

VERSAJET MOBILE PRINTER

MP3200 Series User's Manual



cino

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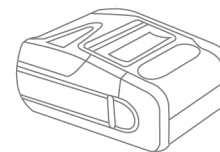
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VERSAJET™

A Series of Rugged Mobile Printer for
Label and Receipt Applications




USER'S MANUAL

MP3200 Series

International Edition, Rev. A

Agency Compliance and Regulatory Information

 FCC ID : SBCMP3200

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter



The CE mark as shown above displayed on MP3200 series mobile printer indicates that this product has been tested in accordance with the procedures given in European Council R&TTE Directive (99/5/EC) and confirmed to comply with the European Standard EN 301 489-17, EN 300 328-2, EN 50371, EN 60950.



CTL094LPD0105



T34291

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



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Getting Started

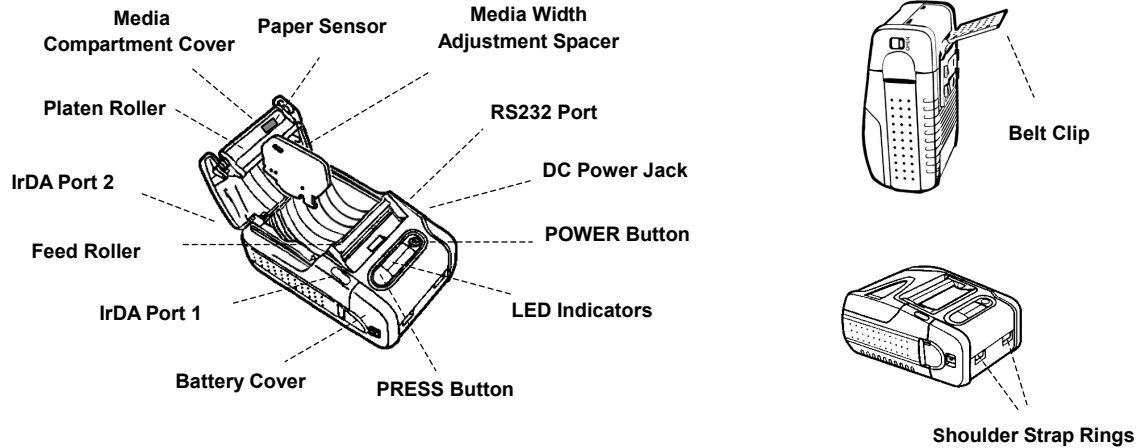
Thank you for choosing **VERSAJET MP3200 Series Mobile Printer**. The MP3200 series mobile printer is designed with rugged yet lightweight architecture, delivering the ultimate convenience of mobility to meet your on-demand labels and receipts printing requirements.

To meet various wireless communication requirements, the MP3200 series comes with two different models - MP3200 and MP3200BT. RS232C and IrDA communication interfaces are supported on both models. Moreover, the MP3200BT is compatible with most Bluetooth-enabled devices by incorporating Bluetooth 1.2 wireless technology. You can select the most suitable model to fulfill your demand.

This user's guide provides all of the information required for installation, operation, maintenance and troubleshooting. If you need more information, please contact your supplier or visit our web site for details.

Getting Familiar with Your MP3200

Please familiarize yourself with the features of your MP3200 as shown in the following diagram.

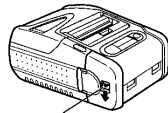


Installing and Charging the Battery

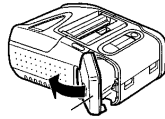
A new rechargeable battery pack is shipped together with the MP3200 series mobile printer. Please unpack and fully charge the battery pack prior to using it for the first time. Please follow the steps indicated below to install and charge the battery pack :

Installing the Battery

- (1) Open the battery pack compartment by pushing down the cover lock button.

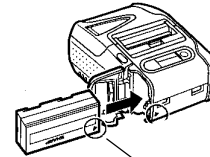


Push Down the Cover Lock Button



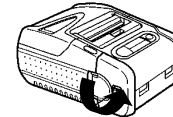
Open the Cover

- (2) Slide the battery pack into the battery pack compartment aligning with the arrow sign.



Align the Arrow Sign

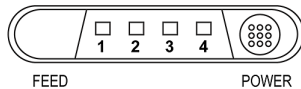
- (3) Close the cover of the battery pack compartment.



