts; There is a danger of explosion!
- Do not drop, throw, or apply excessive force to the device to prevent damage; Do not use the device if you detect damage.

3. Manufacturer recommendations

- We recommend dicodes wire (RESISTHERM) for optimal performance and excellent vaping enjoyment.

4. Storage instructions

- If you don't use the device for an extended period of time, remove the rechargeable battery.
- Keep the device out of the reach of children and pets.
- Ensure that the device is firmly and securely in place.
- Store the device clean and dry; avoid high humidity.
- Do not store the device under extreme temperatures; avoid exposure to direct sunlight.

5. Disposal note

- The packaging must be disposed of in an environmentally friendly manner.
- Products marked with the crossed out bin, do not belong in the trash. These products can be disposed of free of charge in your local retailer or at community collection points. Check with your local council, town hall or local waste management company.

6. Product overview

6.1. General note on the use of the E-PIPE one

The E-PIPE one is able to control a heating coil with up to 60W. At 60W continuous power, all common heating coils will inevitably become significantly hotter than the maximum steam temperature of 240°C that we recommend. The user should also keep in mind that taking 60W from even the best "high drain" batteries available on the market will generate a high power loss of about 10-15W in these batteries themselves as well as in all contact points and components, which will ultimately reduce the battery life.

We therefore recommend using the E-PIPE one in temperature-controlled mode or in boost mode. In these two modes, the risk of reaching a too high vapor temperature is minimized. The vapor result, i.e. the taste is even better in this case, since even with large coils with a large heat capacity, only a small amount of power is required to maintain the temperature after a quick heat-up phase (at high power).

6.2. Battery usage instructions

Always use batteries with high to very high current carrying capacity (even at the expense of capacity, unless you are steaming at powers <20W). Avoid "no-name" products. Always insert the battery into the E-PIPE one with the positive terminal facing down.
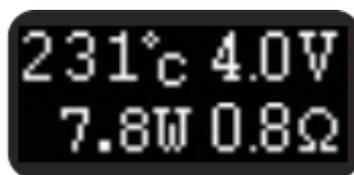
The E-PIPE one is equipped with a self-calibrating touch sensor. After inserting the battery, the sensor will calibrate itself within the first 15 seconds. Please <u>do not</u> touch the fire button while inserting the battery and within the first 15 seconds after.

6.3. Removable display

The E-PIPE one has a removable OLED display unit. All important information is optionally displayed here during (display-mode=cont) and/or for 4 seconds after vaping. If the display unit is removed, vaping with the last set values is still possible, but the accidental adjustment of values is blocked.

