digital controlled devices

dicodes

Dani Box 21700 / USB-C

manual

01 DaniBox21700

The dicodes DaniBox21700 is an electronically controlled vaping device to be used with various atomizers of different sizes and diameters up to 25mm. Mechanically the box measures 45.2mm x 25.2mm x 82.8 mm.
The mod is powered by one Li-Ion battery of size 20700 or 21700.
It has a very ergonomic soft touch design and is equipped with three buttons on the long side for menu operations and firing, a high brightness 0.66”OLED display on the top and a sophisticated construction of an adjustable center pin made of beryllium copper.
The bodies are manufactured from high quality anodised aluminum and are offered in several colors. The head and bottom pieces are made of solid stainless steel and have a brushed steel appearance.
Electrically, the DaniBox21700 allows vaping with up to 80W (100W Boost) and, beside 4 different operation modes, provides temperature controlled vaping with many different kinds of wire-materials (dicodes-wire, nickel, titan, stainless steel, and others).
We recommend the dicodes-wire (NiFe30, RESISTHERM) for optimal performance and unique liquid flavor.

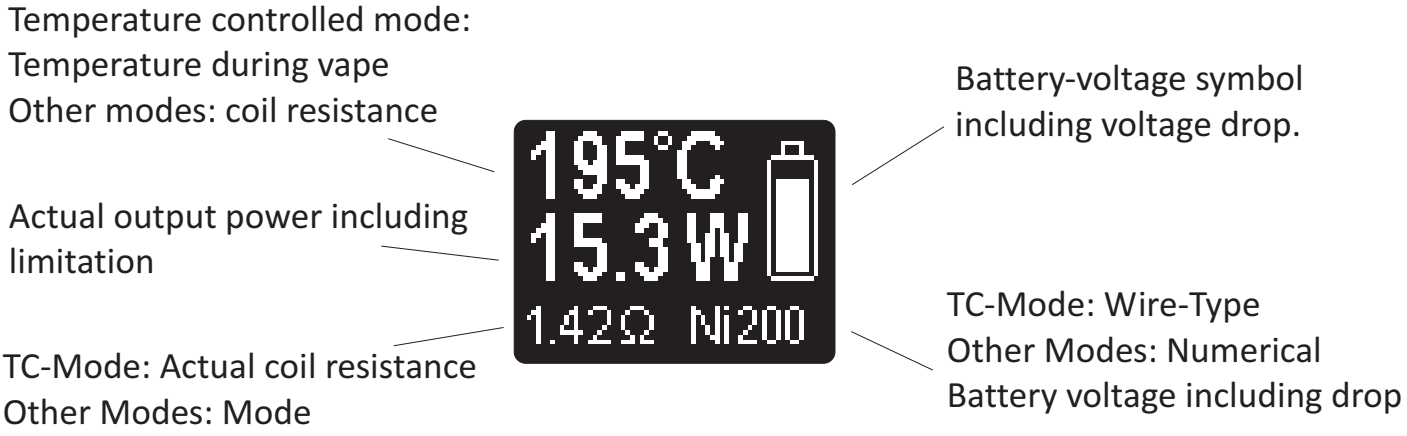
The box-mod provides several safety-features referring to their high power capability. Beside the limitation of the output current to 22A and output voltage to 11V, the mod is continously checking the input voltage and current and limits the output power accordingly, to always keep the system in a safe condition.
As part of this safety concept, the system’s source resistance is determined, i.e. the combined resistance of the battery, contacts and internal wiring. Please see chapter 3 for further information.

