

## BENTSAI BT-HH6210BL

# BENTSAI BT-HH6210BL Handheld Inkjet Printer User Manual

Model: BT-HH6210BL | Brand: BENTSAI

## 1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation, setup, maintenance, and troubleshooting of your BENTSAI BT-HH6210BL Handheld Inkjet Printer. Please read this manual thoroughly before using the device to ensure optimal performance and longevity.

## 2. PRODUCT OVERVIEW AND KEY FEATURES

The BENTSAI BT-HH6210BL is a versatile handheld inkjet printer designed for high-efficiency coding and marking on various surfaces. It features a 1-inch printhead and is equipped with a photoelectric sensor for automated printing on conveyor lines.

### Key Features:

- **Extended Battery Life:** Operates for over 16 hours non-stop on a single charge, thanks to advanced motherboard technology.
- **Photoelectric Sensor Integration:** Enables automatic printing as items pass by, ideal for assembly line operations.
- **Adjustable Print Height:** Supports print heights from 0.03 inches (0.8mm) to 1 inch (25.4mm), with up to 10 lines of text.
- **Versatile Printing:** Capable of printing batch numbers, QR codes, UPC barcodes, dates, text, logos, pictures, and variable data.
- **Wide Surface Compatibility:** Prints on wood, cardboard, plastic, polyethylene, metal, glass, ceramic, aluminum foil, concrete, and more.
- **Quick-Drying Ink:** Comes with a 42ml fast-drying ink cartridge for immediate adhesion.
- **Ergonomic and Lightweight Design:** Weighs only 410g with an ergonomic handle and a 4.3-inch HD touchscreen for comfortable and intuitive use.

- **Stable Printing:** Features an upgraded 5-roller system for smoother and more stable print application.
- **USB File Support:** Allows printing of external fonts, images (JPG, PNG, BMP), and variable data directly from USB files.



Figure 2.1: BENTSAI BT-HH6210BL Handheld Inkjet Printer with its accompanying ink cartridge.



2x Duration, Less Recharge

**BENTSAI**

 Last **≥ 16** Hours



**VS**

**OTHER**

 Last **8** Hours



Figure 2.2: The BENTSAI BT-HH6210BL offers over 16 hours of continuous operation, significantly longer than typical handheld printers.

# Coding Solutions for Various Industries

## Plastic



## Carton



## Wood



## Fabric



## Metal



## Glass



## Foam



## Ceramic



Figure 2.3: The printer is capable of marking on a wide array of materials including plastic, cardboard, wood, fabric, metal, glass, foam, and ceramic.

# Print Various Contents

The image shows a hand holding a handheld printer. Above the printer, several callout boxes illustrate different content types supported for printing:

- QC Code**: A QR code.
- Barcode**: A standard barcode with the number 1234567890 below it.
- Signs / Picture**: A recycling symbol and the CE mark.
- Logo/Trademark**: The Bentsai logo with the text "INKJET CODING SOLUTIONS" below it.
- Variable Date**: A vertical list of numbers: 000001, 000002, 000003, 000004.
- Time Auto Update**: The date and time "2025/04/13 17:30:00".
- Production Date**: "MFD:2024/12/25" and "EXP:2026/12/25".
- Bitmap Font**: "MFD:2024/12/25" and "EXP:2026/12/25" rendered in a stylized, spaced-out font.



Figure 2.4: Various content types supported for printing, including QR codes, barcodes, variable data, dates, and custom logos/images.



Figure 2.5: Detailed features highlighting the printer's 300 DPI resolution, 1-inch printhead, 5 stable wheels for precision, long battery life, light weight, and responsive touchscreen.

### 3. WHAT'S IN THE BOX

Upon opening your BENTSAI BT-HH6210BL package, please verify that all the following components are included:

- BT-HH6210BL Handheld Inkjet Printer
- EB22B Fast Dry Black Ink Cartridge
- Metal Positioner
- Roller Guide
- Sensor (Photoelectric)
- USB Flash Disk
- Stylus Pen
- Charger
- Ink Cartridge Clip
- User Manual



Figure 3.1: Contents of the BENTSAL BT-HH6210BL product package.

## 4. SETUP

### 4.1 Initial Charging

Before first use, fully charge the printer's internal battery. Connect the provided charger to the printer's charging port and plug it into a standard power outlet. The charging indicator on the device will show the charging status. A full charge typically takes several hours.

### 4.2 Ink Cartridge Installation

1. Ensure the printer is powered off.
2. Locate the ink cartridge slot on the printer.
3. Remove the protective cap from the EB22B Fast Dry Black Ink Cartridge.
4. Carefully insert the ink cartridge into the slot until it clicks into place. Ensure it is seated firmly to prevent printing issues.
5. Close any access covers if present.

### 4.3 Power On/Off

- **To Power On:** Press and hold the power button until the screen illuminates.
- **To Power Off:** Press and hold the power button until a shutdown prompt appears, then confirm.

### 4.4 Initial Configuration

Upon first power-on, you may be prompted to set the language, date, and time. Follow the on-screen instructions using the touchscreen or stylus pen to complete these settings.