Close the Cover

Charging the Battery

- (1) Plug the power supply unit into the appropriate AC wall socket, then connect the DC plug of the power supply unit to MP3200(BT) DC power jack.
 - !** a. Use of an unapproved power supply unit could damage the battery pack or MP3200(BT).
 - b. For more information on the battery pack, please refer to “Extending Battery Life” and “Battery Disposal” for details.
- (2) Activate MP3200(BT) by pressing the POWER button. You will hear 3 short beeps in ascending tone to indicate power-on status. The LED indicators will flash 5 times to indicate current battery status.
- (3) During battery status indication, the LED4 indicator will go on steady green after the LED indicators flash 3 times. This means MP3200(BT) is in charging state. You may check the battery status by pressing the POWER button during battery charging. While pressing the POWER button, the LED indicators will flash three times to indicate the battery status.



Please refer to following table for detailed battery status.

LED1	LED2	LED3	LED4	Battery Status
Green	Green	Green	Green	More than 90% of battery remains
Green	Green	Green		More than 70% of battery remains
Green	Green			More than 50% of battery remains
Green				More than 20% of battery remains
Orange				Less than 20% of battery remains
Red				Less than 10% of battery remains

- !** a. The MP3200(BT) gives 1 warning beep at 5 seconds intervals when the battery power is less than 20%.
 - b. The MP3200(BT) gives 2 warning beeps at 5 seconds intervals when the battery power is less than 10%.
- (4) Following the battery status indication, the LED1 indicator of MP3200(BT) will flash green(red) at 2 seconds intervals. The MP3200(BT) is now ready to be connected.
 - !** The MP3200(BT) battery pack has to be charged about 4~5 hours for the first time. You may check the battery status by pressing the POWER button.

Loading the Media Roll

The MP3200(BT) is designed to print either receipt or label. Please decide the printing mode, media type and sensor type before loading the media roll.

Printing Mode

The MP3200(BT) supports two printing modes : standard (line) mode and page mode.

- ◆ Standard (line) Mode - Default Setting
In this mode, the MP3200(BT) prints data one line at a time.
- ◆ Page Mode
In this mode, the MP3200(BT) prints data one page at a time.

Media Type

The following media types can be applied to MP3200(BT) :

- ◆ Continuous Receipt
- ◆ I-Mark Media (detected by reflective sensor)
- ◆ Gap Label (detected by transmissive sensor)

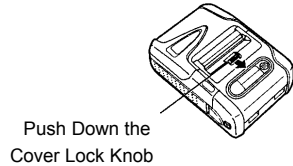
Sensor Type

Both transmissive sensor and reflective sensor are available for page mode only :

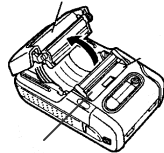
- ◆ Transmissive Sensor
This sensor is used to detect the different transmissive ratio between label and liner.
- ◆ Reflective Sensor
This sensor is used to detect the different reflective ratio between media and I-Mark (black mark).

Loading Media Roll without Peeler

- (1) Open the media compartment cover by pushing down the cover lock knob.



Open the Media Compartment Cover (Upper)

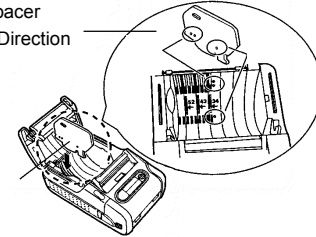


Media Compartment Cover (Front)

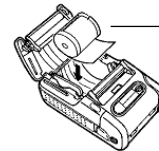
- (2) You can find a media width adjustment spacer inserted in the media compartment groove. Push the spacer forward and pull it out. Adjust the width adjustment spacer to fit one of the grooves in accordance with the width of the media roll. Grooves are available for the width from 34 to 58 mm with 3 mm per pitch.

Insert the Spacer in the Correct Direction

Media Width Adjustment Spacer

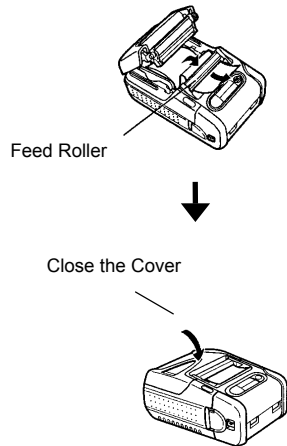


- (3) Set the media roll as shown in the following diagram.