02 Feature List

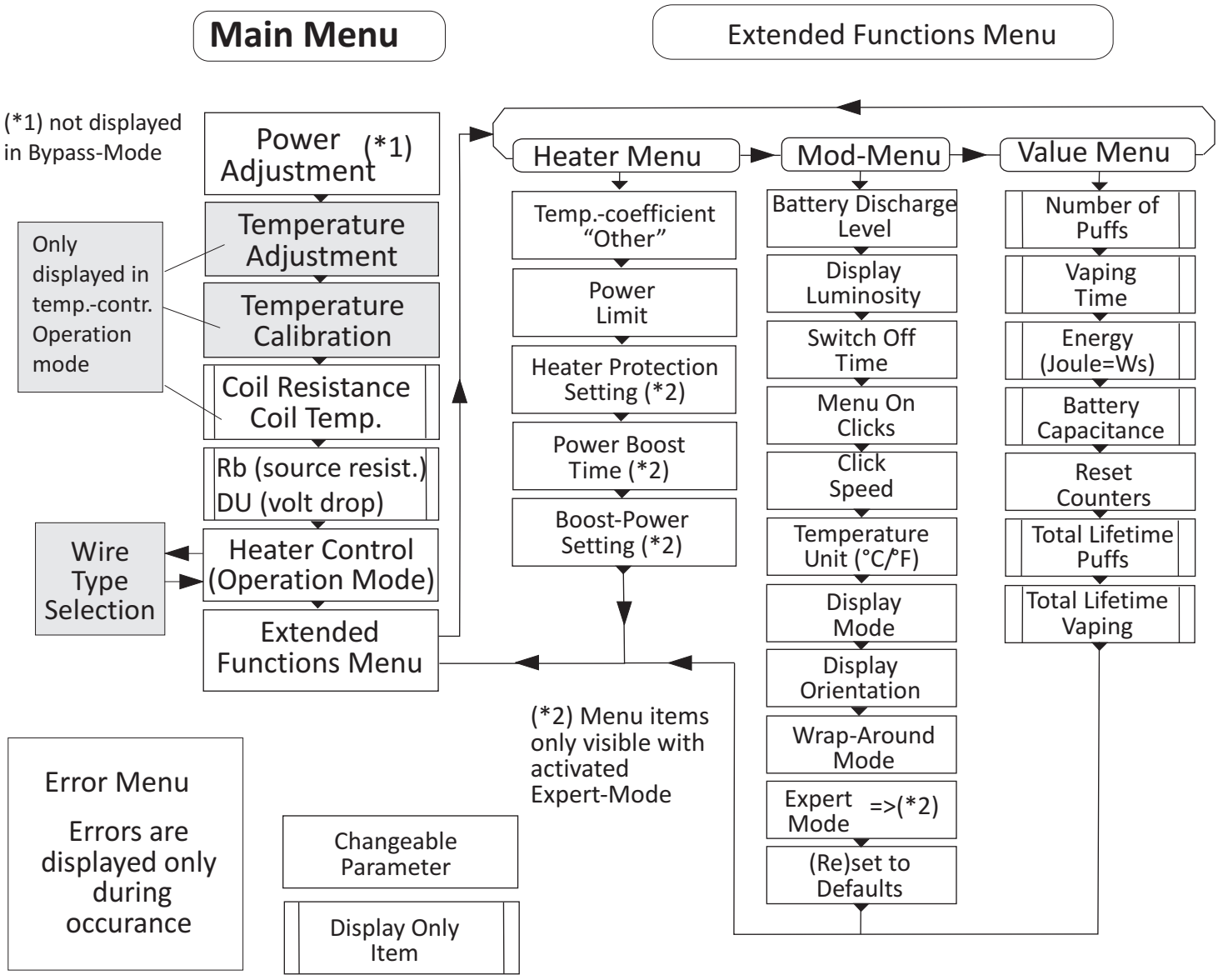
- 5 to 80W continuous with one Li-Ion battery size 21700 (20700)
- up to 100W short term in Boost mode
- Adjustable battery discharge level (2.5-3V, reduced power)
- Up to 11V output voltage
- Up to 22A output current
- System source resistance determination
- Temperature controlled vaping mode with various wire-types
- Mechanical MOD mode
- 10 Power boost modes
- 10 Heater protection modes
- USB- charging up to 2A (DaniBox 21700-USB only)
- Atomizer resistance range 0.05 to 5 Ohms, total
- Atomizer resistance range at 80W 0.17-1.5Ohms
- Atomizer resistance range at boost 100W 0.21Ohm-1.2Ohm)
- Reverse battery protection
- Versatile menu structure
- Individual user preferences selection
- spring loaded center pin made of copper beryllium
- 1 year warranty (terms and conditions, see chapter 07)
- stable stainless steel / anodized Aluminium housing

03 Display Operation

The mod is equipped with a graphical 0.66” OLED display which provides all important information about the status during and for 4 seconds after each vape.



04 Menu Overview



05 Main Menu (Page 1) On/Off, Key-Locking

Switching On/Off, Key Locking and Menu-Operation

The DaniBox21700 has three buttons: The bigger vape/fire button positioned directly below the atomizer and a plus- and minus button below the fire button.
The mod is switched on by shortly pressing any button 5 times, if it was actively switched off, see below. The display shortly shows “dicodes”.
By pressing the plus- or minus-button three times (user changeable with parameter Menu-On clicks “MOnClk”) the user is led to the main menu.
For actively switching off the mod, the fire button is to be pressed shortly 5 times and the display shows “Bye..”

Beside the active switching on and off, the device switches off automatically after a user defined time (default 5minutes). All dicodes boxmods differentiate between active switch off and the automatic switch off after the switch-off-time. When the mod was switched off driven by the automatic timer, the menu is entered by clicking “n” times the plus or minus button (”n”=“Menu On Clicks”,parameter value 1-5, default value 3) or by pressing the vape-button longer for immediate vaping. I.e. the user can vape immediately, even when the mod was completely powered down.

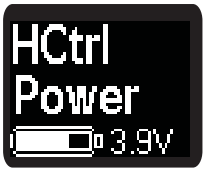
To avoid an unintended change of settings, for example during transportation in a pocket, the buttons can be locked by pressing the plus- and minus button simulteanously: “KeyLock” is displayed. To unlock the buttons, again press both buttons at the same time, indicated by “UnLock” shown on the display.
Note that many other mods are locked/unlocked by pressing the fire button 5 times shortly. This is in fact the same behaviour on dicodes-mods, except that dicodes-mods are switched off completely without discharging the battery.

Beside the main menu covering the needed functionality for vaping, there is an extended function menu with 3 sub-menues, see page 3. The extended functions menu lets the user adjust preference settings as well as parameters not needed often. Thus the main menu is kept short, while keeping the option for individual configurations.
By means of the plus and minus buttons it is possible to navigate through the menu, as well as to increase and decrease values of a parameter after a short waiting until the value is displayed inverted (black on white).
The waiting time from navigation mode to the entry mode is adjustable by means of the parameter “Speed” in the extended functions menu.
Beside waiting, it is also possible to get from navigation to value entry mode (and back) by **shortly** pressing the fire button, i.e. skipping the waiting time. Thus a quick change of adjustments is possible.
In the extended functions menu, the short pressing of the fire button also enables the fast stepping between the selection of one of the three different sub menues, again skipping the waiting time until the desired menu is displayed. At this point the fire button also acts as an escape option from the extended funtions menu, by holding the button for a longer time and releasing it. Note that during the extended functions menu display vaping is disabled.

