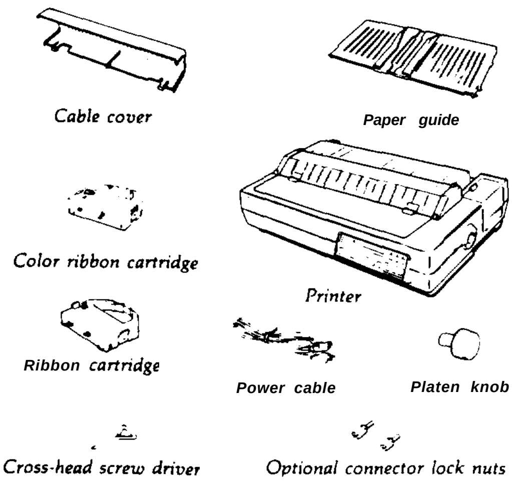


Printer Specifications

Printing

Print method: 24-pin impact dot matrix

Print speed: See table below.

Quality	CPI	Characters/second/line
Draft	10	333
	12	400
LO	10	111
	12	133

Printing direction: Bidirectional logic-seeking for text and graphics. Unidirectional available through SelecType or software command.

tine spacing: 1/6", 1/8", or programmable in increments of 1/60th, 1/180th or 1/360th of an inch

Paper feed speed: 83 ms/line at 1/6" line spacing

Printable columns: See table below.

Character size	Maximum printed characters
10 cpi	136
10 cpi condensed	233
12 cpi	163
12 cpi condensed	272

Buffer: 8 Kbyte

Character fonts:

Font	Available Sizes (characters per inch)
Epson Draft	10, 12, 15
Epson Roman	10, 12, 15, Proportional
Epson Sans Serif	10, 12, 15, Proportional
Epson Courier	10, 12, 15, Proportional
Epson Prestige	10, 12, 15, Proportional
Epson Script	10, 12, 15, Proportional
Epson OCR-A	10, 12, Proportional
Epson OCR-B	10, 12, Proportional
* Orator	10
* Orator - S	10

* Optional with the Multi-Font Module

Characters:

96 standard ASCII character set (including italic characters)
13 international character sets
Epson Extended Graphics characters

Paper feed methods: Friction-
Built-in push feed tractor
Pull tractor (optional)
Double-bin cut sheet feeder (optional)

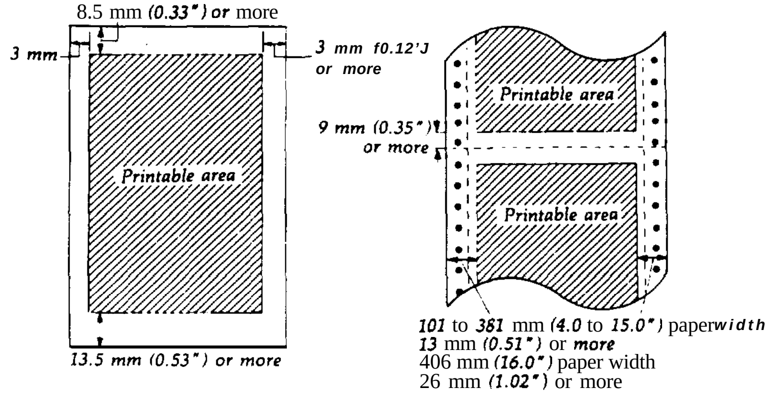
Paper width:
Single sheets
7.15 to 14.3 inches (182 to 364 mm)
Continuous
4.0 to 16.0 inches (101 to 406 mm)
Envelope
No. 6 (166 x 92 mm),
No. 10 (240 x 104 mm)
label
2-1/2 X 15/16 inches,
4 X 15/16 inches,
4 X 1-7/16 inches,

Paper length:
Single sheets
3.7 to 14.3 inches (94 to 364 mm)

Paper thickness:
Single sheets
0.0026 to 0.004 inches (0.065 to 0.1 mm)
Continuous
0.0023 to 0.018 inches (0.06 to 0.46 mm)
Envelope
0.0063 to 0.0197 inches (0.16 to 0.52 mm)
Label
0.0075 inches (maximum 0.19 mm)

Printable area:

Single sheet — Continuous paper



'For printable area for envelopes, see page A-8.