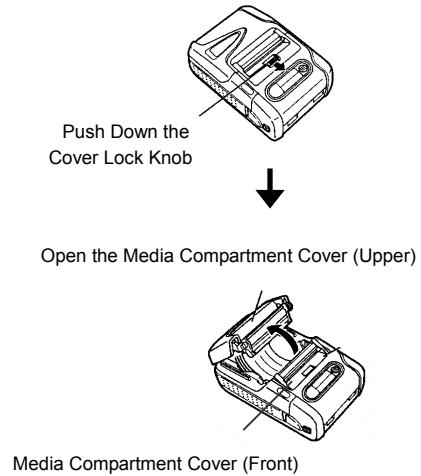
Make Sure the Direction of the Media Roll is Correct

- (4) Pull out the media paper and thread it into the slot beneath the feed roller. Close the media compartment cover.

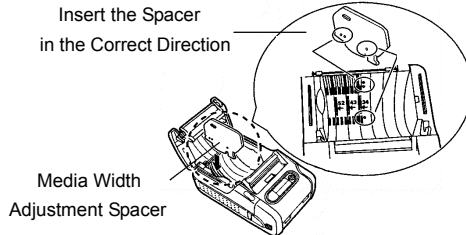


Loading Label Roll with Peeler

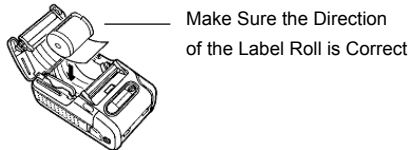
- (1) Open the media compartment cover by pushing down the cover lock knob.



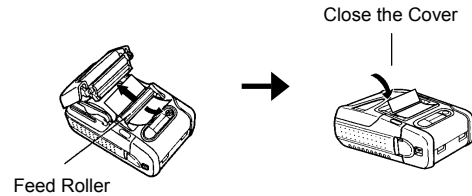
- (2) You can find a media width adjustment spacer inserted in the media compartment groove. Push the spacer forward and pull it out. Adjust the width adjustment spacer to fit one of the grooves in accordance with the width of the label roll. Grooves are available for the width from 34 to 58 mm with 3 mm per pitch.




- (3) Set the label roll as shown in the following diagram.



- (4) If you choose label printing by using the peeler function, the backing material will be peeled away from the label as it is printed. Tear the first label partially apart and thread the label edge into the slot beneath the feed roller, keep the backing material separated on the other side of the feed roller. Then, close the media compartment cover. Press the FEED button, the MP3200(BT) will forward the first label and remain ready in the next printing position.



-  If you would like to use the peeler function, you have to conduct length measurement firstly. Please refer to **“Conduct Length Measurement”** before loading the label roll.

Conduct Length Measurement

You can conduct length measurement by using transmissive sensor (default setting) for gap label roll or reflective sensor for I-Mark media roll.



Please refer to the **Programming Reference** for changing the sensor from transmissive to reflective, if the I-Mark media roll is used.

- (1) Open the media compartment cover, the LED1 and LED3 will light up orange and green respectively, and then start flashing after 10 seconds.
- (2) Load the media roll.
- (3) Press the FEED button and release it.
- (4) Close the media compartment cover, the LED3 flashes green 3 times. The MP3200(BT) will feed four labels to execute length measurement. After the length measurement is completed, the MP3200(BT) will be ready in the next printing position and the LED1 of MP3200(BT) will flash green (red) at 2 seconds intervals.
- (5) The MP3200(BT) is ready for page mode operation.

If the length measurement is failed or executed without setting the correct media roll, the MP3200(BT) will issue a paper jam error. Please conduct length measurement once again. On condition that the length measurement is done successfully, the value will be stored into the flash memory. When you load the same media roll next time, the MP3200(BT) will perform top-of-form by feeding one label or one measured length of the receipt paper right after you close the media compartment cover in power-on state.

The MP3200(BT) will also feed one label or one measured length of the receipt paper while pressing the FEED button. However, if you load a different media roll, you will have to re-conduct length measurement.

Revert to Standard Mode

The printing mode will be switched to page mode after the length measurement is completed. If you would like to revert it to standard mode, please follow the steps indicated below :

- (1) Open the media compartment cover, the LED1 and LED3 will light up orange and green respectively, and then start flashing after 10 seconds.

- (2) Load the receipt roll (without I-Mark).
- (3) Press the FEED button and release it.
- (4) Close the media compartment cover, the LED3 flashes green 3 times. The MP3200(BT) will feed about 16 cm receipt paper and remain ready for the next printing. The MP3200(BT) will give two beeps, the LED1 and LED2 will light up orange and green respectively.
- (5) Press "FEED" button, the LED1 of MP3200(BT) will flash green(red) at 2 seconds intervals.
- (6) The MP3200(BT) is now ready for standard mode operation.

