

JBC

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INSTRUCTION MANUAL



B210

Precision Handle for B-IRON

This manual corresponds to the following reference:

B210-C

Packing List

The following items are included:

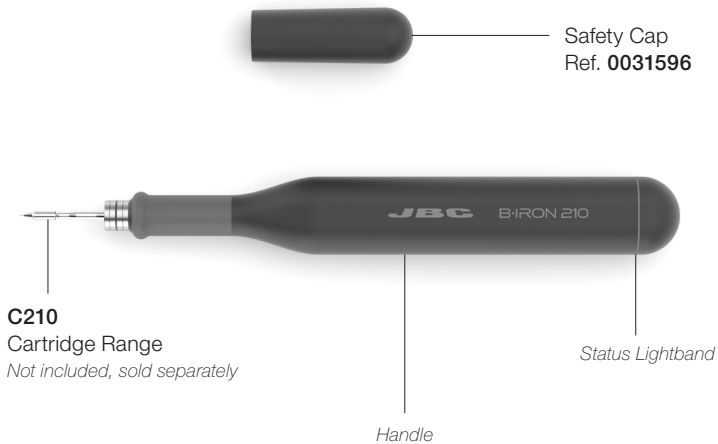


Precision Handle for B-IRON 1 unit
Includes Safety Cap for B115/210 Handles (ref. 0031596)
Cartridge not included, sold separately

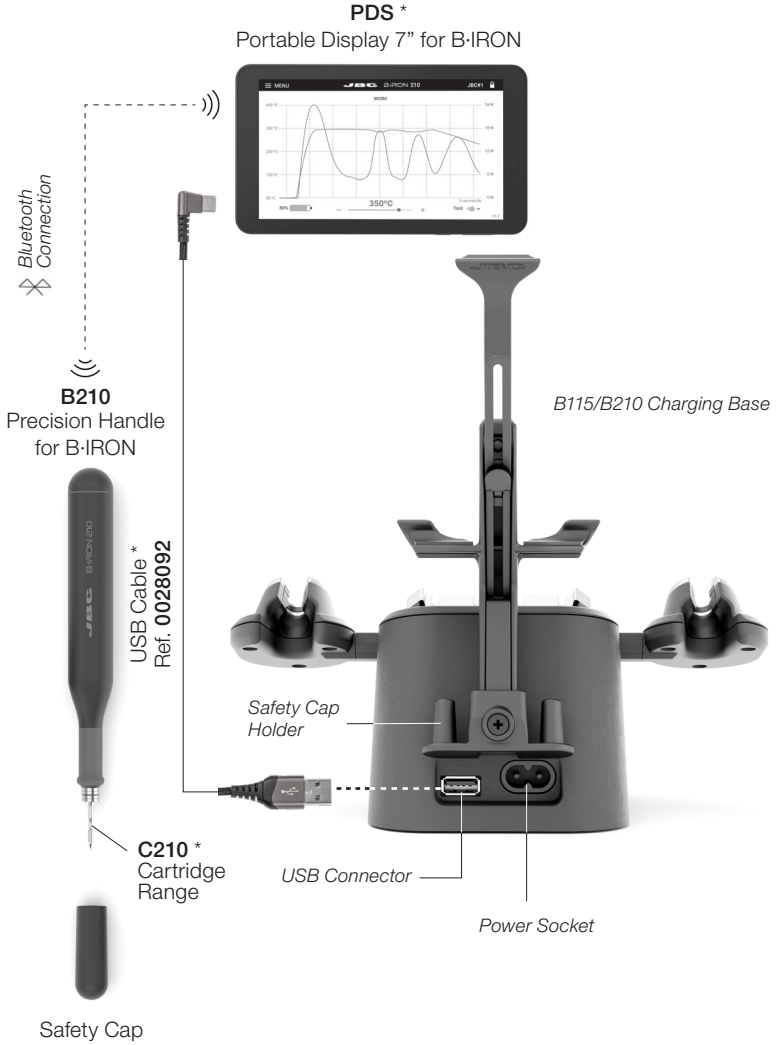
Manual 1 unit
Ref. 0030947

 Please read this manual and its safety guidelines thoroughly before using the product.