Number of copies: Continuous. multi-part. no carbon: one original plus up to five copies. Total thickness must not exceed 0.018' (0.46 mm)

Ribbon:
Black ribbon cartridge #7762:
Life expectancy (in Letter Quality characters, at 48 dots/character): 3 million

Color ribbon cartridge #7763:
Life expectancy (in Letter Quality characters, at 48 dots/character)

Black:	1.0 million
cyan:	0.7 million
Magenta:	0.7 million
Yellow	0.5 million

Film ribbon cartridge # 7764:
Life expectancy (at 10 cpi, with bi-directional printing, using 136 columns): 0.1 million'

- This number may vary depending on print direction, characters per inch, or text density per page.

MCBF:	For all components excluding print head: 5 million lines
MTBF:	6000 power-on hours (at 25% duty)
Print head life:	200 million strokes per wire
Dimensions and **weight:**	Height: 7.7' Width: 26.6" Depth: 20.4' Weight: approx. 44 lbs
Voltage:	120 VAC ± 10%
Power consumption:	400 watts maximum
Frequency:	49.5 to 60.5 Hz
Insulation resistance:	10M ohms between AC power line and chassis
Dielectric strength (between AC line and chassis):	Can withstand 1.25 kV rms applied for one minute
Temperature:	Operation: 40°F to 95°F (5°C to 35°C) Storage: -22°F to 140°F (-30°C to 60°C)
Humidity:	Operation: 10% to 80% (without condensation) Storage: 5% to 85% (without condensation)
Shock:	Operation: Up to 1 G withii 1 ms Storage: Up to 2 G within 1 ms
Vibration:	Operation: Up to 0.25 G at up to 55 Hz Storage: Up to 0.50 G at up to 55 Hz

The Cut Sheet Feeder

Dimensions and weight: 26.7"(W) x 22.9"(D) x 16.5'(H) (mounted on the printer) approx. 13.2 Ibs.

Bin capacity:

bin 1
Single sheets. Up to 150 sheets of 22 lb. paper
Up to 185 sheets of 17 lb. paper
(Total thickness should not exceed 0.59' or 15mm)

Envelopes': Up to 25 (plain and bond type)
Up to 30 (air mail)

bin 2
Single sheets: Up to 150 sheets of 22 lb. paper
Up to 185 sheets of 17 lb. paper
(Total thickness should not exceed 0.59' or 15mm)

* Envelopes can only be used in bin 1.

Stacker capacity:

Face down	Single sheets:	Up to 60 sheets of 22 lb. paper Up to 75 sheets of 17 lb. paper
	Envelopes:	Up to 10 (plain and bond type) Up to 12 (air mail)
Face up	Single sheets:	Up to 150 sheets of 22 lb. paper Up to 185 sheets of 17 lb. paper
	Envelopes:	Up to 25 (plain and bond type) Up to 30 (air mail)

Reliability

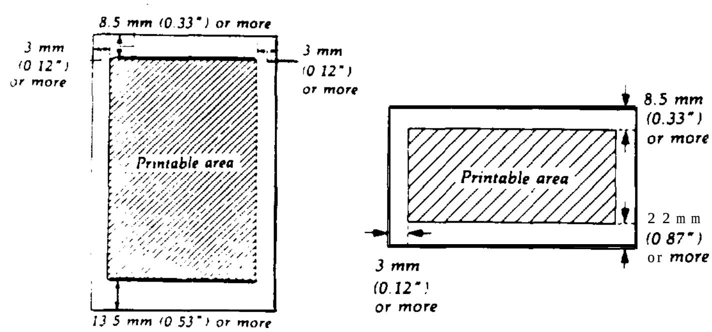
MCBF **(Mean Cycle Between Failure): 100,000 cycles**

Environmental conditions

Tempera-	**Operation:**	+41°F (+5°C) to +95°F (+35°C)
	storage:	-22°F (−30°C) to +158°F (+70°C)
Humidity:	Operation:	15% to 80% without condensation
	Storage:	5% to 90% without condensation

Paper

	Single sheet bin 1 and bin 2	envelope bin 1
Width	7.17' LO 14.3' (182mm to 364mm)	6.50' to 9.49' (166mm to 241mm)
Length	8.27' to 14.3' (210mm to 364mm)	3.62' to 4.09" (92mm to 104mm)
Thickness	0.0028' to 0.0039' (0.07mm to 0.1mm)	0.0043' to 0.0205' (0.16mm to 0.52mm)
Weight:	17 to 22 lb. paper	12 to 24 lb. paper
Printable area :		



Software

The following is a typical example of a software setup required for proper operation of your cut sheet feeder. Not all software is set up the same. so you may find that a bit of experimentation is required before you find the best equivalent settings to use.