Verify MP3200 is Working

After fully charging the battery pack and loading the receipt roll, you can print a configuration message to verify MP3200(BT) is in proper working condition. A configuration message will be printed after executing the self-test procedure.

- (1) Make sure the MP3200(BT) is power off.
- (2) Press FEED button and POWER button simultaneously.
- (3) Release both POWER and FEED buttons. The LEDs will flash 5 times to indicate the battery status firstly, then the LED1 gives short orange blinks 10 times. The MP3200(BT) will start printing a configuration message.
- (4) Pull one edge of the receipt paper against the tear bar to tear the configuration message down.

This message provides related information on firmware version, communications, power management, printer control setting, general specifications and head resistance.



Using Your MP3200

The MP3200 series mobile printer has to establish communication with a host system which sends the data to be printed. There are three ways for connecting MP3200(BT) with the host system :

- ◆ By means of an IrDA wireless communication via IrOBEX or IrCOMM protocols.
- ◆ By means of a Bluetooth wireless communication via SPP protocol (MP3200BT only).
- ◆ By using a RS232C cable between printer and its host system.

Please kindly note that the three communication interfaces can not be activated concurrently. If you select one of the communication interfaces, the other two will be disabled automatically.

Connecting MP3200 through IrDA

The MP3200(BT) is equipped with a standard IrDA interface. IrDA is an industry standard defined by the IrDA consortium (Infrared Data Association). It specifies a way to transfer data wirelessly via infrared radiation. The IrDA specifications include standards for both the physical devices and the protocols they use to communicate with each other.

Especially, the most popular IrOBEX and IrCOMM protocols are supported by the MP3200(BT). This allows MP3200(BT) to be compatible with most IrDA-enabled computing platforms, such as PC, laptop, PDA, PDT and mobile phone, etc.

IrOBEX stands for Infrared OBJECT EXchange and is an industry standard of the IrDA, which defines how “Objects” can be shared between different IrDA devices. The IrOBEX protocol has been built into the Microsoft Windows system and is supported by many various devices.

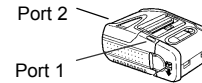
IrCOMM stands for Infrared COMMunications, which supports the legacy applications by emulating the RS232 serial port over the IrLMP/IrLAP protocol stack. Please note that the Microsoft Windows system does not support IrCOMM software driver, you have to obtain the IrCOMM driver from the third-party.


Decide IrDA Protocol and IrDA Port

Before establishing an Infrared connection between MP3200(BT) and the host system, please decide the IrDA protocol and IrDA port in advance.

The MP3200(BT) supports both IrOBEX and IrCOMM protocols. IrOBEX is enabled as the default setting. If you would like to use IrCOMM, you can use the printer command to change the default setting.

There are two IrDA ports available for communication. Port1 is on the upper side of the body, port2 is on the back side of the body. Both ports are **enabled** as the default setting. But sometimes the data might not be received correctly when transmission is in interruptive condition. If you wish to get a more reliable transmission, you are recommended to choose only the convenient one for your applications. You can use the printer command to change the default setting.



 Please refer to the **Programming Reference** for changing the IrDA protocol and IrDA port.

Establish IrOBEX Connection

The following procedure of installation example describes how to connect MP3200(BT) with a host laptop in Windows 2000 using IrOBEX protocol for reference. Please note that the installation procedure may vary with each different host system and operating system. You have to follow the respective procedure to build the connection accordingly.

- (1) Make sure the battery pack is fully charged. You may refer to “**Charging the Battery**” for details.
- (2) Power on MP3200(BT) within the IrDA connection range. The LED indicators flash 5 times to indicate the battery status firstly. Following the battery status indication, the LED1 indicator of MP3200(BT) will flash green(red) at 2 seconds intervals. The MP3200(BT) is now ready to be connected.
- (3) Direct the IrDA port of the host laptop towards the enabled IrDA port of MP3200(BT). Insure there is a direct line of sight and no obstacles between the host laptop and MP3200(BT) for properly sending and receiving signals. Communication is available in the range of **15°** up, down, left and right.
- (4) If the IrOBEX connection is built successfully, the LED2 will flash green and an IrOBEX connection icon will be displayed on the task bar with **MP3200(BT)-0001** (0001 is the default setting of IrDA device ID). You can use the printer command to change the IrDA device ID.



IrOBEX Connection Icon



Please refer to the **Programming Reference** for changing the IrDA device ID.