05 Main Menu (Page 2) Operation Modes

Heater Control (Operation modes)

The mod can be used in up to 5 operation modes. The mode can be selected in the Heater Control menu “Hctrl”.:
The default operation is power or temperature controlled vaping.
With the “Expert Mode” (Extended Functions Mod-Menu) enabled, additional operation modes are Heater Protection, Power Boost, and Bypass (mechanical mod).
With Expert Mode disabled, the menu options Heater Protection, Power Boost and Bypass are masked out.



Power Mode

In the operation mode “Power” the wattage selected in the power setting menu is applied to the coil, unless the voltage would be greater than 11V or the current greater than 22A, which depends on the coil resistance.

For example with a coil resistance of 4 Ohms and a power setting of 40W, the required voltage at the coil would be 12.7V. The power is therefore reduced to maximum wattage 30W ($(11V)^2/4R=30.25W$).
Or, if the coil resistance is 0.1 Ohm the maximum power is 48W, because $(22A)^2*0.1Ohm=48.4W$.
As can be seen from the examples, with high coil resistance the power is limited by the maximum voltage of 11V and with low resistances by the maximum current of 22A. The fact is also reflected in the feature list: A power of 80W is possible from 0.17 to 1.5 Ohms.
Resistances of 0.05 to 5 Ohms are possible but with a reduced power.

Temperature controlled vaping

In this mode the mod will regulate the temperature of the coil to the pre-set value, except the power setting is too low to achieve the temperature. So please note to adjust the power setting to a value high enough, if you choose temperature controlled vaping. Otherwise the temperature regulation changes to a temperature limitation mode. If the power level is sufficiently high, it sets the heating up speed of the coil until the set-point temperature is reached.

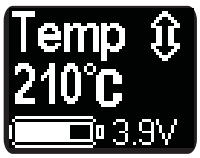
When HCtrl is set to TmpCtrl, the menu directly jumps to the selection of the wire type after a short waiting time. Here the user can select between dicodes-wire (NiFe30), Nickel 200 (Ni), Titan(Ti), Stainless Steel 304, 316 and 316L, NiFe48 and “Other”.
Just stop stepping further in the list at the wire type you are using and wait for the display to go off.
With wire-type “Other” selected, the temperature coefficient defined in the Extended Functions Menu under item “Tmp. Cof” is used. The value of the selected coefficient is displayed behind “Wire”.

For commonly used wires, the predefined coefficents are: NiFe30=320, Nickel200=620, Titanium=350, SS304=105, SS316=88, SS316L=82, NiFe48=480 .

If you use the dicodes wire (RESISTHERM) it is guaranteed that the wire will always have the same coefficient, because the wire was especially designed for temperature regulation purposes. The regulation accuracy is best then, as the combination of resistivity and high coefficient is very good.
Note for using Nickel wire: Nickel has a high and always precise temperature coefficient (Ni200). But Nickel is not so easy to handle, because it is quite soft and it leads to very low resistance coils, because of it’s high conductivity. Then smallest changes of contact resistances due to atomizer movements (tightening) or mechanical thermal elongations lead to poor regulation accuracy.
When using stainless steel wires it is strongly recommended to have a coil resistance of 0.7 Ohm or higher and to make sure that there are no not well defined contact resistances in series with the coil, e.g. an adjustable center pin screw. Otherwise the temperature regulation and accuracy is poor.

05 Main Menu (Page 3) Temperature Control Mode

Temperature Mode (continued)



The temperature selection is ***only available and displayed if temperature controlled vaping is selected***. So the menu structure adapts to the selected operation mode.
The Temperature Up/Down menu sets 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 steps of 5°C/10°F). To achieve a high precision temperature control, a correctly performed reference measurement (TempCal Init) is mandatory, see next item.

Manual Coil Temperature Calibration

This Menu item is ***only displayed if temperature controlled vaping is selected*** (see Heater Control menu item below). For the use of temperature controlled vaping, the calibration measurement is a very important part of it.
The Temperature calibration measures the coil resistance at room temperature (20°C) as the reference for temperature controlled vaping. This together with the wire's temperature coefficient enables the mod to calculate the coil's temperature. The calibration must be confirmed in a second step to avoid accidential activation. After confirmation the display shows "process" until the calibration completed. It is extremely important to understand, that, if the calibration is performed at a temperature other than 20°C, the control will regulate a constant temperature, but with an offset deviation. So take the ambient temperature during the temperature adjustment in to account. Similiar, if a wrong temperature coefficient was adjusted, the actual temperature might deviate dramatically from the set-point (here it is a factor and not an offset). Always perform a calibration, when a new atomizer is attached, even if it is made from the same coil material.