To maintain 54 printed lines per page make the following changes:

	Continuous form settings	**Cut sheet** feeder settings
Page Length	66	61
Top Margin	6	4
Bottom Margin	6	3

Interface Specifications

Your printer is equipped with both a parallel and a serial interface. For specifications for optional interfaces, see the manuals provided with the optional interfaces.

Parallel interface

The following tables describe the parallel interface.

Pin assignments for the **parallel** interface

Connector pin assignments and a description of their respective interface signals are shown in the following table.

Signal Pin	Return Pin	Signal	Direction	Description
1	19	STROBE	IN	STROBE pulse to read data in Pulse width must be more than 0 5 microseconds at the receiving terminal
2 3 4 5 6 7 8 9	20 21 22 23 24 25 26 27	DATA 1 DATA 2 DATA 3 DATA 4 DATA 5 DATA 6 DATA 7 DATA 8	IN IN IN IN IN IN IN IN	These signals represent information of the 1st to 8th bits of parallel data. respectively Each signal is at HIGH level when data is logical 1 and LOW when it is logical 0.
10	2 6	ACKNLG	OUT	About a 1 1-microsecond pulse. LOW Indicates that data has been received and that the printer is ready lo accept more data
11	29	BUSY	OUT	A HIGH signal indicates that the printer cannot receive data The signal goes HIGH in the following cases: 1) During data entry (ea char. time) 2) During printing 3) When off line 4) During printer-error state.

- All interface conditions are based on TTL level. Both the rise and the fall times of each signal must be less than 0.2 microseconds.
- Data transfer must be carried out by observing the ACKNLG or BUSY signal. Data transfer to this printer can be carried out only after receipt of the ACKNLG signal or when the level of the BUSY signal is LOW.

Printing enabled/disabled signals and control conditions

The following table shows the relationship between printing being enabled or disabled. the on line/off line status, and the receipt of the data on/off control characters, DC1 or DC3.

ON LINE (Indicator on)	SLCT IN	DC1/DC3 (Data on/off control)	ERROR	BUSY	ACKNLG	Printing (Disabled/ enabled)
on line	Low (J9/ interface)	DC1/DC3 (no effect)	High	High/Low	Pulsed ea. char.	Enabled (normal cond.)
on line	High	DC1 Recv'd	High	High/Low	Pulsed ea. char.	Enabled
on line	High	DC3 Recv'd	High	High/Low	Pulsed ea. char.	Disabled*
off line	High/Low (no effect)	DC1/DC3 (no effect)	Low	High	Not generated	Disabled

'While printing is disabled, character data is being received and acknowledged so that the printer can look for another DC1 character. which would allow it to resume printing.

Compatible interfaces

The following is a list of Epson interfaces that are compatible with your LQ printer.

Inlet-face number	Name
#8143	New serial interface
#8148	Intelligent send interface
X8165	Intelligent IEEE-488 Interface

Default Settings

The following table shows the **default conditions that become valid** when **the printer is initialized.**

Item	Reset to:
Top of formposition	Current paper position
Left and right margins	SelecType setting
line spacing	1/6-inch line spacing
Vertical tab positions	cleared
Horizontal tab positions	Every eight characters
VFU channel	Channel 0
Font selection	Reset to the current SelecType setting
User-defined characters	Hardware: Cleared Software: Deselected only

In addition, the data b&r is cleared when the printer is initialized by **turning on the power or by sending an INIT signal.**

> Note: The userdefined character set is not cleared when the printer is initialized by ESC @.