Features



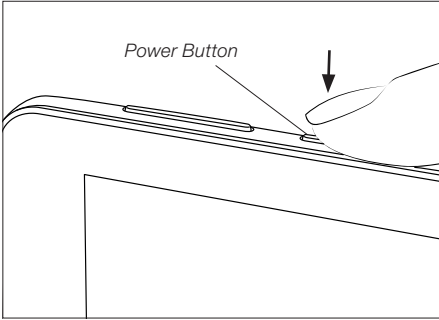
Connections Example



** Not included, sold separately*

Quick Start

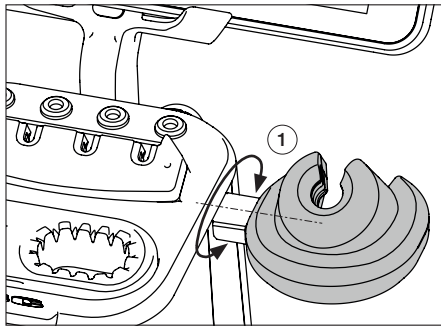
Turning on the Portable Display




Turn on the portable display by holding down the power button and then open the B-IRON app*:

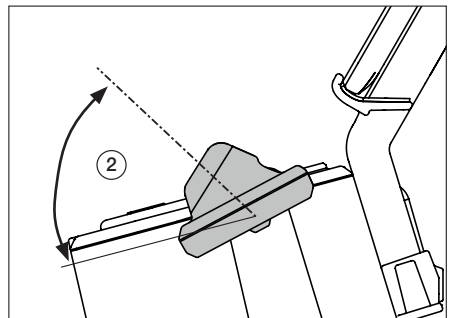
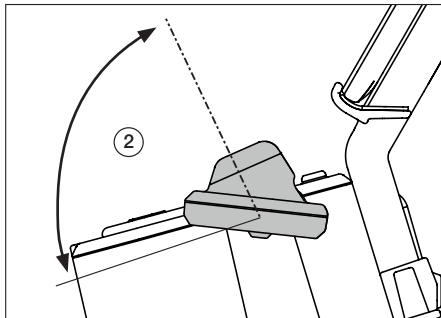
*** Note:** The app can also be downloaded to your own devices. To know how, see section "Installing and Updating the B-IRON App".

Tool Holder Angle Adjustment



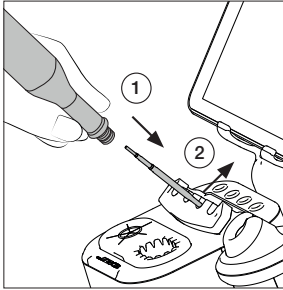
Adjust the tool holder angle by simply rotating it forward or backward (1) to the desired working position (2). Tool holders have 7 different positions, each one varying by an angle of 10 degrees.

 Do not rotate the tool holder with a tool resting on it.



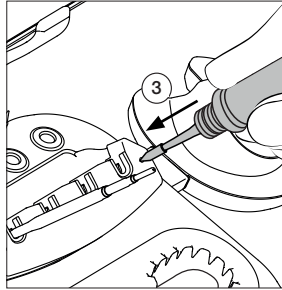
Cartridge Insertion and Charging

Inserting



Place the tool over a cartridge and press the tool down to insert the cartridge (1). To release the tool with the cartridge from the extractor, lift the tool upward (2).

Fixing

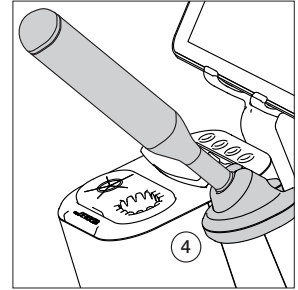


Make sure that the cartridge is appropriately inserted* into the tool by gently pressing the tip against the holes on the sides of the cartridge extractor (3).

***Important:** Cartridges must be inserted up to the mark for a proper connection.



Charging



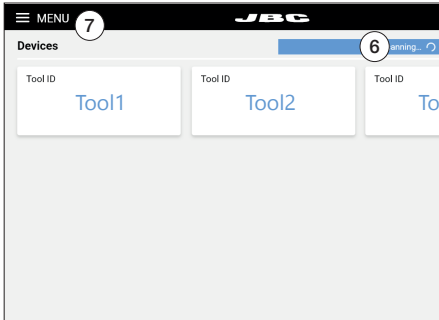
Place the tool on the tool holder (4) to charge it. A beep will sound to confirm that the tool is properly placed and charging.

The sound can be turned up, down or off using the buttons on the display.

⚠ Note: Charge the tool completely before using it for the first time. It will take approx. 60 min for B210, approx. 30 min for B115 and approx. 40 min for BP115.

