

2.1 Configuration Options

The printer incorporates a number of configurable *options*, each of which has a number of *settings*. The default settings of the standard printer are detailed in the table below in bold. To change the setting of any option, follow the procedure below:

1. Ensure the printer is OFF.
2. Press and hold the Mode button whilst powering the printer ON. After about five seconds, the Status light will flash five times to show that the printer is in *configuration mode*. Release the Mode button.
3. Press the Mode button the same number of times as the *option* that you wish to change (for example to change baud rate, press the Mode button twice).
4. After a short delay, the Status light will flash the same number of times as the option that you have chosen. If you have made a mistake at this stage, simply wait: after a delay, the printer will power-on without changing any options.
5. To proceed with configuration, press the Mode button the same number of times as the *setting* that you wish to make (for example, to set the baud rate to 19200, press the Mode button once).
6. After a short delay, the Status light will flash the same number of times as the setting that you have made.
7. After a further delay, the printer will power-on with the new setting.

Option Number	Option	Setting Number (default in bold)	Setting MPP5610 & 5611 (default in bold)	Setting Number	Setting MPP5620 (default in bold)
1	RS232 Protocol	1	8, No parity		
		2	8, Odd parity		
		3	8, Even parity		
		4	7, Odd, parity		
		5	7, Even Parity		
2	RS232 Baud Rate	1	19200 baud	1	115200 baud
		2	9600 baud	2	57600 baud
		3	4800 baud	3	38400 baud
		4	2400 baud	4	19200 baud
		5	1200 baud	5	9600 baud
		6	600 baud	6	4800 baud
		7	300 baud	7	2400 baud
				8	1200 baud
				9	600 baud
				10	300 baud
3	RS232 Handshake	1	None		
		2	Software		
		3	Hardware		
4	Default Font	1	Arial 16, 24 CPL		
		2	Arial 12, 32 CPL		
		3	Arial 8, 48 CPL		
5	Character Format	1	Normal		
		2	Double Width		
		3	Double Height		
		4	Double Width and Height		
6	Print Density	1	Lowest		
		2			
		3			
		4	Highest		
7	Printer Current	1	Highest		
		2			
		3			
		4	Lowest		
8	Print Format	1	Standard paper, upside down		
		2	Standard paper, normal		
		3	Labels, normal printing		
		4	Labels, upside down printing		

2.2 Software Selectable Functions

Underline	11 selectable international character sets
Double height	Reverse printing
Double width	Inverse printing
Graphics	Reset
Horizontal tab, plus setting	Barcodes
Form feed, plus setting	

2.3 Control Codes and Escape Sequences

Function	Code	Decimal	Hex
Horizontal tab	HT	9	09
Line feed	LF	10	0A
Form feed	FF	12	0C
Carriage return	CR	13	0D
Double width on	SO	14	0E
Double width off	SI	15	0F
Cancel	CAN	24	18
Set print mode	ESC ! <i>n</i>	27 33 <i>n</i>	1B 21 <i>n</i>
Set barcode start position	ESC \$ <i>n1 n2</i>	27 36 <i>n1 n2</i>	1B 24 <i>n1 n2</i>
Set bit image (8 pin single density)	ESC * 0 <i>n1 n2 [d]</i>	27 42 0 <i>n1 n2 [d]</i>	1B 2A 00 <i>n1 n2 [d]</i>
Set bit image (8 pin double density)	ESC * 1 <i>n1 n2 [d]</i>	27 42 1 <i>n1 n2 [d]</i>	1B 2A 01 <i>n1 n2 [d]</i>
Set bit image (24 pin single density)	ESC * 32 <i>n1 n2 [d]</i>	27 42 32 <i>n1 n2 [d]</i>	1B 2A 20 <i>n1 n2 [d]</i>
Set bit image (24 pin double density)	ESC * 33 <i>n1 n2 [d]</i>	27 42 33 <i>n1 n2 [d]</i>	1B 2A 21 <i>n1 n2 [d]</i>
Underline on	ESC – 1	27 45 1	1B 2D 01
Underline off	ESC – 0	27 45 0	1B 2D 00
Reset	ESC @	27 64	1B 40
Set page length	ESC C <i>n</i>	27 67 <i>n</i>	1B 43 <i>n</i>
Set horizontal tabs	ESC D <i>n</i>	27 68 <i>n</i>	1B 44 <i>n</i>
Bold on	ESC G	27 71	1B 47
Bold off	ESC H	27 72	1B 48
Set bit image	ESC K <i>n1 n2 [d]</i>	27 75 <i>n1 n2 [d]</i>	1B 4B <i>n1 n2 [d]</i>
Country select	ESC R <i>n</i>	27 82 <i>n</i>	1B 52 <i>n</i>
Double width on	ESC W 1	27 87 1	1B 57 01
Double width off	ESC W 0	27 87 0	1B 57 00
Compressed bit image graphics	ESC Z <i>n1 [d1] ... n24 [d24]</i>	27 90 <i>n1 [d1] ... n24 [d24]</i>	1B 5A <i>n1 [d1] ... n24 [d24]</i>
Print & feed paper	ESC d <i>n</i>	27 100 <i>n</i>	1B 64 <i>n</i>
Reversed on	ESC i 1	27 105 1	1B 69 01
Reversed off	ESC i 0	27 105 0	1B 69 00
Send Printer Status	ESC v	27 119	1B 76
Double height on	ESC w 1	27 119 1	1B 77 01
Double height off	ESC w 0	27 119 0	1B 77 00
Inverse on	ESC { 1	27 123 1	1B 7B 01
Inverse off	ESC { 0	27 123 0	1B 7B 00
Set barcode height ($1 \leq n \leq 255$)	GS h <i>n</i>	29 104 <i>n</i>	1D 68 <i>n</i>
Print UPC-A barcode	GS k 0 [<i>d</i>] NULL	29 107 0 [<i>d</i>] 0	1D 6B 00 [<i>d</i>] 00
Print UCP-E barcode	GS k 1 [<i>d</i>] NULL	29 107 1 [<i>d</i>] 0	1D 6B 01 [<i>d</i>] 00
Print EAN13 barcode	GS k 2 [<i>d</i>] NULL	29 107 2 [<i>d</i>] 0	1D 6B 02 [<i>d</i>] 00
Print EAN8 barcode	GS k 3 [<i>d</i>] NULL	29 107 3 [<i>d</i>] 0	1D 6B 02 [<i>d</i>] 00
Print Code 39 barcode	GS k 4 [<i>d</i>] NULL	29 107 4 [<i>d</i>] 0	1D 6B 04 [<i>d</i>] 00
Print 2 of 5 barcode	GS k 5 [<i>d</i>] NULL	29 107 5 [<i>d</i>] 0	1D 6B 05 [<i>d</i>] 00
Print Codabar barcode	GS k 6 [<i>d</i>] NULL	29 107 6 [<i>d</i>] 0	1D 6B 06 [<i>d</i>] 00
Print CODE128 barcode	GS k 7 <i>n [d]</i>	29 107 7 <i>n [d]</i>	1D 6B 07 <i>n [d]</i>
Set barcode magnification ($2 \leq n \leq 4$)	GS w <i>n</i>	29 119 <i>n</i>	1D 77 <i>n</i>