Temperature controlled mode:
Temperature during vape
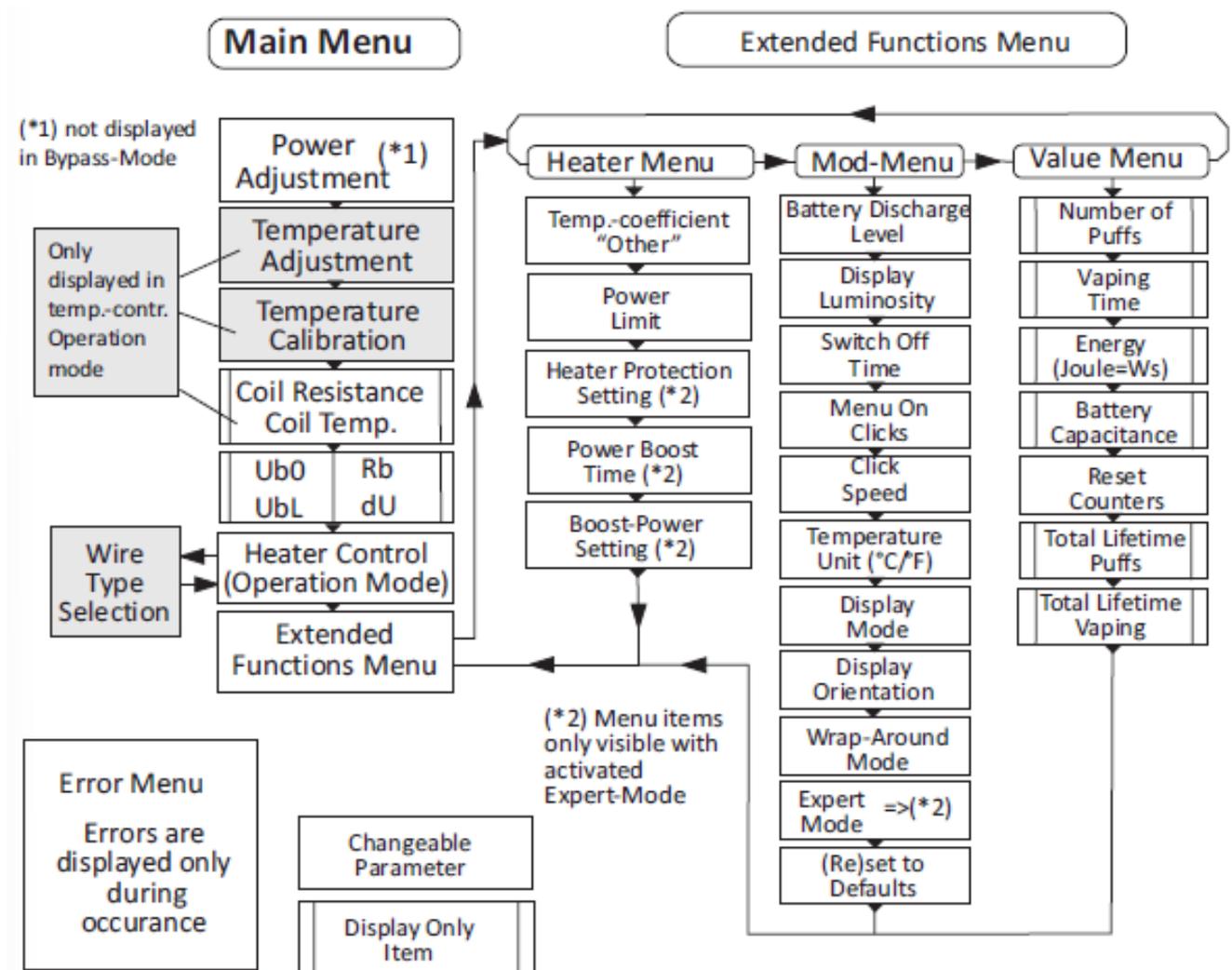Other modes: battery symbol

Battery-voltage during the vape, including voltage drop.

231°c 4.0V
7.8W 0.8Ω

Wattage setting
In Direct-Mode (Bypass)
it shows the actual power
applied to the coil.

Coil-Resistance during vape, including temperature dependent increase.

6.4. Menu overview

Main Menu

Extended Functions Menu

(*1) not displayed in Bypass-Mode

Power Adjustment (*1)

Only displayed in temp.-contr. Operation mode

Temperature Adjustment

Temperature Calibration

Coil Resistance Coil Temp.

| Ub0 | Rb |
| UbL | dU |

Wire Type Selection

Heater Control (Operation Mode)

Extended Functions Menu

Error Menu

Errors are displayed only during occurance

Changeable Parameter

Display Only Item

Heater Menu

Temp.-coefficient "Other"

Power Limit

Heater Protection Setting (*2)

Power Boost Time (*2)

Boost-Power Setting (*2)

(*2) Menu items only visible with activated Expert-Mode

Mod-Menu

Battery Discharge Level

Display Luminosity

Switch Off Time

Menu On Clicks

Click Speed

Temperature Unit (°C/°F)

Display Mode

Display Orientation

Wrap-Around Mode

Expert Mode =>(*2)

(Re)set to Defaults

Value Menu

Number of Puffs

Vaping Time

Energy (Joule=Ws)

Battery Capacitance

Reset Counters

Total Lifetime Puffs

Total Lifetime Vaping

6.5. Main menu

Power Up and Power Down (Setting the Power)

Power Up increases the power gradually up to the set Power Limit and then starts again at 5W; correspondingly in the reverse direction. The Power Limit value is set in the Extended Functions submenu and provides a power limit for lower power atomizers or for a desired power limit. The step size is 0.5W in the 5-30W range and 1W above 30W.

For temperature controlled vaping (if activated), the set power value determines the maximum power that can be delivered to the coil. If this power is lower than the power required to reach the set temperature, the temperature control becomes a temperature limit. If the power is high enough, it determines the heating rate of the coil until the set temperature is reached. In the "Bypass" mode, the power setting is not available, because in this case the power depends only on the battery voltage and the resistance of the coil. The Power Up and Power Down menu items are then not displayed.

Temperature Up and Temperature Down (Setting the Temperature)

This menu item is only available and displayed if temperature-controlled vaping has been selected (see Heating control menu). The menu structure adapts to the selected operating mode. The Temperature up/down menu is used to set the setpoint for the coil temperature during vaping. The temperature setpoint can be selected from 120°C to 280°C (250°F- 540°F) in increments of 5°C (10°F). To achieve a highly precise temperature control, a correctly performed reference measurement (TempCal Init) is required, see next point.