For more information on how to change cartridges and the use of the cartridge extractor, see section "Cartridge Extractor and Cartridge Holder".

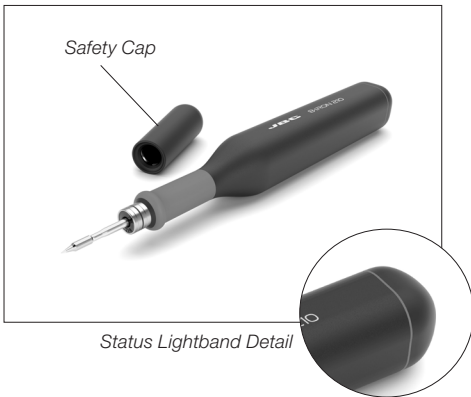
Tool Selection



Select the tool from the device list. If the tool is not displayed on screen, make sure that the cap is off and the tool has some battery. Try scanning again by tapping *Scan* (6) on the display.

To add a second tool to the station once the first one is connected, go to the main menu (7) and tap *Add device*. Select your second tool from the device list.

Status Lightband



The status lightband indicates as follows the tool status:

| | |
|-----------------------------------|--|
| green | working/soldering tool fully charged |
| green blinking | charging |
| alternating red/green blinking | low battery, less than 20% |
| red blinking | no cartridge |
| blue blink every few seconds | the cap is on and the tool is disconnected |
| no color | power off |

Safety Cap and Cap Holder



Thanks to the safety cap for B210 and B115 handles, tools can be safely transported even with a cartridge inserted.

When the cap is placed onto the tool, the cartridge stops heating immediately, data transfer is cut off and the tool is disconnected from the station. It turns off completely after 10 minutes of inactivity. This allows a greater saving of the tool's battery.

The stand has a holder for two safety caps on the back. This component can be detached by loosening and removing the screw between the two holders (1).

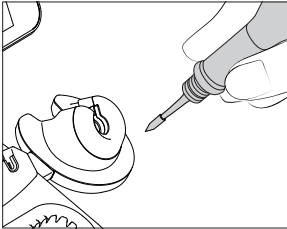
While the tool is being used, the cap can be stored on the cap holder.

Operation

The JBC Most Efficient Soldering System

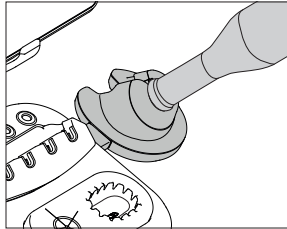
This revolutionary technology can recover tip temperature extremely quickly. This allows the user to work at a lower temperature.

Work



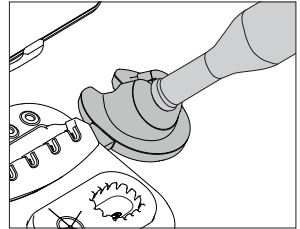
When the tool is lifted from the tool holder, the tip of the assembled cartridge will heat up to the selected working temperature.

Charge Mode



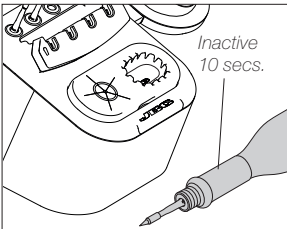
While the tool remains on the tool holder, it charges and the tip will gradually cool down to room temperature.

Sleep Mode



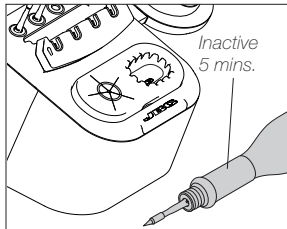
If Sleep Mode is activated (see section “Settings”), upon placing the tool on its holder, besides charging it enters Sleep Mode. The tip temperature will drop down and remain at Sleep temperature.

Hibernation Mode



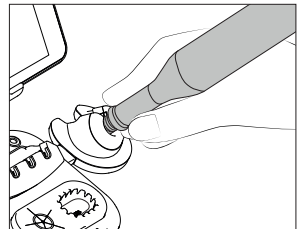
When the tool is away from the tool holder and remains inactive (no movement for at least 10 seconds), the tool goes into Hibernation Mode and the tip temperature gradually cools down to room temperature.

Automatic Turn Off



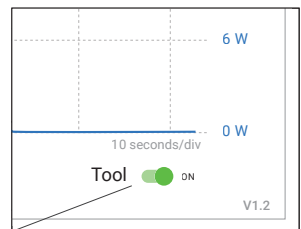
If the tool has been inactive for a longer period of time (at least 5 minutes), it automatically turns off.