- (5) The MP3200(BT) is now ready for print.
 - !** a. Data may not be received correctly when transmission is under direct sun light, fluorescent lamps or strong lights.
 - b. Data may not be received correctly if the MP3200(BT) has been left for an extended period in temperatures outside the recommended storage temperature range.
 - c. Transmission distance varies according to the system used and the surrounding conditions. So it may not be possible to establish a connection within the connection range provided in the specifications.

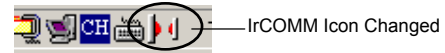
Establish IrCOMM Connection

The following procedure of installation example describes how to connect MP3200(BT) with a host laptop in Windows 2000 using IrCOMM protocol for reference. Please note that the installation procedure may vary with each different host system and operating system. You have to follow the respective procedure to build the connection accordingly.

- (1) Make sure the battery pack is fully charged. You may refer to “**Charging the Battery**” for details.
- (2) Power on MP3200(BT) within the IrDA connection range. The LED indicators flash 5 times to indicate the battery status firstly. Following the battery status indication, the LED1 indicator of MP3200(BT) will flash green(red) at 2 seconds intervals. The MP3200(BT) is now ready to be connected.
- (3) Install the IrCOMM driver supplied by the third-party.
- (4) After completing the driver installation, an IrCOMM icon will be displayed on the task bar and a virtual COM port will be created automatically.



- (5) Please use the printer command to set the IrDA communication protocol as IrCOMM.
- (6) Direct the IrDA port of the host laptop towards the enabled IrDA port of MP3200(BT). Insure there is a direct line of sight and no obstacles between the host laptop and MP3200(BT) for properly sending and receiving signals. Communication is available in the range of **15°** up, down, left and right.
- (7) If the connection is built successfully, the LED3 will flash green and the IrCOMM icon will be changed as shown below.



- (8) The MP3200(BT) is now ready for print.
 - ! a. Data may not be received correctly when transmission is under direct sun light, fluorescent lamps or strong lights.
 - b. Data may not be received correctly if the MP3200(BT) has been left for an extended period in temperatures outside the recommended storage temperature range.
 - c. Transmission distance varies according to the system used and the surrounding conditions. So it may not be possible to establish a connection within the connection range provided in the specifications.

Connecting MP3200BT through Bluetooth

The MP3200BT is equipped with a Bluetooth module which is compliant with the up-to-date Bluetooth® 1.2 wireless technology. This enables wireless connectivity between MP3200BT and most Bluetooth-enabled devices, such as PC, laptop, PDA, PDT and mobile phone, etc.

Usually, all actions between a program installed on your computer and a remote Bluetooth device are carried out by the Bluetooth services. A Bluetooth device can offer one or more services. These popular services include Serial Port (SPP), Dail-Up Networking (DUN), Human Interface Device (HID), Generic Object Exchange (GOEP), Personal Area Networking (PAN), Lan Access (LAP), Generic Access (GAP), and so on.

The MP3200BT supports **Serial Port service (SPP)** which is one of the most popular Bluetooth services providing the serial radio link between Bluetooth master and slave devices. Under Bluetooth SPP, the remote Bluetooth system always acts as a master and MP3200BT always acts as a slave. The MP3200BT will only wait for the connection request issued by the remote Bluetooth master system to establish the radio link. Once the pre-built radio link is lost, the user has to re-build the radio link manually.

Usually, the resident Bluetooth drivers will configure the SPP connection as one of the virtual COM ports in your host system that can be controlled and utilized by the user's application programs. If your host system supports the functionality of PICONET, up to 7 units of MP3200BT can be connected to the same host system simultaneously. When a PICONET is formed, the host system acts as the master while the MP3200BTs act as slaves for the duration of the PICONET connection.


Establish Bluetooth Connection

Generally speaking, Widcomm provides complete Windows® based Bluetooth software and its stacks have been broadly adopted by the Bluetooth industry. The following procedure of installation example describes how to connect MP3200BT with a host laptop in Windows 2000 using Widcomm Bluetooth driver for reference. The installation procedure may vary with each different remote Bluetooth host system, operating system and Bluetooth driver. You have to follow the respective procedure to build the connection accordingly.