Coil Resistance and Coil Temperature

This is a <u>display only</u> menu item. The coil resistance is displayed in a range from 0.00 to 9.90 Ohms. If temperature controlled vaping is selected, the current measured coil temperature is displayed, if not, the display shows T ---.
If the display does not show 20°C even with cooled down atomizer, it is recommeded to perform a manual calibration again.
Note that for coils with very low resistance, like Nickel-coils or stainless steel, a slight mechanical re-arrangement (tightening the atomizer) can lead to drastical changes in the temperature control due to the change of contact resistances. We therefore rcommend to use other than Nickel coils, e.g. The NiFe30 (RESISTHERM) wire from dicodes or other higher coefficient wires.
When the values of coils resistance and temperature are highlight and pressing + or - permanently will show a real time update of the values as long as the button is pressed. This can help a lot diagnosing if there is a lose contact or similar problems.

05 Main Menu (Page 4) Expert Operation Modes

Main Menu

Parameter

Extended Functions
Heater Menu

Heater Protection Mode (only when Expert Mode=1)

The heater protection mode is a periodic interruption of the power applied to the coil. The duration and the repetition rate of the interrupts is selected by means of the parameter “HtProt” in the extended functions mod-menu.
The repeated power interrupt helps to avoid a break in liquid flow and thus an increase in temperature.
The table below shows the relation between power interrupt and appliance time in dependence of the parameter “Heater Prot”:

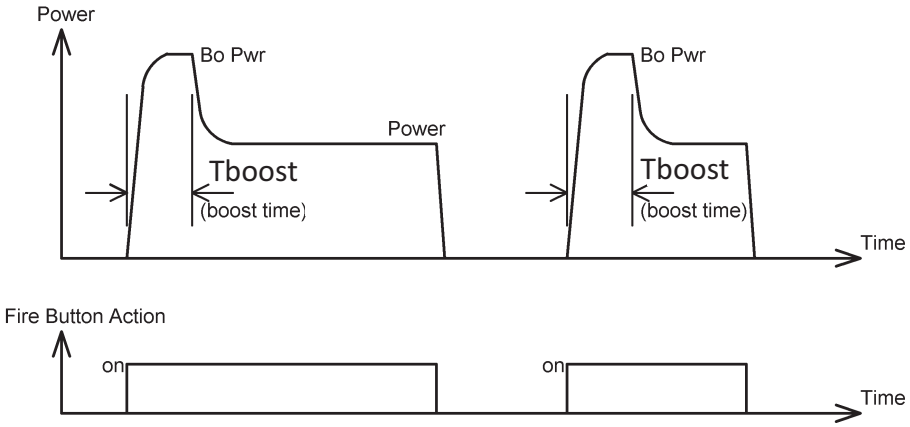
Value Heater Prot	On-Time [ms]	Off-Time [ms]	Powerfactor
1	400	100	0.80
2	600	100	0.86
3	800	110	0.88
4	1000	120	0.89
5	1350	150	0.90
6	2000	200	0.91
7	2000	180	0.92
8	2000	150	0.93
9	2000	100	0.95
10	2000	80	0.96

Power Boost Mode (only when Expert Mode =1)

The Power Boost Mode enables an initial short term high power pulse applied to the coil (boost). When in Boost Mode, the power setting of boost appears in the main menu as well as in the Extended Functions / Heater menu under “Pboost”. Also in the Extended Functions / Heater the boost time can be selected with the parameter Tboost from 0.1 seconds to 1.2 seconds.

Main Menu

Extended Functions
Heater Menu

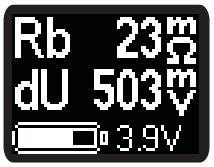


Bypass Mode (only when Expert Mode =1)

In the operation mode “Bypass” (mechanical mod), changing the power setting is not available, because the power is defined by the battery voltage and coil resistance. The menu “Power” is not displayed in this case, but the value display during and after the vape shows the actual power output to the coil. In Bypass Mode all power limiting functions remain active.