## 5. OPERATING INSTRUCTIONS

### 5.1 Basic Printing

1. **Create/Edit Content:** On the main screen, select the option to create a new print job or edit an existing one. Use the touchscreen keyboard or stylus to input text, numbers, dates, or select pre-loaded symbols/logos. The printer supports up to 10 lines of text.
2. **Adjust Print Height:** Navigate to the print settings to adjust the print height between 0.03 inches (0.8mm) and 1 inch (25.4mm) as needed for your application.

3. **Positioning:** For handheld printing, use the roller guide to maintain consistent distance and smooth movement across the printing surface. For precise placement, utilize the metal positioner.
4. **Print:** Press the print trigger button and smoothly move the printer across the desired surface. Maintain a steady speed for optimal print quality.

## 5.2 Advanced Features

### 5.2.1 USB File Transfer

The printer supports importing external fonts, images (JPG, PNG, BMP), and variable data files via a USB flash drive.

1. Save your desired files (fonts, images, variable data) to a USB flash drive.
2. Insert the USB flash drive into the printer's USB port.
3. Navigate to the 'Import' or 'USB' section in the printer's menu.
4. Select the files you wish to import. Once imported, they can be used in your print jobs.



Figure 5.1: The printer supports importing various file types via USB for enhanced customization.

### 5.2.2 Photoelectric Sensor for Conveyor Lines

For automated printing on production lines, connect the photoelectric sensor to the designated port on the printer.

1. Connect the photoelectric sensor cable to the printer's sensor input port.

2. Mount the sensor in a position where it can detect items passing on the conveyor belt.
3. In the printer's settings, enable the 'Photoelectric Sensing Mode' or 'Auto Print' function.
4. Adjust sensor sensitivity and print delay settings as required to synchronize with your conveyor speed. The printer will automatically trigger a print when an item is detected.

## 5.3 Ink Cartridge Management

### 5.3.1 Replacing Cartridges

When the ink level is low or the print quality degrades, replace the ink cartridge:

1. Power off the printer.
2. Carefully remove the empty cartridge by gently pulling it out.
3. Insert a new EB22B Fast Dry Black Ink Cartridge, ensuring it clicks into place.
4. Power on the printer. The system will detect the new cartridge.

### 5.3.2 Cartridge Storage

Store spare ink cartridges in a cool, dry place, away from direct sunlight and extreme temperatures. Keep the protective cap on the cartridge when not in use to prevent drying.

## 6. MAINTENANCE

### 6.1 Printhead Cleaning

If print quality issues arise (e.g., streaks, missing lines), the printhead may need cleaning. Use a lint-free cloth lightly dampened with isopropyl alcohol to gently wipe the printhead surface. Do not use excessive force or abrasive materials.

### 6.2 General Device Cleaning

Wipe the exterior of the printer with a soft, dry cloth. Avoid using harsh chemicals or solvents that could damage the device's casing or screen.

### 6.3 Battery Care

To prolong battery life, avoid fully discharging the battery frequently. If storing the printer for an extended period, ensure the battery is charged to approximately 50% and recharge it every few months.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No print output	Ink cartridge empty or improperly installed; Printhead clogged; Printer not triggered.	Replace or re-install ink cartridge; Clean printhead; Ensure print trigger is pressed or sensor is detecting.
Poor print quality (streaks, faded)	Low ink; Clogged printhead; Incorrect print settings; Uneven movement during printing.	Replace ink cartridge; Clean printhead; Adjust print density/height settings; Maintain steady movement.
Printer not powering on	Battery depleted; Faulty charger or cable.	Charge the printer; Check charger and cable connections.

Problem	Possible Cause	Solution
Photoelectric sensor not detecting	Sensor misaligned or dirty; Sensor mode not enabled; Incorrect sensitivity.	Adjust sensor position; Clean sensor lens; Enable sensor mode in settings; Adjust sensitivity.
USB files not recognized	Unsupported file format; USB drive not properly inserted; Corrupted files.	Ensure files are JPG, PNG, BMP, or supported font types; Re-insert USB drive; Try a different USB drive or re-save files.

## 8. SPECIFICATIONS

Feature	Detail
Model Name	BT-HH6210BL
Printing Technology	1 Inch Handheld Inkjet Printer
Print Resolution	600 dpi (Max Black and White Print Resolution)
Print Height	0.03 inches (0.8mm) to 1 inch (25.4mm)
Ink Cartridge Type	EB22B Fast Dry Black Ink Cartridge (Compatible with BENTSAI EB21/EB22 Series)
Ink Color	Black (Other colors may be available separately)
Connectivity	USB
Display	4.3-inch HD Touchscreen
Battery	2 Lithium Ion batteries (included), 16+ hours operation
Item Weight	3.96 pounds (approx. 1.8 kg)
Product Dimensions	8.78"D x 1.77"W x 5.24"H (22.3cm x 4.5cm x 13.3cm)
Special Features	Display Screen, Lightweight, Portable, Photoelectric Sensing Mode

## 9. WARRANTY AND SUPPORT

The BENTSAI BT-HH6210BL Handheld Inkjet Printer comes with a limited warranty. For specific warranty terms, conditions, and duration, please refer to the warranty card included in your product packaging or visit the official BENTSAI website. For technical support, troubleshooting assistance beyond this manual, or inquiries regarding replacement parts, please contact BENTSAI customer service through their official channels.