- (1) Make sure the battery pack is fully charged. You may refer to **“Charging the Battery”** for details.
- (2) Power on the remote Bluetooth host laptop and make sure the virtual COM port is available for connecting to MP3200BT. If the virtual COM port is not available, please follow the steps indicated below to add an additional COM port :
 - a. Select the **Client Application** tab from the Bluetooth configuration panel.
 - b. Click the **Add COM Port** button.
 - c. Click **OK**.
- (3) Power on MP3200BT within the radio range. The LED indicators flash 5 times to indicate the battery status firstly. Following the battery status indication, the LED1 indicator of MP3200BT will flash **red** at 2 seconds intervals. The MP3200BT is now ready to be connected.
- (4) Execute the Bluetooth Discovery procedure from the remote Bluetooth host laptop by following the steps indicated below :
 - a. Right-click the Bluetooth icon at the taskbar, then select **Explore My Bluetooth Places** from the shortcut menu.
 - b. Double-click the **Find Bluetooth Device**.
 - c. Check whether **“MP3200BT-xxxx”** is shown among the list of the discovered devices in the host laptop (xxxx is the last four numbers of the Bluetooth address).
- (5) Establish the radio link between MP3200BT and the remote Bluetooth host laptop by following the steps indicated below :
 - a. Double-click MP3200BT-xxxx, you will find **CINO SPP on MP3200BT-xxxx** service in the Bluetooth host laptop.

Connecting MP3200 through RS232C

The MP3200(BT) can communicate with a host system through a RS232C serial interface. The following procedure of installation example describes how to connect MP3200(BT) with a host laptop in Windows 2000 for reference.

- b. Double-click “CINO SPP on MP3200BT-xxxx”, the PIN code or Passkey request balloon will appear over the notification area for security connection. Please enter “00000000”.
 - (6) You will hear 4 special beeps in ascending tone to indicate the **radio link built**. After that, the flashing LED1 will change the color from red to **green**. This means the MP3200BT is in radio-connected state.
 - (7) Your MP3200BT is now ready for print.
-  If you would like to discontinue the radio link, you can either right-click the “**MP3200BT-xxxx**” to stop the CINO SPP service, or right-click the “**CINO SPP on MP3200BT-xxxx**” to stop the Bluetooth SPP service. You will hear 4 special beeps in descending tone when the radio link is disconnected. After that, the flashing LED1 will change the color from green to red.
- (1) Make sure the battery pack is fully charged. You may refer to “**Charging the Battery**” for details.
 - (2) Plug the low-profile connector of RS232C cable into the serial port of MP3200(BT) with the arrow sign upward. The serial port is located on the right side of the body .
 - (3) Plug the other end of the RS232C cable into the serial port of the host laptop.
 - (4) Power on MP3200(BT). The LED indicators flash 5 times to indicate the battery status. Following the battery status indication, the LED1 indicator of MP3200(BT) will flash green(red) at 2 seconds intervals.
 - (5) The MP3200(BT) is now ready for print.

Switch Functions

The MP3200(BT) has two control buttons : **POWER** and **FEED**. The following tables show the status of MP3200(BT) by pressing each button in different states.

POWER Button

State	Operations
Power Off	<ul style="list-style-type: none"> Press to power on MP3200.
Power On	<ul style="list-style-type: none"> Press and hold 2 seconds to power off MP3200. Press to indicate the battery status.










FEED Button

State	Operations
Power Off	<ul style="list-style-type: none"> Press together with POWER button to run a self-test and print a configuration message.
Normal Operation - Standard Mode	<ul style="list-style-type: none"> Press to feed around 20mm receipt paper. Press to reprint the last print if a print stop caused by an error.
- Page Mode	<ul style="list-style-type: none"> Press to feed one label. Press to reprint the last print if a print stop caused by an error.

Indications

The MP3200(BT) has two indicators, beeper and LED indicator. They will provide various indications according to the actual operating conditions and states. You may obtain necessary information to understand all details by referring to following descriptions.

Beeping Indications

No.	Beeping Indications	Descriptions
1	 3 short beeps in ascending tone	Power on indication
2	 3 short beeps in descending tone	Power off indication
3	 1 beep at 5 seconds intervals	Less than 20% of battery remains
4	 2 beeps at 5 seconds intervals	Less than 10% of battery remains
5	 2 beeps	Error warning
6	 4 beeps in ascending tone	Bluetooth radio link built
7	 4 beeps in descending tone	Bluetooth radio link lost
8	 1 long beep	Press POWER or FEED button
9	 1 short beep	Close the compartment cover

MP3200BT Communication Indications

LED1	LED2	LED3	LED4	Status
Red				MP3200BT is ready to be connected or is connected by RS232 interface.
Blinking at 2 seconds intervals				
Green				MP3200BT Bluetooth radio link built.
Blinking at 2 seconds intervals				
	Green			IrOBEX link built
Blinking at 2 seconds intervals				
		Green		IrCOMM link built
Blinking at 2 seconds intervals				