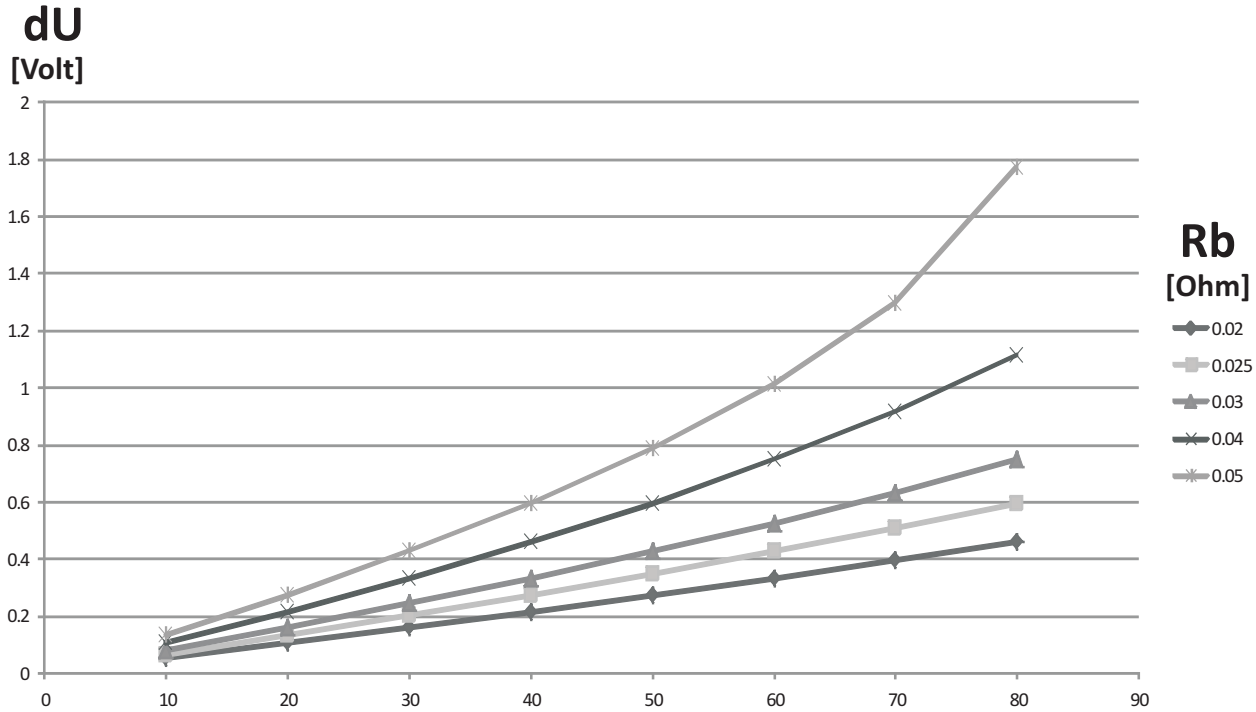
05 Main Menu (Page 5) Battery Status

Battery Status



All dicodes mods show the actual battery voltage during the vape.
This voltage is always lower than the battery voltage in stand-by, i.e. when no power is applied to the coil. The difference between the idle voltage and the voltage during power output is called the volt-drop, should be as low as possible, but can be significant, depending on power, the quality of the battery (inner resistance of the battery) and resistances on the battery side of the mod, which are the contact resistance of the bottom cap, the plus-contacting spring, the melting fuse and wiring to the electronic.
On the Dani Box 21700 there is display menu showing the total resistance on the battery side Rb and the total volt-drop (dU) from idle to the voltage when vaping.
The main contribution of Rb normally is the batteries inner resistance. As an example the inner resistance of a Samsung T40 battery is typically 10-14mOhm. Contacts and internal wiring within the mod are at about 6mOhm, except there is additional resistance due to dirt in the thread or liquid residue on the batteries contacts.
The display of Rb and dU is only updated during vaping. Before, the values in this menu read as “---”.
As said, the value of Rb gives an indication of the batteries quality and of contact resistances and is quite constant. It varies with batteries temperature though.
The value of dU depends on the power output to the coil and thus is not constant. The higher the power output, the higher the volt-drop.
The user should understand, that the volt-drop is not a problem of the device itself, but a normal physical result of current being drained from the battery. The volt-drop can get higher than expected though, when there are additional resistances in row with the battery, like dirt and liquid residue. As a consequence the device will show “low-bat” much earlier and might limit power..
So in order to get an optimally low volt-drop, always keep all contacts and the bottom cap threads clean.

The diagram below shows the dependency of the voltage drop and the power output for different resistances at the battery side.



05 Main Menu (Page 6) Extended Functions, Errors

Extended Functions Menu

The Extended Functions Menu provides three logically grouped sub-menues:

- Heater Menu — Settings related to the heater or coil
- Mod Menu — Settings related to the individual usage and appearance
- Value Menu — Provides several statistics of vaping

The Extended Functions Menu offers a lot of setting options of the device, to provide the highest possible flexibility for the user to individually adjust it to whatever preferences. Normally, once the settings were made, the user will need to change the parameter rarely. In order to keep the main menu as short as possible, the extended functions menu was created.
Chapter 6 explains the Extended Functions Menu is detail.