Manual Coil Temperature Calibration

This menu item is only displayed if temperature-controlled vaping is selected (see Heating control menu item below). When using temperature controlled steaming, the calibration measurement is a very important part of it.

The temperature calibration measures the coil resistance at room temperature (20°C) as a reference for temperature controlled vaping. Together with the temperature coefficient of the wire, this allows the device to calculate the temperature of the coil. The calibration must be confirmed in a second step to avoid accidental activation. After confirmation, the display will show "process" until calibration is complete. It is very important to understand that if the calibration is performed at a temperature other than 20°C, the controller will regulate a constant temperature, but with an offset deviation.Therefore, take into account the ambient temperature during the temperature calibration. Similarly, if an incorrect temperature coefficient has been set and the actual temperature deviates greatly from the setpoint (this is a factor, not an offset).

Always perform a calibration when a new atomizer is connected, even if it is made of the same coil material.

Coil Resistance and Coil Temperature

This is a display only menu item. The coil resistance is displayed in a range from 0.00 to 9.90 ohms is displayed. If temperature controlled vaping is selected, the measured/calculated coil temperature is also displayed, otherwise the display shows T ---.

Note that if the plus or minus button is held down after the values are highlighted (or inverted), the display will continuously update. This can be helpful in diagnosing problems.

If the display does not show 20°C in TC mode after calibration, even when the atomizer has cooled down, we recommend that you perform the calibration again.

Note that for coils with very low resistance, such as nickel coils, a slight mechanical change (tightening the atomizer) can lead to drastic changes in temperature control due to the change in contact resistance. We therefore recommend using coils other than nickel, e.g. NiFe30 (RESISTHERM) wire from dicodes.

7
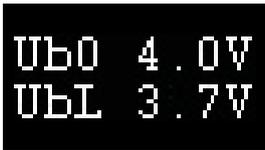
Battery Status Part 1

The Check battery item displays the battery voltage at low current drain (Ub0) and the battery voltage under load during the last puff (UbL). The difference is the voltage drop of the battery (dU). A high voltage drop (e.g. dU>0.4V@20W and dU>0.7V@60W) indicates a bad battery and/or contact problems.

Please note that every battery has an internal resistance and therefore the voltage at the contacts will always drop when current is drained. The more current that is drained, the greater the voltage drop. Always keep this behavior in mind. Common 18650 size batteries have internal resistances of about 18mW to 80mW. Smaller batteries have even higher resistances. In general, high capacity batteries have higher internal resistance and lower capacity batteries have lower internal resistance.
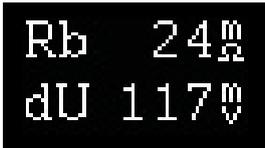
Battery Status Part 2

The E-PIPE one has an additional function that helps the user to evaluate the quality of the battery and the system contacts on the battery side.

When you are in the menu at the display values for Ub0 and UbL, wait until the values are highlighted and then press the plus or minus button. Now the battery source resistance Rb and the voltage drop dU (difference Ub0-UbL) are displayed in increased accuracy. Each time now one of the keys is pressed, the display changes between Ub0/UbL and Rb/dU back and forth.

Note that these values may change somewhat as you toggle back and forth because the battery voltage may change without a load (Ub0), mainly due to temperature change (cooling) after vaping.

The source resistance of the system is the sum of the internal resistance of the battery as the main contributor and all contact and wiring resistances of the device. As mentioned earlier, typical battery resistances vary from 18mW to 80mW depending on the type. The typical contact and wiring resistances of the E-PIPE one boxes add up to about 6mW.

At high power, the current drawn from a battery results in a significant voltage drop across the system's source resistor.By far the largest part of the voltage drop is generated within the battery and not within the device. Please keep this in mind at all times.

The diagram below shows the voltage drop as a function of source resistance for a fully charged 4.2V battery. If the battery is not fully charged, the voltage drop will increase even more as more current is needed to provide the same output power.