MP3200 Communication Indications

LED1	LED2	LED3	LED4	Status
Green				MP3200 is ready to be connected or is connected by RS232 interface.
Blinking at 2 seconds intervals				
	Green			IrOBEX link built
Blinking at 2 seconds intervals				
		Green		IrCOMM link built
Blinking at 2 seconds intervals				

Battery Status Indications

LED1	LED2	LED3	LED4	Battery Status
Green	Green	Green	Green	More than 90% of battery remains
Green	Green	Green		More than 70% of battery remains
Green	Green			More than 50% of battery remains
Green				More than 20% of battery remains
Orange				Less than 20% of battery remains
Red				Less than 10% of battery remains



- a. The MP3200(BT) gives 1 warning beep at 5 seconds intervals when the battery power is less than 20%.
- b. The MP3200(BT) gives 2 warning beeps at 5 seconds intervals when the battery power is less than 10%.
- c. You may check the battery status by pressing the POWER button .

Error Indications

LED1	LED2	LED3	LED4	Status
Orange	Green			Paper jam (*1) , or Label length measurement error (*2)
Start blinking after steady on for 10 seconds				
Orange		Green		Media compartment cover opened (*3)
Start blinking after steady on for 10 seconds				
Orange	Green	Green	Green	Thermal head or motor overheated (*4)
Start blinking after steady on for 10 seconds				
Red	Green	Green		Thermal head broken (*5)
Start blinking after steady on for 10 seconds				
Red	Green	Green	Green	Thermal head or motor overcooled (*6)
Start blinking after steady on for 10 seconds				
Red		Green	Green	Command error (*7)
Start blinking after steady on for 0.5 second				



(*) Please refer to the following resolutions.

- (1) Paper jam :
 - ▶▶ Open the media compartment cover and reload the media roll.
- (2) Label length measurement error :
 - ▶▶ Check whether the sensor type and media type are correct.
 - ▶▶ Re-conduct paper length measurement.
- (3) Media compartment cover opened :
 - ▶▶ Close the media compartment cover.
- (4) Thermal head or motor overheated :
 - ▶▶ The printer will automatically resume operation after the thermal head or motor cools down to the normal temperature.
- (5) Thermal head broken :
 - ▶▶ Call a qualified service technician to replace the thermal head.
- (6) Thermal head or motor overcooled :
 - ▶▶ The printer will automatically resume operation after the thermal head or motor comes to the normal temperature.
- (7) Command error :
 - ▶▶ Reset MP3200(BT).
 - ▶▶ Resend a correct command.

Intelligent Power Management

The power management of mobile printer is a critical essence to prolong battery life. This contributes to extend the duty cycle as long as possible to optimize the efficiency. The MP3200(BT) is powered by a high-capacity Li-Ion rechargeable battery pack. The advanced power management can make the entire operation intelligently for energy-saving to minimize the power consumption.

The unique power management scheme of the MP3200(BT) is accomplished by Power Saving, Auto Power Off and Auto Radio Off.

Power Saving

To conserve the power, the MP3200(BT) will enter power saving state by following two conditions indicated below :

- ◆ Press the POWER button to power on MP3200(BT), the LED indicators flash 5 times to indicate the battery status. Right after the battery status indication goes off, the MP3200(BT) will enter power saving state.
- ◆ If there's any error occurred, the MP3200(BT) will enter power saving state right after the steady LED warning indication turns into flashing.

The MP3200(BT) can be activated by one of the following actions :

- ◆ Receive data through RS232C.
- ◆ Receive a printer command.
- ◆ Connected via IrDA or Bluetooth.
- ◆ Press POWER or FEED button.

Auto Power Off

The MP3200(BT) will automatically power off in 5 minutes (default setting) after entering power saving state. You can use the printer command to set up the time frame from **00** to **255** minutes. If you set up the time frame to 00, the auto power off function will not be activated. When MP3200(BT) enters auto power off mode, you have to reactivate it by pressing the POWER button.

Auto Radio Off

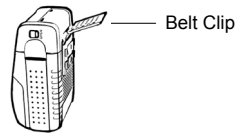
For MP3200BT, the radio link will be disconnected after 20 minutes (default setting) of no operation in Bluetooth connected state. After that, the MP3200BT will enter power saving state.

Using the Accessories

The MP3200(BT) is equipped with a belt clip and two shoulder strap rings for user's convenience. Please refer to following figures for details.