Error Messages

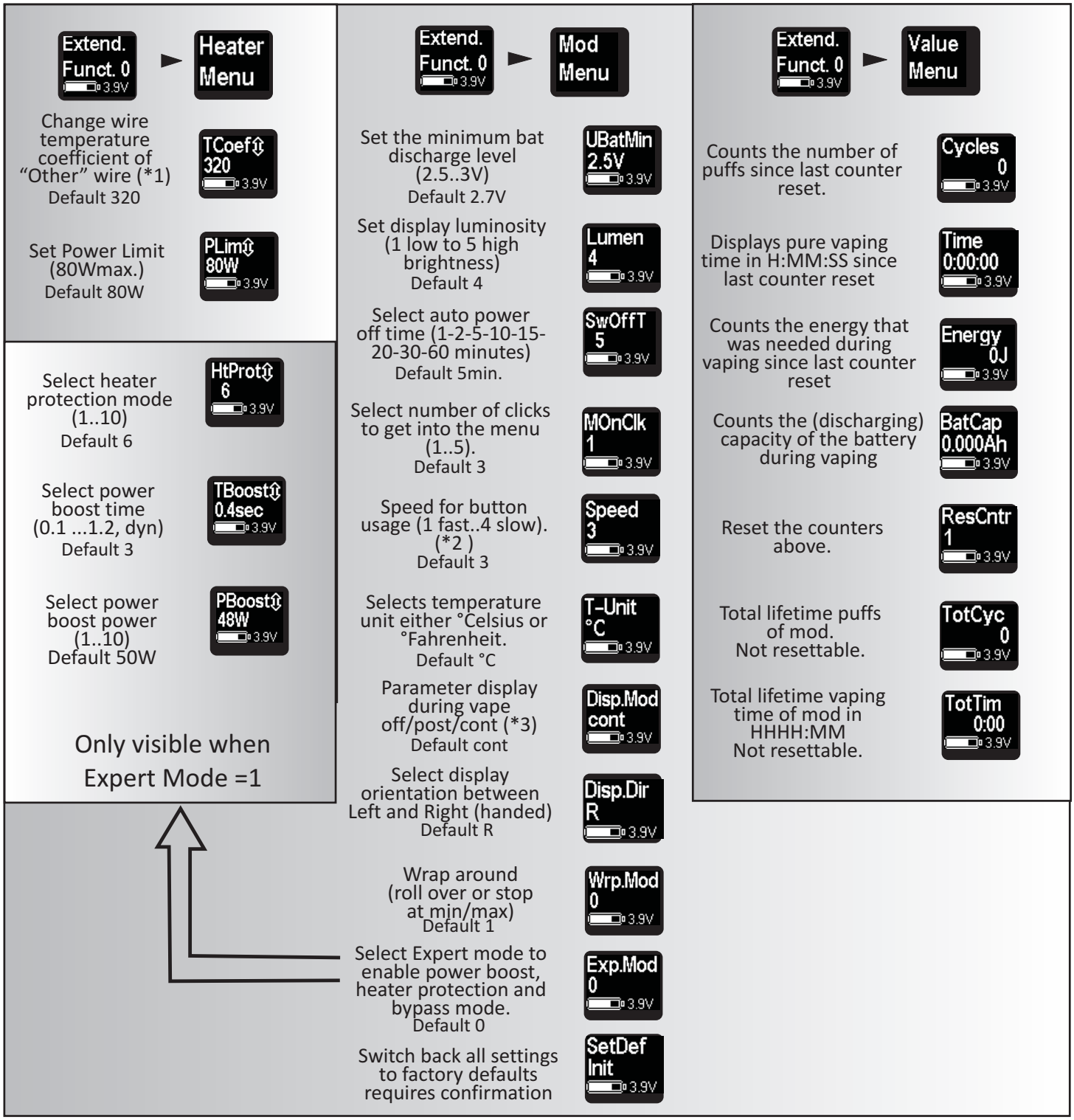
If an error occurs, the mod directly jumps to the error menu and displays the error number and a mnemonic (short-term) description.
The possible error messages are:

0 OvrVolt: The input voltage is too high. The Dani Box Micro operates with one battery. If the input voltage exceeds 4.5V 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 during the temperature reference measurement occured
3 N/A
4 OverCur: Short on coil exceeding the current limit of 22A or coil breakdown (open)
5 LowBat: The battery voltage under load (with current drained from it) has reached the minimum discharge level, defined with parameter UbatMin in the extended function mod-menu. Also see explanations on Rb and dU on chapter 5, page 5 (page8 of the document)
6 EleHot: The electronics have heated up too much and needs to cool down. This error will not occur with normal usage of the mod.
7 TimeOut: The maximum puff-time is limited depending on power. For a power <20W it is 20 seconds. Above 20W it decreases by 0.5seconds per Watt, above 40W it is 10 seconds.
8 LowR: In Bypass mode the coil resistance is too low.

All errors need to be acknowledged by the user except error1 “check atomizer” (no atomizer attached). To acknowledge and thus clear an error, wait for the error to be highlighted and press either the plus or minus button. Err -- is then displayed. The error display disappears, when the user vapes or after one round in the menu.
Note that vaping is only possible if the error was cleared. Attaching a different atomizer, e.g., will not clear the error.
Removing the battery will also clear a pending error.

06 Extended Functions Menu (Page 1) Overview

Chapter 6 explains the extended functions menu in detail.
Here is a graphical overview of the extended functions menu and it's three sub-menus:



(*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 4 slowest

(*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

06 Extended Functions Menu (Page2)

In the following paragraphs, explanations are given for those parameters and items, which are not self explaining or which have interdependencies with other parameters or functions.

Extended Functions Menu => Heater control sub-menu

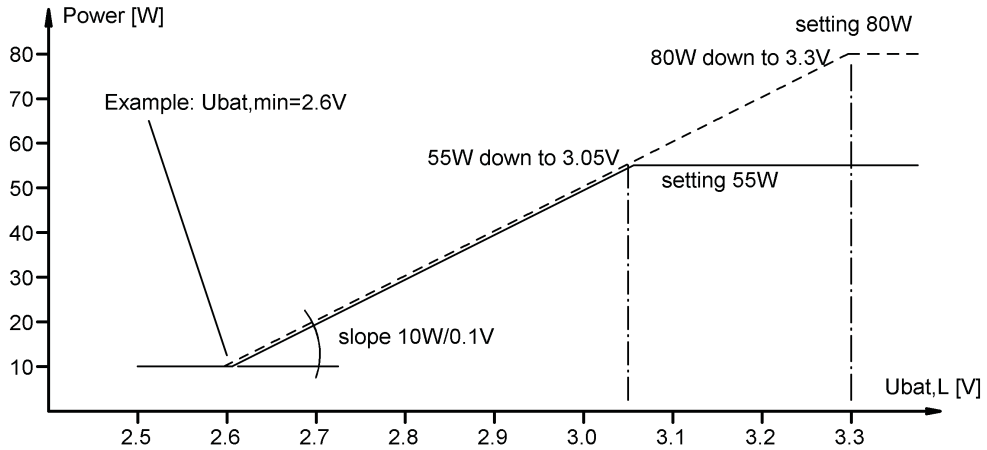
The selection of the correct wire-temperature-coefficient is very important for the correct operation of the mod, when temperature controlled vaping is selected.
As soon as TC-mode is selected, a multiple choice list of commonly used wires types with predefined coefficients is displayed and the wire type “Other”.
The coefficient of this “Other” wire is adjusted in this menu item. Note that stainless steel wires and also titanium wires often have not well defined coefficients, depending on their exact alloy composition.
The TCoef item in the menu is visible, even if the operation mode is not selected to temperature controlled vaping.