8
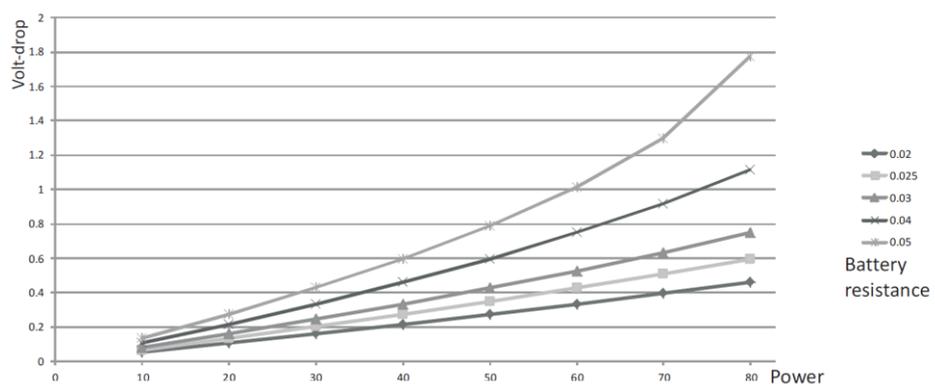
HCtrl 0
Standrd

Heater Control (Operation modes)

The device can be used in up to 5 operating modes. The mode can be selected in this menu:

The default mode is either Power (0) or Temperature Controlled Vaping(1).

If "Expert Mode" (Extended Functions Mod menu) is enabled, the Heater Protection (2), Power Boost (3) and Bypass (4, mechanical mod) modes are also available.

If the Expert Mode is deactivated, the menu items 2 to 4 are hidden.

HCtrl 0
Power

0. Power Mode

In power mode, the wattage selected in the power setting menu is applied to the coil unless the voltage would become greater than 10 V or the current greater than 18 A, which depends on the coil resistance.

For example, with a coil resistance of 4 ohms and a power setting of 40 W, the required voltage across the coil is 12.65 V. So in such a case, the electronics is limited to 25 W ((10 V)^2/4 ohms = 25 W). Or with a coil resistance of 0.1 Ohm and a setpoint of 45 W, the electronics limits to 32.4 W, because $(18A)^2 \cdot 0.1$ Ohm=32.4 W.

As can be seen from the examples, the power is limited by the maximum voltage of 10V for high coil resistance and by the maximum current of 18A for low resistance. This fact is also reflected in the function list: a power of 60W is guaranteed from 0.2 to 1.6 ohms. Resistors from 0.05 to 5 ohms are possible, but with a lower power.

HCtrl 1
TmpCtrl

1. Temperature controlled vaping

In this mode, the device will regulate the temperature of the coil to the preset value unless the power setting is too low to reach the temperature. So please make sure that you set the power setting to a high enough value if you choose to use temperature controlled vapor. Otherwise, the temperature control will switch to a temperature limiting mode.

Wire320
NiFe30

When HCtrl is set to 1, the menu jumps directly to the wire type selection. The user can choose between NiFe30 (Dicodes wire), Nickel200, Titanium, Tungsten, Stainless Steel and "other".

If "other" is selected, the temperature coefficient is defined in the menu "Extended Functions / Heater" under the menuitem "Tmp. Cof". The value of the selected coefficient is displayed after "Wire".

•

•

•

For commonly used wires the predefined coefficients are: NiFe30=320, Nickel200=620, Titanium=350, SS304=105, SS316=88, SS316L=92 and NiFe48=480. Note that there are different alloys for titanium and stainless steel on the market, so the predefined values may differ from the actual wire value used. In these cases, it is preferable to select "other" as the wire type and set the value of the wire in the extended functions menu. The range for the coefficient is between 050 and 650.

Wire280
Other

Example: A value of 320 (NiFe30) means a resistance change of 32% with a temperature increase of 100°C.

Main Menu

```
HCtrl 2
HtrProt
```

Parameter

Extended Functions
Heater Menu

```
Heater
Prot  2
```

2. Heater Protection Mode (only when Expert Mode=1)

The Heater Protection mode causes a periodic interruption of the power supply. The length and spacing of the interruptions is set via the "Heater Prot" parameter in the Extended Functions menu. The repeated power interruption helps to avoid a breakdown of the fluid flow and thus temperature rise.

