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MP300 Mobile Printer

Product Reference Guide

Rev. A

About This Manual

This manual explains how to install, operate and maintain the Unitech MP300 Mobile Printer.

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Support

Unitech's professional support team is available to quickly answer your questions or technical-related issues. Should an equipment problem occur, please contact the Unitech regional service representatives nearest you. For complete contact information, please visit the Web sites listed below:

UTA (USA, Canada) http://www.ute.com

UTA (Latin America) http://www.latin.ute.com

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Notices

General Precautions

- Before using this product be sure to read through this manual. After reading please keep the manual in a safe place for future reference.
- The information contained is subject to change without notice.
- Unitech is not responsible for any operational results regardless of missing information, errors or any misprinting in this manual.
- Unitech is not responsible for problems created as a result of using options and consumables not officially approved.
- This product is designed for servicing at an Authorized Service Center. Other than routine maintenance described in this manual, the user should not attempt to repair, service or disassemble this product.
- Incorrect operation, handling, improper supplies and operating environments may cause damage or otherwise affect the proper operation of this product. Such actions invalidate the product warranty.

Safety Notices


Caution! Refer to the explanation in this manual


Caution! Risk of electric shock


Double insulation or reinforced insulation


DC, Direct current or voltage


AC+DC, Current or voltage

Table of Contents

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Chapter 1

Getting Started

Introducing the MP300

The Unitech MP300 is a full featured thermal receipt printer. It's designed for varied job environments including field service, field sales, hospitality, restaurants, ticketing and many other applications where point of service receipts are required.

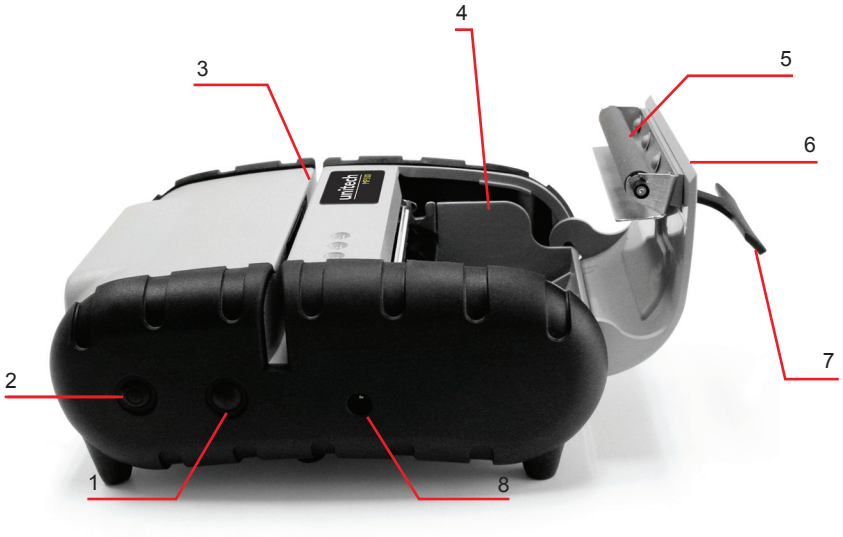
What's in the Box

The MP300 package contains the following items:

- MP300 printer
- Battery pack
- Universal AC adapter output cable (US, UK, European or Australian plugs)
- Belt Clip
- Roll of paper supply (already loaded in the printer)

A Tour of the MP300

The following section identifies the main components and features of the MP300:



	Feature		Feature
1	Paper feed button	6	Metal tear bar
2	On/Off button	7	Paper door pull lever
3	MSR slot (optional)	8	AC adapter port
4	Paper compartment	9	IrDA window
5	Platen roller	10	Serial port

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Declaration of Conformity

The MP300 conforms to the following regulations or standards:

FCC:	• Part 15 Subpart B, Class B
CE:	• EN60950 • EN55022 Class B • EN61000-3-2 • EN61000-3-3 • EN50024
Supplementary Information :	• The product complies with EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC • The product conforms to ANSI/UL STD 60950 & Certified to CAN/CSA STD C22.2 No. 60950-00 • CB Certified • ETL Listed, control #3046813 • The product is IEC 68 certified