Power Limit defines the adjustment range of the power in the main menu. As stated in the main menu already, the limit value sets the roll-over or stop point of the menu “Power”. The power limitation makes sense especially in the power vaping mode to reduce the range to the used atomizer.

Extended Functions Menu => Mod sub-menu

All dicodes devices have a functionality to adjust the minimum discharge level of the battery between 2.5V and 3.0V. Almost all available batteries on the market specify the minmum discharge level of 2.5V to 2.7V. If the user is not sure whether the used battery meets this specification, the level should be set to 2.7V (default setting).

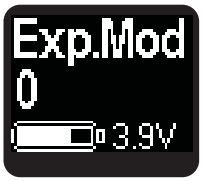
The selected voltage Ubat,min is the voltage at the electronics input, where the mod will allow 10W to be drained from the battery to protected it from overloading.
In contrast to other available tube- and box-mods on the market, which stop operation already at 3.4V, the lower discharge level on dicodes mods lead to a better battery utilization. At UBatMin+ 0.7V a power reduction is activated depending on the actual power setting. The reduction starts when the power selected hits the slope from Ubat,min@10W to Ubat,min+0.7V@80W as shown in the diagram above. With every 0.1V of higher battery voltage (higher charge level) 10W more of power is permitted.



The device has an automatic switch off timer. The time to automatic power off the device can be selected between 1 minute up to 60 minutes. We recommend to choose 1 or 2 minutes, because the mod is always immediately on and ready to vape, when the fire button is pressed.
This provides the best utilization of the battery. When off, the device draws zero current from the battery.
Note that if the mod was actively switched off by the user (5 times fast clicking of the fire button), the instant power on is not available. In this case the mod has to be switched on with 5 clicks first on any button.

06 Extended Functions Menu (Page 3)

The display mode switches on and off the dynamic display of several parameters during and after the puff. The setting “cont” (continious) will display values during and 4 seconds after the vape. With “post” the values are displayed only after the puff and off disables the display.



The DaniBox21700 can be used in 5 different modes. But in order to keep the menu as short and simple as possible, 3 of the 5 modes are only available, if the Expert-Mode is set to 1. The name is Expert-Mode, because the use of the additional operation 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 again the modes in an overview:

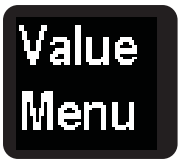
Mode0 Power	Vaping with a constant power setting. The selected power is applied to the coil, unless the coil’s resistance affords a different power setting or power is limited due to other reasons.
Mode1 Temp-Cont.	The power applied to the coil is calculated by a temperature controller which keeps the coil’s temperature constant. Important to note: Set the correct temperature coefficient and perform a calibration at room temp.
Mode2 Heater-Prot.	The power applied to the coil is repeatedly interrupted to enable a liquid flow und thus to limit the temperature.
Mode3 Power-Boost	The coil is quickly heated up initially. We recommend not to set the boost-power value too low but adjust a lower normal power setting to limit the coils temperature rise. Boost power can be selected in the main menu, Boost Time can be set on the extended function / Heater menu from 0.1 to 1.2 seconds.
Mode4 Bypass	The mod behaves like a mechanical mod, i.e. the battery voltage is directly applied to the coil. This, with the restriction, that the maximum current is 22A. Note that the vape now depends on the charging level of the battery, and the coil should not be too low in resistance as then 22A is the limiting factor. If the resistance is too low in Bypass-mode, Err8 LowR is displayed and vaping is not possible.

The parameter “Set defaults” switches back all settings of the device to their default values. The default value can be found in the overview of the extended functions menu.
To avoid unintentional reset to the defaults the device will ask for a confirmation:
Select SetDef Init, wait for the Init to be highlighted, press up or down => Confirm is displayed (already highlighted). Press again up or down to confirm (=> Process is displayed) or do nothing to cancel.

The default values for parameters of the main menu, depending on the operation mode, are:

Power 10W
HtrCtrl Power (that is power is the default operation mode)
Temperature 210°C (when temperature control was selcted)
Boost Power 50W (when power boost was selected)

06 Extended Functions Menu (Page 4) Sub-menu Value



The Extended Functions Menu has another sub-menu showing several statistical values. There are two types of value-counters, either resettable to zero or not. The statistic counters are saved whenever the mod is automatically or manually switched off.

In contrast, if the battery is removed from the mod before switching off, the changes of the counters since the last switching on are lost.

The following statistical values are stored:

Cycles Number of puffs. The counter can be reset to 0.