The table below shows the shows the ratio of power-on to power-off time depending on the parameter "Heater Prot":

Value Heater Prot	On-Time [ms]	Off-Time [ms]	Powerfactor
1	400	100	0.80
2	600	100	0.86
3	800	110	0.88
4	1000	120	0.89
5	1350	150	0.90
6	2000	200	0.91
7	2000	180	0.92
8	2000	150	0.93
9	2000	100	0.95
10	2000	80	0.96

Main Menu

```
HCtrl 3
P-Boost
```

Parameter

Extended Functions
Heater Menu

```
Boost
Time 3
```

```
Boost
Pwr 50W
```
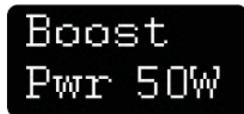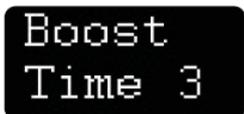
## 3. Power Boost Mode (only when Expert Mode=1)

The Power Boost mode allows an initial short term high power pulse to be applied to the coil (boost). In addition to 3 selectable initial boost lengths, further options generate a periodic boost pulse of varying length and repetition rate. In addition to 3 selectable initial boost lengths, other options generate a periodic boost pulse of varying length and repetition rate. An initial boost is used to heat up the coil quickly.The periodic boost allows the coil temperature to constantly exceed a certain range. In this case, different flavors in the liquid, which all develop their flavor at different temperatures, are addressed by the varying temperature.

We recommend setting the normal power (not the boost) to much lower values when using the periodic boost, since the average power is increased by the boosts and the temperature rises as a result.

Boost Power	Boost Time [ms]	time on nominal power [ms]	effective power (at 5W nominal power)
1	300	-	start-boost
2	450	-	start-boost
3	600	-	start-boost
4	800	-	start-boost
5	1000	-	start-boost
6	100	700	6.9
7	150	800	7.17
8	200	900	7.36
9	250	1000	7.6
10	300	1000	8.0

Note: If the set power value matches the power limit value, the power boost has no function, as no higher power than the power limit value is permitted.

Diagram for Boost-Function

10
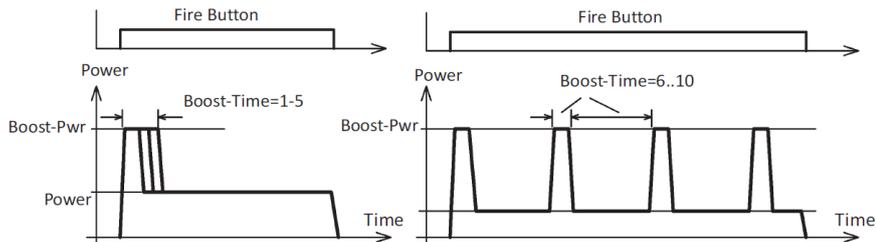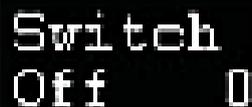
Switching off the device

In addition to the auto switch-off function, the user can also switch off the device manually.

We recommend switching off the device before changing the battery or waiting for the automatic switch-off, as in this case the statistics counters are saved. Otherwise, the changes since the last saving will be lost when the battery is removed.

To switch off, wait until the "0" is displayed inverted and then press the key. Please note that after an active switch-off (i.e. not auto switch-off), the device can only be switched on again by briefly pressing the key five times.
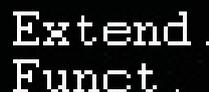
Extended Functions Menu

The Extended Functions Menu offers three logically grouped sub-menus:

Heater Menu   ➜ Settings related to the heater or coil
Mod Menu   ➜ Settings for individual use and appearance
Value Menu   ➜ Provides various statistics about of vaping

The Extended Functions Menu provides a variety of setting options, to give the user the highest possible flexibility in customizing the settings to their preferences. Normally, once the settings have been made, the user will rarely need to change the parameters. To keep the main menu as short as possible, the advanced function menu was created.

The many options may scare off some users at first. But without the extended functions menu, the device would not be able to meet all the different customer requirements. Please take some time to familiarize yourself with the menu. We are sure once you get an overview, customization will be a breeze.
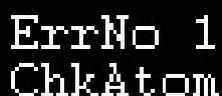
Error Messages

If an error occurs, the device jumps directly to the error menu and displays the error number and a mnemonic (short) description. The possible error messages are:

0 OvrVolt: ➜   The input voltage is too high. The E-PIPE one is prepared for operation with one battery. If the input voltage exceeds 4.5 V, this error message is displayed. Reduce the input voltage to the specified range.

1 ChkAtom: ➜   No atomizer detected or open coil.

2 TempRef: ➜   A problem occured while measuring the temperature reference.

3 N/A

4 OverCur: ➜   Short-circuit (current too high) or coil interruption (sudden burnout of the coil at high power)

5 LowBat: ➜   The battery voltage under load has reached the minimum value set under UbatMin.

6 EleHot: ➜   The electronics have heated up heavily and must cool down. This error cannot occur during normal not occur during normal use.