Communication Options

The MP300 offers both cabled and wireless communication:

Bluetooth Radio:	• Short range OEM module from connectBlue ab, cB-0701-01; FCC ID PVH 070101
Conforms to R&TTE Directives:	• 1999/5/EC (EN 300 328-2), EMC Directive 89/336/EEC (EN 301 489-1 and -17); and Low Voltage Directive 73/23/EEC (EN 61131-2)

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Installing and Charging the Battery

The MP300 Mobile Printer and the Li-ion battery pack are packaged separately. You will have to install the battery pack when you receive your printer. Please ensure that the battery pack is properly installed and fully charged prior to initial use of the MP300.

To ensure a full charge do not operate the printer while charging.

Installing the Battery

- Unlock the battery door by sliding the locking tab down.
- Open the battery door.
- Insert the battery as shown. The battery side with two contact terminals should be facing down, making contact with the two spring probes inside the battery compartment.
- Close the battery door.
- Lock the battery door by sliding the battery door-locking tab up.

Charging the Battery

- Plug the AC adapter output cable into the AC adapter port as shown below.
- Plug the AC adapter output cable into the appropriate AC line voltage socket.
- The yellow/amber charging LED will illuminate indicating that the battery is being charged.
- The battery will be fast-charged and after 180-minutes the LED will turn off.
- To remove the battery pack, open the battery door and tip the battery out of the printer.

NOTE: The wall-mounted charger is a Class II equipment. Multiple plug configurations comply with most international standards. The wall mounted charger is not supplied with plugs for use in Korea.

Battery Notices

⚠ Do not use an unapproved Unitech charger with the MP300. Use of an unapproved charger could damage the battery pack or the printer and will void the warranty.

⚠ The battery terminals are well recessed inside the printer. Do not allow them to contact conductive material since this may create a short circuit, which could cause injury or start a fire.

⚠ When using the wall-mounted charger ensure the socket outlet is close to the printer and easily accessible during the battery recharging process. Either switch the socket off (if supplied with a socket switch) or pull out the charger from the socket or disconnect the plug from the printer in the event of any problems.

Reading the LED Status

The illustration below points out the location of the LED indicators.

This table explains the LED indicator status. For the exact locations of the on/off button, feed button and the AC adapter port, refer to “A Tour of the MP300” on page 8.

LED Indicator	State	Status
LED 1	Purple or Orange	Low Power Mode (In Bluetooth mode the LED is purple. In RS232 mode the LED is orange).
	Green	Indicates that power is on and that the printer is in RS232 or IrDA mode.
	Blue	Indicates that power is on and that the printer is in Bluetooth mode.
LED 2	Yellow	The battery charger is charging the battery at a fast rate. If the battery is below 5V, the battery is being “trickle-charged” until the battery voltage reaches 5V, and then the fast-charge rate starts. The LED will turn off when the battery is fully charged.
LED 3	Green	Indicates that the MSR is ready to accept data.
	Red	Indicates a fault condition or a printer error, and the printer is not ready to accept data. The printer is out-of-paper.

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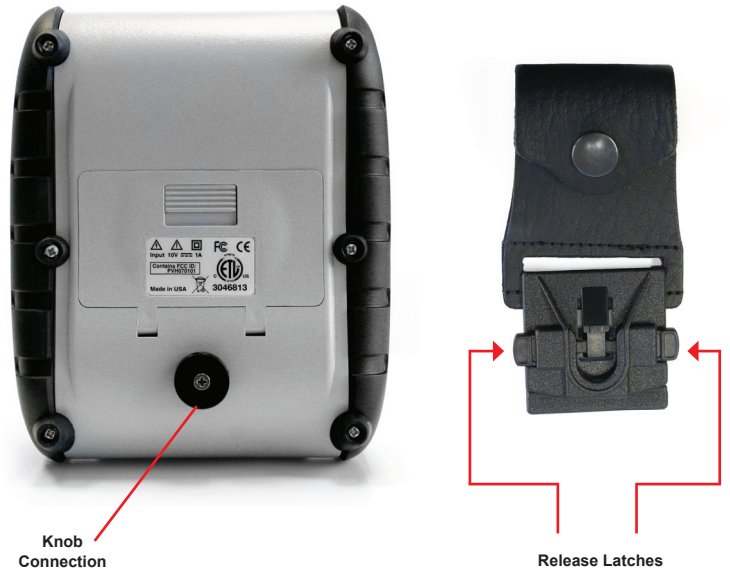
Attaching the Belt Clip