Turning the Tool Back On



After automatically turning off, put the tool back on the tool holder to turn it on again.

Note: The tool can also be switched off/on manually. Tap the *Tool* power switch on the display (bottom right) to switch it off/on (if the tool is turned off, it will remain connected up to 5 minutes to the station but will not heat up the cartridge).

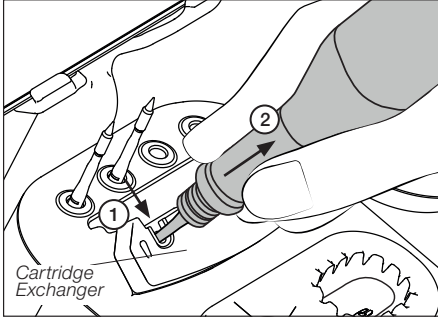


Tool Power Switch

Cartridge Exchanger

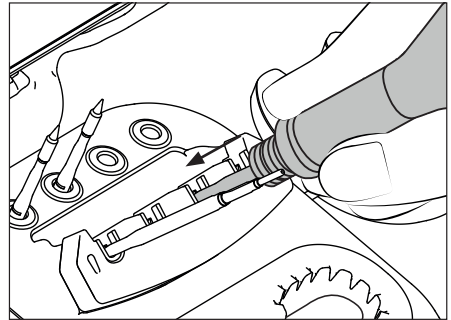
The cartridge exchanger saves time and allows to change cartridges safely without switching the tool off.

1. Removing Cartridges

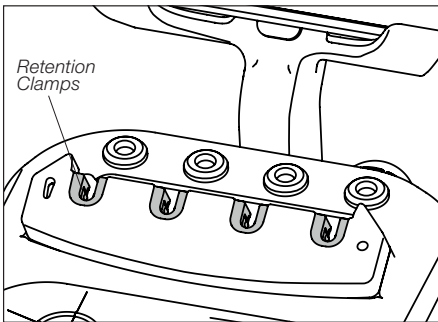


Place the cartridge over one of the slots of the cartridge exchanger and press down (1) until you hear a click. Then pull the handle out (2) to remove the cartridge.

2. Inserting Cartridges



Place the handle over a cartridge and press the handle down to insert the cartridge.



Cartridge Retention

Cartridges are held in place inside the cartridge exchanger thanks to the retention clamps, with the advantage that the cartridges do not fall into the exchanger and the cartridge tips are therefore protected. The cartridge exchanger of B-IRON stations works with C210 and C115 cartridges.

C210 Cartridge Retention Area

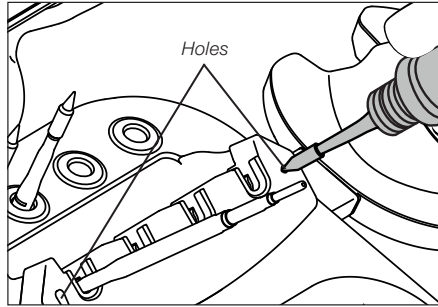
The holding area of C210 cartridges goes from the start of the tip until the cartridge begins to widen.



3. Fixing Cartridges

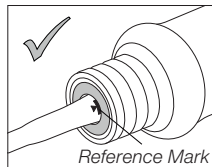
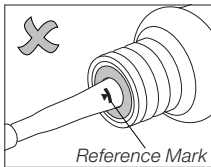
Depending on the shape of the tip, use the holes on the sides of the cartridge exchanger to properly adjust the cartridge.

Important: Push the cartridge in as far as it will go, making sure that it is firmly assembled*.



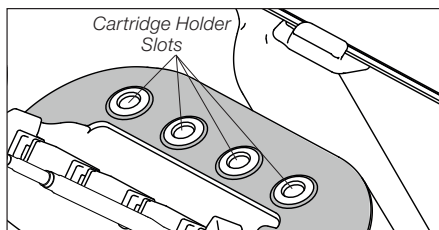
*Inserting C210 Cartridges

Push the cartridges inside the handle until the reference mark is aligned with the edge of the handle.



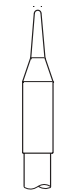
Cartridge Holder for C210 Cartridges

The cartridge holder (4x slots) is used to store cartridges. It allows to have different cartridges quickly at hand and it works with C210 Cartridges.