7 TimeOut: ➜   The maximum draw time is limited depending on the power: max. 20 seconds for powers < 20W. Above 20W it decreases by 0.5 sec/W. Above 40W, the maximum draw time is 10 seconds.

8 LowR: ➜   In bypass mode, the coil resistance is too low.

| Extend. Funct. | → | Heater Menu |

Change wire temperature coefficient of "Other" wire (*1)
Default 320

`Temp. Cof☼320`

Set Power Limit (80Wmax.)
Default 80W

`Power Lim 40W`

Select heater protection mode (1..10)
Default 6

`Heater Prot  2`

Select power boost time (1..10)
Default 3

`Boost Time  3`

Select power boost power (1..10)
Default 50W

`Boost Pwr 50W`

Only visible when
Expert Mode =1

| Extend. Funct. | → | Mod Menu |

Set the minimum bat discharge level (2.5..3V)
Default 2.7V

`UbatMin  2.6V`

Set display luminosity (1 low to 5 high brightness)
Default 4

`Lumen     4`

Select auto power off time (1-2-5-10-15-20-30-60 minutes)
Default 5min.

`SwOff Time 30`

Select number of clicks to get into the menu (1..5).
Default 1

`MenuOn Click 1`

Speed for button usage (1 fast..5 slow). (*2)
Default 3

`Click Speed 3`

Selects temperature unit either °Celsius or °Fahrenheit.
Default °C

`Temp. Unit °C`

Parameter display during vape off/post/cont (*3)
Default cont

`DispMod   cont`

Select display orientation between Left and Right (handed)
Default R

`Display Dir    R`

Wrap around (roll over or stop at min/max)
Default 1

`Wrap Mode   1`

Select Expert mode to enable power boost, heater protection and bypass mode.
Default 0

`Expert Mode   1`

Switch back all settings to factory defaults

`SetDef init`

| Extend. Funct. | → | Value Menu |

Counts the number of puffs since last counter reset.

`Cycles  5432`

Displays pure vaping time in H:MM:SS since last counter reset

`Time 1:23:34`

Energy taken from battery during vaping since last counter reset

`Energy  7435J`

Displays battery capcitance since last counter reset (can show battery quality)

`BatCap 1.796Ah`

Reset the counters above.

`Reset Cntr   0`

Total lifetime puffs of mod.
Not resettable.

`TotCycl 25626`

Total lifetime vaping time of mod in HHHH:MM
Not resettable.

`TotTime 27:54`

(*1) The temperature coefficient selects the type of wire material in the range 050 to 650: When TC-mode is selected (Main menu HCtrl=1), the user must select the wire type to be NiFe30 (320, dicodes wire), Ni200 (620), Titanium (350), SS304 (105, V2A), SS316 (88), SS316L (92), NiFe48 (480) or "Other". The value for "Other" is adjusted here. Value to select = Literature-value*10E5 K. Example: Ni 6.2E-3*1/K * 10E5*K => 620.

(*2) Setting 1 (fastest) up to 3 without animation (visual shift effect), setting 4 slowest with shift animation.

(*3) When temperature controlled vaping mode is selected and with diplay mode=post/cont, the current values of "Power", "Temperature" and "Wire-Resistance" can be observed 4 seconds after/during the vape. In power mode, the battery voltage, power and resistance is displayed. In Bypass mode the measured power is displayed. With display mode = off no parameters are displayed after or during the vape.

6.6. Extended Functions menu

In the following paragraphs, explanations are given for those parameters and items, which are not self explanatory or which have inter-dependencies with other parameters or functions.

```
Temp.
Cof↕320
```

The selection of the correct wire-temperature-coefficient is very important for the correct operation of the device, when temperature controlled vaping is selected.

As soon as TC-mode is selected, a multiple choice list of commonly used wires types with predefined coefficients is displayed, as well as "other" wire type.

The coefficient of the "other" wire is set in this menu item. Note that stainless steel wires and also titanium wires often have coefficients that are not exactly defined, depending on their exact alloy composition.

The TCoef menu item is also visible if the operating mode is not set to temperature-controlled vaping.

```
Power
Lim 40W
```

The Power Limit has an influence on several functions:

Power Limit defines the setting range of the power in the main menu. As with the Main Menu explained earlier, the Power Limit sets the maximum value of the power.