The belt Clip consists of two parts:

- A knob located on the back part of the printer just above the battery door.
- A strap with a click-on connector.

To attach the strap to the knob, insert the knob located at the bottom of the printer into the slot on the connector. Pull down until you hear a click. The printer is now secure. The loop is then placed over your belt. Allow the printer to hang down either the left or right hip.

- To release the printer, press down on the two latches on the connector, and pull the knob clear of the slot.



NOTE: Do not force or pull the printer from the connector without pressing down on the two latches.

Loading Supplies

Adding Paper

The printer can print text, bar codes and graphics on thermal receipt paper. See “Supply Specifications” on page 32 for the width, thickness requirements and approved vendors. Follow these steps to load printer paper:

- Open the paper supply cover by placing your fingers under the “T” pull lever. Pull up firmly on the supply cover until the lever stops moving. **Please be careful not to force the “T” pull lever too far back.**
- Place the paper roll into the paper supply well. Make sure the paper supply unwinds from the bottom as shown below.
- Position the paper supply between the print-head guides.
- Make sure some supply (2” - 3”) extends beyond the top of the paper supply well.
- Shut the paper supply cover and press close.

NOTE: To prevent any possible damage to the print-head mechanism, it is important to verify that the paper has not been fastened to the inside core in any way. The paper should be wound on the core in such a way that the end of the paper will unwind freely from the core. If fastened by tape or glue, the core will be pulled into the mechanism causing jamming and possible gear damage.

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Tearing Paper

The printer’s paper door acts as a tear bar. Pull one edge of the paper against the tear bar as indicated, then pull down and across against the tear bar to rip the paper.

NOTE: Using the tear bar is the only way to rip the paper. Pulling up and sideways without using the tear bar can cause a paper jam due to paper misalignment in the print-head mechanism.

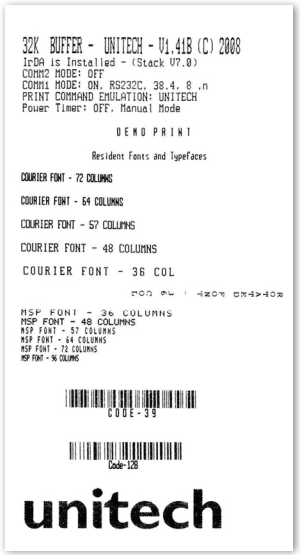
Chapter 3

Using the Printer

Initial Power Up and Self-Test

Once the battery is charged and the paper is loaded, an initial power up and self-test can be performed.

- Press the on/off button once. This powers on the printer. LED 1 illuminates in green or blue depending on the communication mode.
    - The printer will remain on until it is manually powered off.
- Press the on/off button to power the printer off. The LED turns off.
- To start the self-test, press and hold the feed button then press the on/off button.
- The printer will start printing the self-test messages. Release the feed button.
    - Press the on/off or feed button to stop or cancel the self-test print.
    - The first few lines of the self-test show the printer firmware version, the current printer settings (for example IrDA or Serial mode) and a list of any optional or special features installed.