2.4 International Character Sets

Country	Code	Decimal	Hex
USA	ESC R 0	27 82 0	1B 52 00
France	ESC R 1	27 82 1	1B 52 01
Germany	ESC R 2	27 82 2	1B 52 02
UK	ESC R 3	27 82 3	1B 52 03
Denmark I	ESC R 4	27 82 4	1B 52 04
Sweden	ESC R 5	27 82 5	1B 52 05
Italy	ESC R 6	27 82 6	1B 52 06
Spain	ESC R 7	27 82 7	1B 52 07
Japan	ESC R 8	27 82 8	1B 52 08
Norway	ESC R 9	27 82 9	1B 52 09
Denmark II	ESC R 10	27 82 10	1B 52 0A

2.6 Character Font	Bit 1	Bit 0
24 characters per line	0	0
48 characters per line	0	1
32 characters per line	1	0
Undefined	1	1

2.8 Send Printer Status (ESC v)			
Bit	Function	0	1
2	Paper Out	False	True

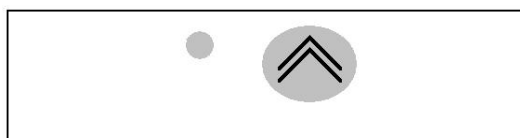
2.5 Print Mode (ESC!)

Bit	Function	Value	
		0	1
0	Character font (see below)		
1			
2	Print density (see below)		
3			
4	Double height	Cancelled	Set
5	Double width	Cancelled	Set
6	Undefined		
7	Underline	Cancelled	Set

2.7 Print Density		Bit 3	Bit 2
Light	1 (Default)	0	0
	2	0	1
	3	1	0
Dark	4	1	1

3. PRINTER OPERATION

3.1 Mode Button and Status LED Operation



Status LED Mode Button

3.2 Power On Self Test

The self test procedure is initiated by supplying power to the printer while the mode button is depressed. When the mode button is released a test print will be produced.

3.3 Status LED

The printer incorporates an LED indicator to report its condition. If there is a fault, the LED will flash in sequence. The fault can be identified by counting the number of flashes.

LED Indication	Condition	Solution
On	Printer On	-
Off	Printer Off	-
* * *	Paper out or door open	Fit new paper
** ** **	Thermal head too hot	Allow head to cool

3.4 Paper Out

The printer will automatically detect when the printer paper has run out, and report this using the Status LED. Use the Mode button to feed through the last few centimetres of paper and fit a new roll.

3.5 Head Thermal Limit

After extensive printing the print head temperature may rise to an unusable level. The Status LED will report when this occurs, and printing will be suspended until the head temperature returns to normal levels.

3.6 Paper Tear Procedure

When removing printout from the printer, pull the printout toward the tear bar and tear from one side to the other across the serrated edge.

3.7 How To Open Lid

Pull the lever until the lid is released from its locked position. To avoid damage do not use excessive force.



3.8 Replacing Paper Roll

If the paper roll needs replacing, open the paper cup lid and remove the remaining paper. Reel off a few centimetres from a new roll of paper. Hold approximately 5cm of paper outside the device as you place the new roll into the reservoir. Close the lid by applying equal amounts of pressure on each side ensuring the lid is in the locked position. Now tear the spare paper away.

3.9 Paper Feed

Depressing the mode button will allow paper to be fed through the printer.

4. ACCESSORIES & CONSUMABLES

4.1 Paper rolls

Description	Part Number
Thermal Paper Roll, 25m	MM58
Thermal Label Roll, continuous white self-adhesive	ML58/C48
54x25mm Thermal Paper Label Roll	ML59
54x50mm Thermal Paper Label Roll	ML60
54x75mm Thermal Paper Label Roll	ML61
54x25mm Thermal Weather-proof Label Roll (Polypropylene)	ML59P
54x50mm Thermal Weather-proof Label Roll (Polypropylene)	ML60P
54x75mm Thermal Weather-proof Label Roll (Polypropylene)	ML61P

4.2 Power & Data Cables

Description	Connection Type	Part Number
Data Cable, 150mm, 4 way KK plus bare end	RS232	MGK83
Data Cable, 1m, USB A to B	USB	MGK63
Power Cable, 150mm 2 way KK plus bare end	Power	MGK82