The power limit is useful for non-temperature controlled vaporizing and the use of small heating coils or vaporizers to prevent the coil from burning out.

```
UbatMin
   2.6V
```
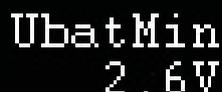
All dicodes devices have a functionality to adjust the minimum discharge level of the battery between 2.5V and 3.0V (older models 3.5V). Almost all available batteries on the market specify the minmum discharge level of 2.5V to 2.7V. If the user is unsure whether her/his specific battery meets this specification, the level should be set to 2.7V.

The selected voltage is the voltage at the electronics input, when current is drained from the battery (UbL). In contrast to other available tube- and boxmods on the market, which stop operation already at 3.4V, the lower discharge level on dicodes mods lead to a better battery utilization.

```
SwOff
Time 30
```

```
On
Click 0
```
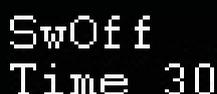
The time until the device automatically switches off can be selected between 1 minute and 60 minutes. We recommend combining a switch-off time of 2 or 5 minutes with immediate vape readiness (On-Clicks=0). In this combination, when transporting the device e.g. in a bag, it could happen that the button is activated by an unfavorable position. The device would then heat up to the draw time limit, then switch off and immediately switch on again and "heat up" the coil.
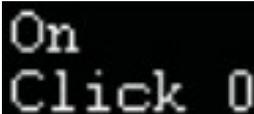
To avoid this problem, a safety function is built in: If the number of "on-clicks" is less than or equal to 2 and error 7(TimeOut) is present and the device performs an automatic switch-off, the device can only be switched on again by briefly pressing the key 5 times (i.e. 5 on-clicks). This behavior is valid only once for the described case. After that, the device behaves as set.

Pressing the key 5 times is also required if "On clicks" are below "2" and the device is actively switched off by the user (i.e. automatic switch-off does not occur).

As already mentioned, the number of key presses before switching on can be selected under the On-Clicks menu item. The selection ranges from 0 (immediate steam readiness) to 5 clicks (Note: The unit switches on after the first click and checks whether the key is pressed within a certain time. If this is not the case, the device switches off again).

```
DispMod
   cont
```
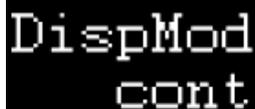
The display mode switches the dynamic display of various parameters on and off during and after the pull. With the "cont" (continous) setting, the values are displayed during and 4 seconds after the pull. With "post" the values are displayed only after the pull and "off" switches the display off.

The values displayed depend on the operating mode: In temperature controlled mode, the parameters are temperature, coil resistance, temperature regulating power and a battery symbol.

For Power, Boost, and Heater Protection modes, the selected power (or limited power, if applicable), coil resistance, and battery voltage are displayed. When Bypass mode is selected, the coil resistance and the measured power depending on the battery voltage are displayed, since there is no fixed power setting in Bypass mode.

```
Expert
Mode  1
```
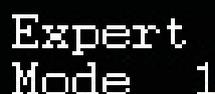
The E-PIPE one can be used in 5 different modes. However, to keep the menu as short and simple as possible, 3 of the 5 modes are only available when Expert mode is set to 1. The name Expert mode means that the use of the additional operating modes requires additional knowledge about their functionality.

The additional modes available with Expert Mode set to 1 are "Power Boost", "Heater Protection" and "Bypass".

Here is an overview of the modes once again:

Mode0 Power	Power-controlled vaping. The set power is delivered to the heating coil, unless the power is limited by a protective mechanism.
Mode1 Temp-Cont.	The temperature control takes over the power setting and keeps the set temperature constant. Important to note: Set wire temperature coefficients and adjust at room temperature (perform reference measurement).
Mode2 Heater-Prot.	The power output is interrupted briefly at regular intervals to allow liquid to flow and to limit the temperature.
Mode3 Power-Boost	The heating coil is heated up quickly at the beginning with high power. A repeated boost can additionally be activated during steaming. Important to note: Do not choose the "boost power" too small. However, you should reduce the normal power setting significantly, adapted to the vaporizer.
Mode4 Bypass	The device behaves like a mechanical mod, i.e. the battery voltage is switched through directly to the heating coil. If the resistance of the coil is too low, an error message is displayed (Err8 LowR). Important to note: The vaping result is now depending on the state of charge of the battery and the coil should not be designed with too low resistance, otherwise the 20A limit is quickly reached.
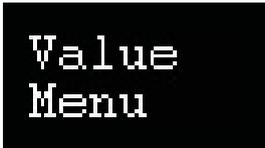
Value Menu

The Extended Functions Menu contains another submenu with several statistical values. There are two types of value counters that can either be reset to zero or not. The statistical counters are saved when the mod is switched off automatically or manually. On the other hand, if the battery is removed from the device before it is switched off, the changes in the counters since the last time it was switched on will be lost. The following statistical values are stored:
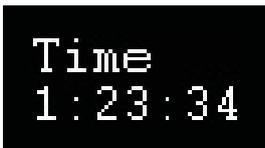
Cycles

Number of puffs.