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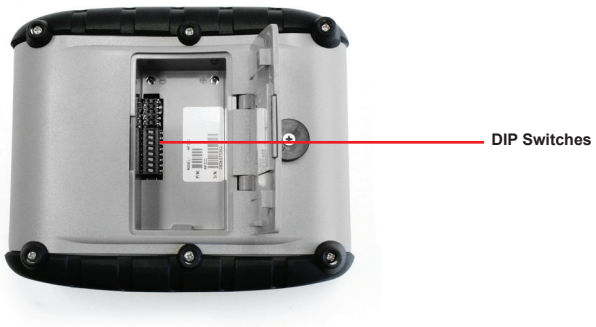
Connecting the Printer

- The MP300 supports Serial RS232 and IrDA compatible infrared communication interfaces. Radio frequency (RF) Bluetooth communication is also available as an optional feature.
- Serial, IrDA and Bluetooth communication settings can be changed via a DIP Switch located on the control card.
- Printer drivers for Windows 95/98/NT/2000/XP/Vista are available from Unitech.
- PrinterCE print control utility for Windows CE devices is available from Unitech.
- Printboy Print Utility from Bachmann Software or PalmPrint Utility from StevensCreek are recommended for mobile computer devices.

DIP Switch Location

- The DIP Switch is located inside the battery compartment. The DIP Switch location is shown below.
- The functions assigned to these switches are on page 18.
- If the serial interface is selected, the communication parameters; baud rate, data bit and parity must be set. These parameters apply both for UART 1 and UART 2.



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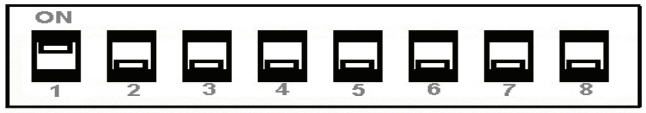
Setting DIP Switches



NOTE: Be careful when changing the DIP switch settings. Carefully use a pointer on the DIP switch you are going to change. DO NOT use a screw driver or apply excessive force.

DIP Switch Functions

DIP Switch	Function	Switch	Switch	Switch	Switch	Notes
1,2,3,6	Communication Interface	SW1	SW2	SW3	SW6	
	RS232	Off	Off	Off		Also set 4 & 5
	IrDA	On	On	Off		Also set 4 & 5
	Bluetooth	Off	On	On		38,400 Baud
	IR Direct Mode	On	On	Off	On	9600 Baud
4 & 5	COM 1 & 2 - Baud Rate	SW4	SW5			RS232 Rate
	38, 400	Off	Off			Bluetooth
	19, 200	Off	On			
	9600	On	Off			
	2400	On	On			
4 & 5	COM 2 – IrDA Baud Rate	SW4	SW5			IrDA Baud Rate
	9600	Off	Off			Fixed
	9600 - 38.4 Baud	On	Off			Variable
6 & 7	COM 1 & 2 - Parity Bits	SW6	SW7			
	No parity	Off	Off			
	Odd parity	On	Off			
	Even parity	On	On			
8	Auto Power Save	SW8				
	Power save disabled	Off				Manual On/Off
	Power save enabled	On				Auto Power Down

NOTE: In order for changes to the DIP Switch configuration to take effect, the printer's power must be reset.

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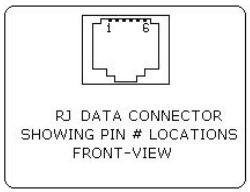
Communication

- The MP300 has two serial communication UARTs. It is able to support two modes of communication simultaneously – either RS232 and IrDA (If DIP switch 1 is on) or RS232 and Bluetooth (If DIP switch 1 is off and DIP switch 3 is on).
- DIP switch 2 is used to control the RS232 port. If the switch is turned on the RS232 Port is disabled and if it is turned off the RS232 Port is enabled. If RS232 interface is not required, disabling the port will save battery power.
- Bluetooth communication is available if optional daughter boards are installed.

Serial Communication Specification

- The RS232 interface signals for the MP300 printers are terminated on a 6-pin RJ type data connector located on the side of the printer.
- Six connections are provided from the serial interface to the host computer. The serial interface signals and pin outs on the RJ connector, and the connector pin locations are shown below.
- A minimum of two connections are required for operation: RXD – pin 3 and Common – pin 1.

The communication parameters: baud rate, data bit and parity must be set the same as the host device settings.