Time The timespan during which power was applied to the coil, i.e. vaping time.The counter can be reset to 0.

Energy This is the energy consumption during vape in Joules=Watt-Seconds. This value is the true integrated vape power over time. It is the power integral, because during 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 If this counter is reset immediately after the insertion of a fully charged battery, and checked before a new battery is inserted, it shows that part of the batteries capacity, which was consumed for vaping. Note that the amount of the batteries capacity needed for the device in standby is not counted.

The menu item **Reset Cntr**, i.e the resetting of the counters, is intentionally positioned between resettable counters and those which cannot be reset. So it is easier to remember, which are resetable.

TotCycl "Total Cycles" is the number of puffs throughout the entire mod's life. It cannot be reset.

TotTime "Total Time" is the total time of vaping (not standby) in a format HHHH:MM that is 4 digits of hours and 2 for minutes. It cannot be reset.

07 Charging DaniBox21700-USB only

Charging the device

The DaniBox 21700-USB (not to mix with the classic DaniBox 21700) is equipped with an integrated battery charger circuit and an USB-C connector at the bottom of the device.
Connect a source, i.e. wall adapter, power-bank, etc., capable of delivering 5V and at least 2Amps (10W).

Note that several sources with an USB-C connector output can deliver 5V, 9V or 12V or even higher voltage. These sources normally check the device to be charged, if it can handle higher voltages than 5V. This is called power delivery protocol and uses the data-lines on the USB-C port.
On 5V only devices the detection is realized by simple resistors on certain USB-C lines (CC1/CC2).
The DaniBox21700-USB is such a 5V only device.
But there are sources on the market, which do not follow this protocol. Charging is not possible with these devices.
Sources with a USB-A output connector are always working as they always provide 5V only.

08 Warranty and Disclaimer

Warranty
All devices produced by dicodes must pass extensive electrical tests, calibrations and optical inspections before being packed and shipped. If nevertheless an erroneous operation is detected, dicodes will take care about within one year after purchase. The customer is therefore requested to keep the invoice.
The **warranty** refers to the error free operation of the **electronics hardware and software during normal usage**.
In case the device shows a permanent electric fail, the user is free to send the device back to dicodes for repair without cost (shipping cost to dicodes in Germany is not covered by the warranty). Shipping back to Germany as a private person from a non-EU country is not possible due to German customs. Please contact the dealer where you bough the product first.
The customer is requested to check the devices housing for scratches or marks, prior to any use. Company dicodes cannot accept claims regarding scratches and marks after any use of the mod.
In the case the customer is not sure whether the malfunction is covered by the warranty, please contact dicodes by email info@dicodes-mods.de prior to sending back the device. In any case we recommend to contact dicodes before shipping.
If a sent back defective device is not covered by the warranty, dicodes will give the customer a quote for repair, before any repair action takes place.
The postal fee or shipping charge from the customer to dicodes is **not covered by the warranty in any case.** If dicodes receives a device, that was sent back because of not-existent problem, dicodes is free to charge the customer with a service fee.
Remove the battery before shipping. Please send the device to:

Company: dicodes GmbH
Street: Friedrich der Grosse70
ZIP-Code: 44628
Town: Herne
Country: Germany

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

The warranty does not cover:
- defects or fails due to misuse, contamination by liquid or dirt, damage, tampering, lack of care, exposure to temperatures higher than 45°C or lower than 0°C, or by dropping
- scratches or marks due to normal wear and use
- defects due to the use of faulty or incorrect batteries

Note: Always keep the charger contact at the bottom of the device clean and free of liquid. Liquid (resinified) can conduct electrical current. This can discharge the battery or damage the device.

The warranty voids, when:
- dropping the device on the floor (*)
- attempting to open or opening the device
- maintaining or repair by unauthorized persons

(*) Do not use a device which dropped, because the electronic or battery could be damaged. Contact dicodes.
If the battery cannot be removed, because of a blocking battery cap, unscrew the three screws on the bottom to remove it.

09 Remarks and Notes

Battery
Always use batteries with high drain or very high current capability, flat top, unprotected from high quality manufacturers. Avoid to use no-name products. Using low quality batteries will void the warranty. Insert the battery with the plus terminal in the direction towards the atomizer and in angular position.

Warranty
Opening the device, other than the battery cap, to change the battery, will void the warranty!

Electronic cigarettes
Electronic cigarettes are NOT healthy. But so far all studies indicate, that they are less harmful compared to tobacco- cigarettes. Electronic cigarettes are an alternative to tobacco-products, but should not be regarded as an dehabituation to smoking. Electronic cigarettes are not suited for children and youngster below 18years of age, non-smokers, pregnant women, persons with allergies against Nicotine, Propylene Glycol and persons with cardiovascular disease. Selling to persons below 18years of age is prohibited!

Battery Disposal
You bought a rechargable battery powered product. The rechargable battery lasts long, but wears out nevertheless. Li-Ion batteries may not be disposed in household waste. Customers are obligated by law to dispose worn out batteries to apporiate gathering points.

Mod Disposal
The symbol below indicates that this product should not be treated as household waste, but according to WEEE (waste electrical/electronical equipment) should be reused or recycled. Thank You!

dicodes GmbH
Friedrich der Große 70
44628 Herne
Germany
Phone: +49 2323 1463635
Email: info@dicodes-mods.de
Web: www.dicodes-mods.de