Belt Clip

Hook the clip over your belt and ensure the clip is securely attached to the belt.



Shoulder Strap Rings

There are two shoulder strap rings on the top of MP3200(BT). You can snap each end of the shoulder strap into the rings.





Maintenance and Troubleshooting

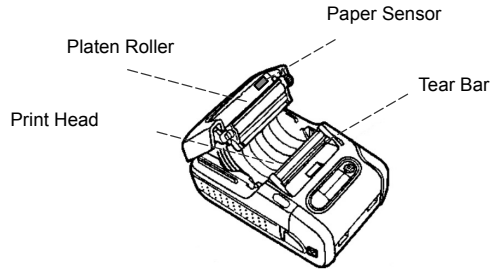
This Chapter provides some useful information for following topics:

- ◆ Cleaning Instructions
- ◆ Troubleshooting
- ◆ Extending Battery Life
- ◆ Product Disposal
- ◆ Battery Disposal

Cleaning Instructions

The MP3200(BT) should be cleaned after printing a few rolls of media or if there are voids in the printout. Thus, cleaning MP3200(BT) is a necessary maintenance activity to ensure optimum performance and life. Clean the Printer areas by using cleaning pen or cotton swabs moistened with isopropyl alcohol. Please refer to following procedure and figure to clean the Printer :

- (1) Power off MP3200(BT).
- (2) Open the media compartment cover.
- (3) Remove the media roll.



Areas	Methods
Print Head	Use the cleaning pen or a cotton swab moistened with isopropyl alcohol to clean the surface of the print head from end to end.
Tear Bar	Use the cleaning pen or a cotton swab moistened with isopropyl alcohol to clean the tear bar.
Platen Roller	Rotate the platen roller and clean the surface of the platen roller with cleaning pen or a cotton swab thoroughly.
Interior	Blow the paper dust by using a can of compressed air or by vacuuming. Ensure the paper sensor windows are free of dust.
Exterior	Use soft cloth moistened with water to clean the exterior of the printer.

- !** a. Don't use sharp objects to clean the print head. This may result in damage to the Printer.
- b. Let the print head cool to room temperature prior to cleaning, protecting yourself from burns.
- c. The tear bar has sharp edges. Please be careful when cleaning the tear bar to avoid possible injury.

Troubleshooting

Please review following information to solve common problems you may encounter with MP3200(BT). If the problems are not covered in this section, please inquire to your supplier for technical support.

Problems	Solutions
No power	<ul style="list-style-type: none"> ● Make sure the battery pack is installed properly. ● Recharge the battery pack.
Media does not feed	<ul style="list-style-type: none"> ● Ensure media cover is closed. ● Remove the obstruction in paper path.
Poor print quality	<ul style="list-style-type: none"> ● Clean print head. ● Check and recharge the battery pack. ● Check the quality of media.
Communication Error	<ul style="list-style-type: none"> ● Check if the media is loaded. ● Check baud rate. ● Replace cable to terminal.
No print	<ul style="list-style-type: none"> ● Make sure the sensor and the media are set correctly. ● Verify if the communication between the host system and the printer is established correctly. ● Replace the battery pack.

Extending Battery Life

Here are some tips for extending the overall life of your batteries :

- (1) The battery storage temperature is 40°F to 104°F (4°C to 40°C). Don't store a fully charged battery pack at temperature above this range for a long period – the battery pack may permanently lose charge capacity.
- (2) Don't disassemble, or modify a rechargeable battery pack. Otherwise, it will leak, overheat or crack.
- (3) Always use a Cino charger to charge. The use of any other kind of charger may damage the battery pack.
- (4) Remove the battery pack from MP3200(BT) if you will not use it for a long time.
- (5) Don't touch or moisten the rechargeable battery pack with fresh water or seawater. If a battery pack is moistened, it will heat up or rust.
- (6) Remember that any rechargeable battery pack will lose its ability to maintain a charge over time. It can only be recharged a finite number of times before it must be replaced.

Product Disposal

The MP3200(BT) complies with Directive 2002/69/EC of the European Parliament and of the Council of 27 January 2003 on Waste Electrical and Electronic Equipment (WEEE).

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.



The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your supplier for more information.

Battery Disposal

Don't dispose the used battery packs in unsorted waste. Please recycle them according to your local regulations. The Rechargeable Battery Recycling Corporation (RBRC) is a non-profit organization created to promote recycling of rechargeable batteries. For more information about how to recycle battery packs in your area, please visit www.rbrc.org



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