RJ45 Connector Pin #	Communication Interface	Signal Name
3	RS232 from host (Input)	RXD
2	RS232 from printer (Output)	TXD
6	Request to send from host (Input)	RTS
4	Clear to send from printer (Output)	CTS
1, 5	Logic common	COM

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Infrared Communication Mode (IrDA)

- DIP switch 1 and 2 (Disable UART 0) must be in the on position.
- The printer can be powered up by pressing the power on/off switch.
- If no IrDA connection is made, the printer will automatically power down to a lower power level to conserve battery life. It will remain in a “sleep” mode until an IrDA connection is made, at which time the printer will “wake up” and print the requested data.

Direct IR

- If DIP switch 1, 2 and 6 are on, the baud rate of the IrDA communication is set at 9600 bps.

Infrared Communication (Variable Baud Rate IrDA Mode)

- If you wish to default to variable IrDA, (9600 - 38,400) then you should turn DIP switch 6 off.
- Pressing the power button again will turn the printer off.

Bluetooth Communication (Option)

- DIP switch 1 must be in the off position.
- DIP switch 3 and 2 must be in the on position.
- Adjust settings to match the Bluetooth module in your computing device.
- The printer can be powered up by pressing the power on/off button.
- Pressing the power on/off button again will turn the printer off.

NOTE: Since UART 1 (RS232) and UART 2 (IrDA/BT) share the same DIP switches, the same baud rate, parity and stop bits settings apply both for RS232 and Bluetooth (Refer to Developer’s Manual for further details).

NOTE: It is necessary for the mobile computing device you are using to discover the printer. Refer to the Bluetooth manual provided with your mobile computer and the Bluetooth section of the Developer’s Manual.

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Magnetic Stripe Reader (Option)

- The Magnetic Stripe Reader is a factory-installed option. This option requires special application software to read and process cards with a magnetic stripe, such as credit cards or a driver’s licenses.
- Quickly swipe the card through the reader either left to right, or right to left. The magnetic stripe must be facing toward the paper supply door as indicated below, while it is passed through the reader.

Magnetic Stripe LED Indicator Status Chart

LED Indicator	State	Status
Green	On	Ready/waiting for card to be swiped.
	Off	Good swipe - Card data read - OR Card not ready to be swiped.
Red	On	Error reading card’s data.

Programming Information

This section lists the printer control command strings.

ASCII Control Characters

Character	Hex / Dec	Control Action
EOT	04/04	End of text
BS	08/08	Back space
HT	09/09	Horizontal tab
LF	0A/10	Line feed
VT	0B/11	Vertical tab
FF	0C/12	Form feed
CR	0D/13	Carriage return
SO	0E/14	Shift out
SI	0F/15	Shift in
XON	11/17	Transmitter on
AUXON	12/18	Printer on
XOFF	13/19	Printer receiver is off
NORM	14/20	Return to default 42 column mode
AUXOFF	15/21	Printer to host: Printer is off
CANCEL	18/24	Cancel and reset printer buffer
ESC	1B/27	Escape
EXTEND	1C/28	Extended print
EXTEND OFF	1D/29	Extended print off / Normal print

Printer Font Commands - Courier Character Set

Font Name	Character Size (W x H)	Command String
24 CPI Normal	8 x 23	ESC+'k'+'5'
21 CPI Normal	9 x 23	ESC+'k'+'4'
19 CPI Normal	10 x 23	ESC+'k'+'3'
16 CPI Normal	12 x 23	ESC+'k'+'2'
12 CPI Normal	16 x 23	ESC+'k'+'1'
13 CPI Rotated	14 x 16	ESC+'k'+'0'

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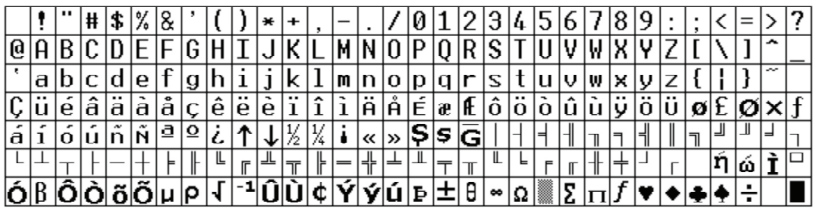
Printer Font Commands