Compatible Cartridges

B210 Handle works with C210 Cartridges. Find the model that best suits your soldering needs on www.jbctools.com



Conical



Chisel



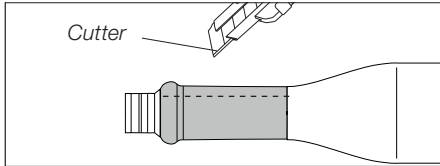
Conical Bent



Bevel

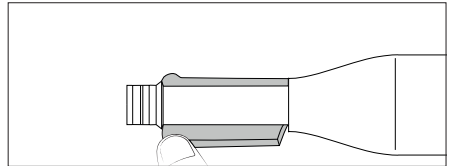
Replacing Grips

1. Cutting



Make a length-ways cut on the worn grip.
⚠ Be careful not to damage the handle.

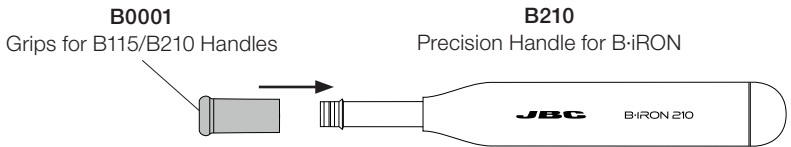
2. Removing



Remove the worn grip.

Assembling New Grips

Firmly slide the grip onto the handle until it locks into place.



Replacing Sealing Plugs

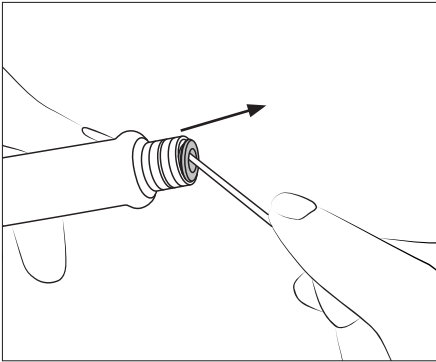
The sealing plug prevents undesirable flux vapors or particles from entering the handle. Its usage is highly recommended for intensive applications when soldering is exposed to FOD environments or for applications where the soldering iron works close to a vertical position.

Note: Choose the correct sealing plug depending on your handle model.

⚠ Before replacing the sealing plug, disconnect the tool from the station and make sure the device is not hot.

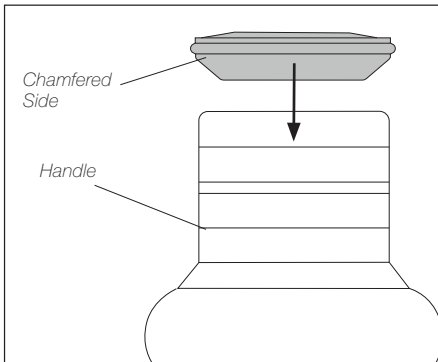
| Handle | Sealing Plug |
|--------|--------------|
| B210 | OB4000 |
| B115 | OB5000 |

1. Removing Sealing Plug



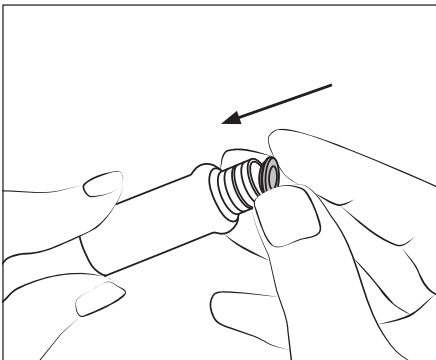
Introduce a small shaft or screwdriver, not deeper than 8 mm, lift and pull the sealing plug. Never use a cartridge to do this operation.

2. Mounting Position



Note: The chamfered side has to be positioned towards the handle.

3. Inserting Sealing Plug

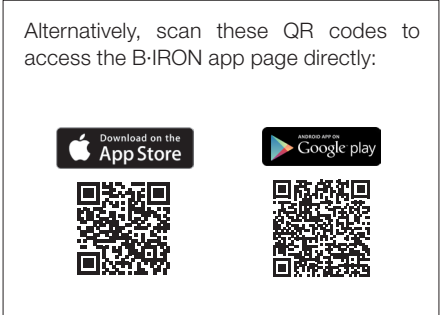


Push the sealing plug inside the handle until the sealing plug and handle edges are aligned.

Installing and Updating the B·IRON App

To install or update the app, some kind of internet connection is required (WiFi, cable, mobile data...).

1. Go to the App Store or Play Store (depending on your operating system).
2. Search for JBC B·IRON on the search bar.
3. Tap on the app and then on *Obtain / Install / Update*.