The counter can be reset to 0.

Time

The time period during which power was applied to the coil, i.e. the vaping time.

The counter can be reset to 0.

Energy

This is the energy consumption when vaping in joules=watt-seconds. This value is the actual integrated vape power over time. It is the power integral, because in temperature controlled vaping (and also in bypass mode) the power is not constant, but varies a lot over time due to the regulation.

The counter can be reset to 0.

BatCap

Battery capacity (BatCap) is quite an interesting counter: if you reset it immediately after inserting a fully charged battery and check it before inserting a new battery, it will show the capacity of the battery. With this function, the user can check if the battery has the capacity specified by the manufacturer or if the battery is worn out.

This counter can be reset to 0.

The menu item (ResetCntr) is intentionally placed between resettable and non-resettable counters. This way it is easier to remember which ones can be reset.
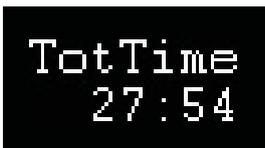
TotCycl

The total number of cycles (TotCycl) is the number of puffs during the entire life of the device.

It **cannot** be reset.

TotTime

Total time (TotTime) is the time of active use (without standby) in the format HHHH:MM, which consists of four digits for hours and two digits for minutes.

It **cannot** be reset.

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7. Cleaning, Maintanance and wood care

The E-PIPE one powered by dicodes is available in different versions. Here are two care instructions on how to proceed with real wood battery carriers:

Note: The wood has been oiled and polished with Carnauba wax before shipping. This layer can/will be lost with frequent use.

Option 1 (Quick care)

Remove display, vaporizer and battery cover. Put a small drop of household olive oil on a cotton cloth and gently rub the pipe body with it. Please proceed carefully so that no oil gets into the atomizer connection or the battery compartment.

Option 2 (Intensive care, only for extreme patina)

Remove display, vaporizer and battery cover. A 600-1000 abrasive fleece is needed. Tape all stainless steel parts with a, preferably transparent adhesive tape (caution due to adhesive sticking back). Put the pipe on a towel and carefully remove the patina with the fleece. Then gently rub the pipe with a cotton cloth and a small drop of household olive oil. Please proceed carefully so that no oil gets into the atomizer connection the battery compartment.

8. Warranty and disclaimer

All devices manufactured by dicodes undergo extensive optical and electrical tests and calibrations before delivery. Should the E-PIPE one nevertheless show a defect or a comprehensible faulty behavior after purchase, then this is to be treated as a warranty case. Company dicodes will accept justified claims up to 2 years after purchase. For this purpose, it is necessary to prove the date of purchase by means of a proof of purchase. The guarantee refers exclusively to the faultless functioning of the hardware and software when used properly. Faults that do not affect the basic functioning are not covered by the guarantee. Also not covered by the warranty are errors caused by improper handling and contamination, see below. In the event of a malfunction covered by the warranty, the customer is free to send the device to the company dicodes and request a free repair or the elimination of the error. The customer is obliged to check the device for scratches and marks before using it for the first time. The company dicodes cannot accept the claim of optical defects after the first use. If the customer is unsure whether a defect or malfunction is covered by the warranty, please contact us before returning the device. If a defective device returned is not covered under the terms of the warranty, the customer will be notified and a quote will be provided before any repairs are made. The cost of shipping a device from the customer to dicodes is in no case covered by the warranty.

Our email address is:
info@dicodes-mods.de

Devices are to be sent to:

**dicodes GmbH
Friedrich the Great 70
D-44628 Herne, Germany**

Not covered by warranty are

- defects and flaws due to improper handling, contamination by liquid, dust, etc., mechanical damage, opening the device (except for battery replacement), exposure to temperatures of >45°C and <0°C
- scratches and marks caused by normal use and carrying
- damage caused by faulty or incorrect batteries

The warranty is void

- if the device is dropped on the floor (*)
- as soon as the device is opened
- when trying to repair a device

  (*) Please do not continue to use the device if it has fallen on the floor. The electronics may be damaged. Contact dicodes.

Errors excepted. Subject to change without notice.
2022 E-PIPE one powered by dicodes, Manual, EN (07 Jan 2022).