Command String	Printer Action
ESC - 'F' - 1	Selects International character set
ESC - 'F' - 2	Selects PC Line Draw character set
ESC - 'U' - '1'	Enable emphasized print
ESC - 'U' - '0'	Disable emphasized print

Below are the International and PC Line Character sets from 32 through 255:

International Character Set

PC Line Draw Character Set



Printer Graphic Commands

Command String	Printer Action
ESC - 'A' – n	Select dot line spacing between printed lines
ESC - 'J' – n	Graphic line feed command
ESC - 'P' - '#'	Select online mode, characters printed as received
ESC - 'P' - '$'	Select buffer mode, characters are printed on (^ D)
ESC - 'V' - n1 – n2	8-bit graphic command
ESC - 'v' - n1 – n2	RLE compressed graphic command

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Magnetic Stripe Reader Commands (When MSR is Installed)

Command String	Printer Action
ESC - 'M' - 'nnm' - Cr	Select MSR with (nn) auto timeout Where nn="00" to "99" m=1: Reads track 1 only m=2: Reads track 2 only m=3: Reads track 3 only m=4: Reads track 1 & 2 m=5: Reads track 2 & 3 m=6: Reads track 1, 2 & 3
ESC – 'C'	Cancel MSR read process

Smart Card Reader Control Commands (when SCR is installed)

Command String	Printer Action
ESC - 'M' - 'nn' - '7'- Cr	Select SCR in direct mode with Serial RS232 (UART0). (nn) is the auto timeout of the SCR.
ESC - 'M' - 'nn' - '8'- Cr	Select SCR in PassThru mode with BT or IrDA on (UART1). (nn) is the auto timeout of the SCR.

Graphic Logo and Bar Code Commands

Command String	Printer Action
ESC - L - G - n	Prepare printer to load image
ESC - G - 0x0FF	Loading logo complete
ESC - L - g - n	Print stored logo image
ESC - 'z' - n1 - n2 - L - [data]	Print bar code without visible text
ESC - 'Z' - n1 - n2 - L - [data]	Print bar code with visible text
ESC - 'Q' - 'J' - n	Reverse dot feed
ESC - 'Q' - 'Q' - n	Set out of paper sensitivity
ESC - 'Q' - 'F' - m	Set forward black mark seek
ESC - 'Q' - 'B' - m	Set reverse black mark seek

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Printer Supervisory and Control Commands

Command String	Printer Action
^V	Buffer, power timer and battery status
^B	Buffer status
ESC - 'P' - '^'	Print battery voltage
ESC - 'M' - '000' - Cr	Disable the power down timer
ESC - 'M' - 'nn0' - Cr	Sets the power down timer to nn seconds
ESC - 'M' - 'C'	Reset auto power down to 20 seconds
ESC - 'P' - '('	Firmware version query
ESC - 'P' - ')'	Hardware model query
ESC - 'P' - '+' or '-'	Enable or disable EOT printer response

Printer Maintenance

Print-Head Cleaning

You may need to clean the print-head and platen roller after printing a number of rolls of paper, whenever you load new supplies or when you see voids in the printout.

- Open the paper door by pulling the “T” bar lever on the top cover as shown in “Adding Paper” on page 14. The paper supply door will pop up.
- Remove the paper roll.
- Moisten a cotton swab with isopropyl alcohol and clean the print-head.
- Clean the platen roller with a dry cloth or small brush. Make sure the platen roller is clean all the way around.
- Moisten another cotton swab with isopropyl alcohol. Rub the swab across the black mark sensor to remove any build-up.
- Moisten another cotton swab and rub the swab across the tear bar to remove any build-up.

You may experience dust build-up depending on the environment and the quality of the paper supply. If this occurs, use a can of compressed air to blow dust and paper debris out of the printer.

Do not use sharp objects to clean the print-head. This may damage the printer and require service.

