

# **JT-HD35** USB load resistance



# **1. GENERAL INFORMATION**

Dear customer,

thank you for choosing our product. In the following, we will show you how to use your product.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

This USB load resistance suits perfectly for example to test how much power your USB charging unit really has. The load resistance can be powered with up to 35 W. The current can be adjusted with a built-in trimmer. On the LCD display, the current current is shown. With the help of the buttons, the load can be switched on and off. Moreover, the load resistance is capable to simulate and to recognize automatically different charging electronics (QC2.0( 5 V, 9 V, 20 V), QC3.0, FCP, AFC 9 V).

operating voltage	4 - 25 V
operating current	0.25 - 5 A
power	35 W
display mode	4 digit segment display
fan speed	8000 RPM ± 10 %
connections	USB2.0, micro-USB, USB Typ-C
dimensions	81 x 41 x 28 cm
weight	52 g

# 3. PIN ASSIGNMENT



1. Functions for protection:

OVP (over voltage protection): over voltage protection by 25 to 30 V, the LED display shows "OVP" like the picture below.



OTP (over temperature protection): with a temperature of over 80 °C the LED display shows "OTP".



OPP (over power protection): With a power of over 35 W the LED display shows "OPP".



After the load is in the protection mode, you have to set the recovery mode for the output.

Display of voltage, current and power

Intelligent fan, with a power of 10 W or a temperature of 40 °C the fan starts automatically to cool the device

Precise multiloop potentiometer to adjust the current accurately up to 0.01 A.

You can set the standard start status freely.

2. Trigger function:

The device can trigger QC2.0, QC3.0, Huawei FCP, Samsung AFC 9V and other quick charger modes.

#### 3. Detection of quick charger function :

You can use the Auto mode to identify if your quick charger has the quick charger function.

#### 4. Power-On automatic trigger function:

With this function you can trigger the quick charger after the start of the device and activate the load automatically. It suits either for batch tests by older charging units.

# **5. USAGE OF DEVICE**

#### 1. Adjusting of current

Through the spinning clockwise of the regulator, the current increases and with spinning counterclockwise, the current decreases.

2. Adjust the status of the LED display

Press "SET" to adjust the status of the LED display. Press again "SET" to display the current (0.00 A), power (00.0 P) and voltage (00.0 V).

3. Load output open and close

Press "OK" to open and close the load output.

4. Adjusting the load output at the start

Hold down the "OK" button to switch the load output with the next start on or off.



display for activated load at the start



display for deactivated load

## **6. TRIGGER FUNCTION**

The trigger / decoy function is the function to start the quick charger of the charging unit. In this mode the load can not be switched on or off but the current of the load can still be adjusted with the potentiometer (except in the AUTO mode because all other modes are sending only trigger instructions and do not evaluate if the trigger is successful or not).

This mode complies the different display states in the trigger mode:

QC2.0 5V: display shows "-05.0" (red LED glows)





QC3.0: display shows current voltage (green LED glows)

Huawei FCP: display shows "FCP9" (blue LED glows)

AUTO: dispaly shows "AUTO" (all LEDs glow)

# SET / - button:

#### press:

Initiate the voltage of the current quick charger mode to trigger or to switch.

# hold down:

Record current quick charger status and closes and opens AUTO

# OK / + button:

press:

Initiate the voltage of the current quick charger mode to trigger or to switch.

# trigger button:

press: Shifting of the trigger mode hold down: Shifting to the load mode

# Starting and Stopping of the trigger mode

Hold down the trigger button to switch between trigger and load mode. If you switch from the trigger mode to the load mode, the trigger state remains unchanged.

# Changing mode

Press the trigger button to change between 4 modes (QC2.0, QC3.0, FCP / AFC and AUTO)

# QC2.0 trigger:

With the QC2.0 mode, press "OK" after 2 seconds the red LED lights up. With the "+" and "-" buttons, it is possible to switch between 5, 9, 12 and 20 Volt.

# QC3.0 trigger:

Like the QC2.0, shows the display the current voltage and you can increase and decrease the voltage with "+" and "-".







# FCP / AFC trigger:

As the other triggers, it is possible to change between FCP and AFC with the buttons "+" and "-".

## AUTO trigger:

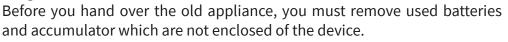
In the AUTO mode the support of quick charger protocoll of the charging unit is tested. Press "OK" in the AUTO mode to determine the automatic charging detection. Wait about 25 seconds, after that the LED should show the supported quick charger protocoll of the charging unit.

# 7. OTHER INFORMATION

Our infomation and take-back obligations according to the electrical and electronic equipment act (ElektroG)

# Symbol oN electrical and electronic devices:

This crossed out bin means that electrical and electronic devices do not belong into the household waste. You must hand over your old appliance to a registration office.



# **Return options:**

As the end user, you can with the purchase of a new device hand over your old appliance (which has essentially the same functions as the new one) free of charge for disposal.

# -Possibility of restitution at our company location during our opening hours:

Simac GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

# -Possibility of restitution nearby :

We send you a parcel stamp with which you can send us your device free of charge. For this, you must contact us per email at service@joy-it.net or per telephone.

# Information about package:

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Please package your old appliance safe during transport. Should you not have a suitable packaging material or you do not want to use your own, you can contact us and we send you an appropriate package.



# 8. SUPPORT

If any questions remain open or problems arise after your purchase, we are available by email, telephone and ticket support system to answer these.

E-Mail: service@joy-it.net Ticket-System: http://support.joy-it.net Telephone: +49 (0)2845 98469 – 66 (10 - 17 oʻclock)

For more information visit our website: **www.joy-it.net** 

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