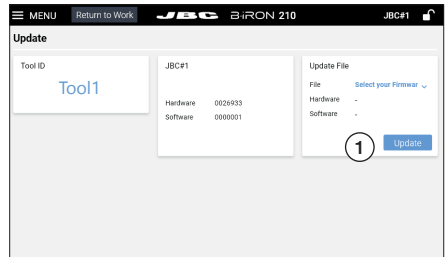


For Android devices the app installer can also be downloaded from:

<https://www.jbctools.com/jbcsoftware.html>

Updating the Firmware

- Download the JBC update file to your PC from: <https://www.jbctools.com/software.html>.
- Connect the tablet/device via USB connection to the PC.
- Check if there is a folder named “JBC” in the internal storage of the Android device used as B·IRON display. If it doesn't exist, create it.
- Copy the downloaded file to the JBC folder.
- Access the B·IRON app and, in the Menu, select *Update*.
- Tap on *Select your firmware file* and pick the downloaded file from the drop-down menu.
- Tap on *Update* (1).



Maintenance

Before carrying out maintenance, always extract the cartridge from the tool and disconnect the charging stand from the mains. Allow the equipment to cool down.

- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the tool and tool holder are clean so that the charging works properly.
- Maintain the tip surface clean and tinned prior to storage in order to avoid tip oxidation. Rusty and dirty surfaces reduce heat transfer to the solder joint.
- Do not use liquids such as alcohol, thinner or benzene to clean the tablet.
- Repairs should only be performed by a JBC authorized technical service.



Safety



It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause a fire.
- The power cord must be plugged into approved bases. When unplugging it, hold the plug, not the wire.
- Do not attempt to dismantle or open the housing of the tool as it may cause damage.
- Do not work on electrically live parts.
- The tool should be placed in the stand when not in use in order to charge the batteries.
- The soldering tip or nozzle, the metal part of the tool and the stand may still be hot even when the station is turned off.
- Do not leave the tool unattended when it is on.
- Avoid flux coming into contact with skin or eyes to prevent irritation.
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working to avoid personal harm.
- Utmost care must be taken with liquid tin waste, which can cause burns.
- This appliance can be used by children over the age of eight and also persons with reduced physical, sensory or mental capabilities or lack of experience provided that they have been given adequate supervision or instruction concerning the use of the appliance and understand the hazards involved. Children must not play with the appliance.
- Maintenance must not be carried out by children unless supervised.
- Do not expose the tablet to high temperatures, humidity or dust. Avoid direct sunlight.
- Do not drop the portable display or the tool, as it may cause damage or malfunction.
- Do not disconnect your device when it is in file transfer mode.
- Do not use the portable display in places where wireless communications are restricted.

Safety - Battery



It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.

- **Caution:** This product contains lithium-ion batteries. Mishandling or improper use may result in fire, explosion, or personal injury.
- Always use the provided charger. Do not use damaged chargers or batteries.
- Never attempt to disassemble or modify the batteries or the product. Doing so may lead to electric shock, fire, or damage to the product.
- In the event of damage, leakage, or overheating of the batteries, discontinue use immediately and contact customer support or JBC technical service facility.
- Dispose of devices with batteries inside, responsibly according to regulations. They must be disposed of in accordance with local regulations so that they can be recycled.
- Do not throw devices with batteries into household waste and do not dispose of them in fire or water.

Specifications

B210

Precision Handle for B-IRON

Ref.: **B210-C**

- Peak Power (Tool): 24 W
- Battery: Li-Ion 7.4 V / 750 mAh
- Charge Time: 60 minutes
- Selectable Temperature: 100 - 450 °C / 210 - 840 °F
- Idle Temp. Stability (still air): ± 1.5 °C / ± 3 °F
- Temp. Accuracy: $\pm 3\%$ (Using reference cartridge)
- Connections: Bluetooth Low Energy (BLE)
- Ambient Operating Temp: 10 - 50 °C / 50 - 122 °F
- Tool Weight: 75 g / 0.165 lb

- Total Net Weight: 101 g / 0.22 lb
- Total Package Dimensions/Weight:
(L x W x H) 220 x 75 x 30 mm / 144 g
8.66 x 2.95 x 1.18 in / 0.32 lb

Complies with CE standards.

Not grounded device. No ESD discharge feature.

JBC

Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour.

Warranty does not cover product wear or misuse.

In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.



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