Charging the Printer Battery

The printer battery is charged using the wall-mounted charger provided. Follow these steps to charge the battery:

- Plug the AC adapter output cable into the AC adapter port as shown in “Charging the Battery” on page 11.
- Plug the AC adapter output cable into the appropriate AC line voltage socket.
- The yellow LED will illuminate indicating that the battery is being charged.
- The battery will be fast-charged and after 180-minutes the LED will turn off.
- To insure a full charge, the printer should not be operating while the battery is charging.

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Important Notes on Charging Batteries

- The MP300 Mobile Printer requires an adapter output of 10V DC/1.32A.
- The battery fast-charge is initiated each time the AC adapter output cable is connected to the printer.
- The fast-charge controller checks the battery’s voltage and temperature before the start of the fast-recharge process. If the battery voltage or the temperature is outside of the fast-charge limits, the charger defaults to trickle-charge at C/10 or 70 mA rate.
- Optional external battery chargers are available for Unitech batteries. Refer to “Printer Supplies” on page 30.

Important Notes on Replacing Batteries

- Check for the correct Unitech part number for the battery and only order that part for your new battery.

Caution! Risk of explosion if battery is replaced by an incorrect type.

Dispose of used batteries according to instructions on page 28.

Verifying Battery Charge State

Follow the steps below to identify and correct any battery power problem that may be encountered. This will help identify that the fault is with the printer and not some other part of your system.

To Test the AC Adapter:

- Use a multimeter and measure the output voltage. Output should be 10V DC.
- Press the on/off button and wait until all LEDs are off.
- Insert the AC adapter output cable into the printer. If the Amber LED goes on, the battery is not fully charged, but the charge circuit is functioning.
- The AC power portion of the circuit appears ok.

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To Test the DC Power:

- Disconnect the AC adapter output cable once the battery has charged for five minutes.
- Press and hold the feed button, then press and release the on/off button and then release the feed button. The printer will print a “self test” receipt.
- If the self test receipt is printed, the DC power is ok.

To Test if the Battery is Accepting the Charge:

- Press the on/off button and wait until all LEDs are off.
- Plug the AC adapter output cable into the printer. Press the on/off button; the green LED is illuminated and after about 20 seconds the LED should turn off.
- If the amber LED is on, this will continue on through this test indicating that the battery is accepting a charge and that the charge circuit is ok. The LED will turn off at the end of a 180-minute charge cycle.

Battery and Safety Information

The printer is powered by a 7.4V Li-Ion 2200mAh Battery Pack.

- Charging time in the printer is approximately three hours.
- Take the battery out of the printer during long periods of storage.
- The battery storage temperature is 40°F to 104°F (4°C to 40°C). Do not store a fully charged battery at temperatures greater than 104°F (40°C) for long periods of time – the battery may permanently lose charge capacity.
- The recommended temperature for charging is between 68°F (20°C) to 77°F (25°C).
- Be sure to use a fully charged battery before long or battery intensive printing sessions. Certain operations (for example, printing receipts with a lot of bar codes and graphics) drain the battery more quickly than others.
- Dispose according to your local regulations. **Do not throw in trash.**

Caution! Do not disassemble, short circuit, heat above 80°C or incinerate, because the battery may explode.

Recycling your Batteries

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 batteries in your area, please visit www.rbrc.org.

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Trouble Shooting

Problem	Action
Does not feed paper or has a paper jam	• Remove any jammed supply • Reload paper supply
Does not print	• Check or replace the printer’s battery • Make sure the paper supply is loaded correctly, and not backwards • Verify communication between the host device and the printer by disconnecting the communication cable and performing a printer self-test
Light printing	• Check or recharge the battery • Adjust the print contrast through print application
Voids in printing	• Clean the print-head following the cleaning instruction listed under “Print-Head Cleaning” on page 26
Red (Error) LED on	• Check that the paper supply roll is not out • Error reading MSR • The print-head may be hot after extended printing, and the printer will pause before resuming printing

If the problem is not identified following the above trouble shooting guide, contact Unitech Technical Support. Support numbers and e-mail addresses are listed on page 3 of this manual.

Other than routine cleaning and other maintenance described on page 26, the printer is not to be personally fixed by the user. It must be returned to an Authorized Service Center. Under no circumstances should the user attempt to take the printer apart.

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Printer Supplies

Part Number	Description
151133	Optional 12V/24V in-vehicle adapter
157260	Multi-Plug Battery Charger Adapter (US, UK, Euro & Australian plug)
756998-1	Spare belt clip
757061	MP300 thermal paper pack (5 rolls)
757061-CASE	MP300 thermal paper case (200 rolls)
757150	Thermal print-head cleaning pen
757351	Optional shoulder strap with quick clip
767400-1	Battery charger (2-bay) Li-Ion, 120V AC
767400-2	Battery charger (2-bay) Li-Ion, 220V AC
767400-4	Battery charger (2-bay) Li-Ion, 240V AC
7A1000014	MP300 battery pack: 7.4V Li-Ion 2200mAh
Available from Unitech e-mail: supportengineering@ute.com	Windows 95/98/NT/2000/XP/Vista drivers

Specifications

Printer Specifications

Problem	Action
Height	2.27”
Width	5.01”
Length	6.14”
Weight (w/ battery & supply)	1.41 lbs.
Shipping Weight	3 lbs.
Power	7.4V Li-Ion 2200mAh rechargeable battery pack
Operating Temp. Limits	14ºF – 122ºF (-10ºC – 50ºC)
Storage Temp. Limits	-4ºF – 140ºF (-20ºC – 60ºC)
Operating Humidity Limits	20% – 85% (non-condensing)
Storage Humidity Limits	5% – 95% (non-condensing)
Drop Threshold	4’
Print-Head	3” 203 dpi (8 dots per mm)
Printing Method	Thermal direct
Print Speed	Up to 2” per second
Supported Fonts (Bitmap)	Standard (normal and bold) Large (normal) Reduced (normal and bold) Large rotated
Supported Bar Codes	Codes 39, Code128, UCC/EAN-128, Interleaved 2 of 5, UPC-A, UPC-E, EAN/JAN-8, EAN/JAN-13, Codabar
Memory	32K SRAM, 256K + 32K Program Flash ROM
Charging Time	Approximately 180-minutes
Communication	RS232, IrDA, Bluetooth
Print Ratio	25% black maximum/square inches.

Supply Specifications

Part Number	Description
Supply	Thermal direct receipt paper
Supply Thickness	2.2 to 3.5 mils (receipt paper)
Supply Width	3.125”
Supply Length	1 roll of receipt paper is approx. 600” (15,240 mm)
Supply Sensing	Black mark (on face of supply)
Paper Roll Diameter	Outside: 1.375” Inside: .25”
Maximum Print Area	2.85” X 8”
Approved Vendors	**Kansaki**: P300, P310, P350, P354, P390, P394, P530UV, TO281CA, OP200, TO381N **Jujo**: TF-50KS-E2C **Honshu**: FH65BV-3

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Regulatory Notes and Warranty

FCC Part 15 Class B

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 the receiver.
- Connect the equipment into an outlet on a circuit different from which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For Bluetooth equipped printers please note:

- The printer contains an OEM Serial Port Adapter from connectBlue with FCC ID: PVH070101. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: “(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.”

Warranty

This printer is warranted by Unitech to be free of defects in parts and workmanship for a period of one year from date of shipment. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair or unauthorized modification. Unitech specifically disclaims any implied warranties of merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, special, incidental or consequential damages. Unitech’s total liability is limited to the repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral is expressed or implied.

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Warranty and/or Repair Service

A Return Merchandise Authorization number must be issued before a unit is returned to Unitech for repair. Once a unit has been properly returned to Unitech (Note: The customer is responsible for ensuring proper packing to prevent damage in transit as well as the shipping costs back to Unitech), it will be repaired (estimates are provided first if the repair cost is estimated above $100.00) and returned via UPS ground. The customer may elect a faster mode of transport at their cost.