Choosing from a menu

Because the family of Epson printers shares many commands, you can use an application program even if it does not list the LQ-2550 on its **printer selection menu. If the LQ-2550** is not listed, select the first printer available on the following list:

LQ-2500
LQ-1050 **(LQ-850)**
LQ-1000 (LQ-800)
LQ-500
LQ-1500

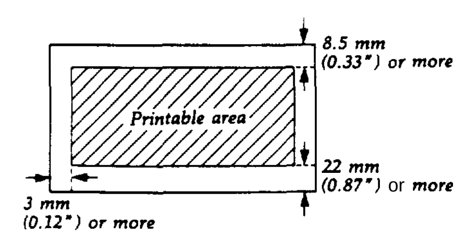
lf none of these printers is listed, select the first one available on the following list:

LQ
EX
FX
LX
RX
MX
Epson printer
Standard printer
Draft printer

If you are printing in color, it is recommended that you choose LQ-2550 or LQ-2500.

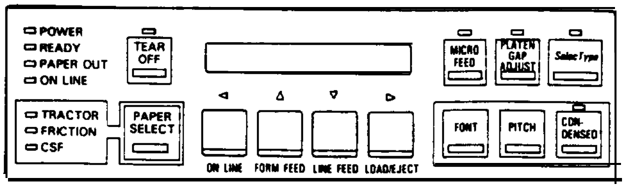
To use all the features of the LQ-2550, however, it is best to use a program with the LQ-2550 on its menu. If your program does not list this printer, contact the software manufacturer to see if an update is available. For further information on using software, see Chapter 4.

> WARNING: When you print on envelopes, be sure that your application program settings keep the printing entirely within the printable area shown below.



> Note: If the printed results are faint, use the PLATEN GAP ADJUST button to adjust the distance between the print head and the platen.

The Display



Roman 10 CPI

Some of the fonts do not offer all pitches. See the table below.

Draft	10, 13, 15
Roman	10, 12, 15, Proportional
Sans Serif	10, 12, 15, Proportional
Courier	10, 12, 15, Proportional
Prestige	10, 12, 15, Proportional
Script	10, 12, 15, Proportional
OCR-A	10, 12, Proportional
OCR-B	10, 12, Proportional

International character sets

country	ASCII code (hex)											
	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
U.S.A	#	$	@	[	\	]	^	`	{	¦	}	~
FRANCE	#	$	à	°	ç	§	^	`	é	ù	è	¨
GERMANY	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
U.K.	£	$	@	[	\	]	^	`	{	¦	}	~
DENMARK I	#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
SWEDEN	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
ITALY	#	$	@	°	\	é	^	ù	à	ò	è	ì
SPAIN I	₧	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
JAPAN	#	$	@	[	¥	]	^	`	{	¦	}	~
NORWAY	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
DENMARK II	#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
SPAIN II	#	$	á	¡	Ñ	¿	é	`	í	ñ	ó	ú
LATIN AMERICA	#	$	á	¡	Ñ	¿	é	ü	í	ñ	ó	ú
KOREA	#	$	@	[	₩	]	^	`	{	¦	}	~
LEGAL	#	$	§	°	'	"	¶	`	©	®	†	™

To select the desired international character set using SelecType, set the COUNTRY option by following the steps in the CHANGE MACRO section earlier in this chapter.

The format of the Master Select code is shown below:

ASCII:	ESC	!	*n*
Decimal:	27	33	*n*
Hexadecimal:	1B	21	*n*

The variable *n* is a number that identifies the mode or combination of modes. To find the value of *n*, use the following table to add up either the decimal or hexadecimal numbers for the features you want.

Feature	Dec.	Hex.
10 cpi	0	00
12 cpi	1	01
proportional	2	02
condensed	4	04
emphasized	8	08
double-strike	16	10
double-wide	32	20
italics	64	40
underline	128	80

Graphics

Individual graphics option commands

There are four individual graphics option commands that are very much the same as the ESC * command, but each one works for only one graphics option. All these commands are for 8-pin graphics options. Note that the commands contain one less variable than the ESC * command because they don't need to select a graphics option.

The commands are shown below:

Command	Function	ESC * Format
ESC K	Single-density	ESC * 0
ESC L	Double-density	ESC * 1
ESC Y	Double-density, high-speed	ESC * 2
ESC Z	Quadruple-density	ESC * 3

Option	Pins	*m*	Horiz. density dots/in.
Single-density	8	0	60
Double-density	8	1	120
High-speed double-density*	8	2	120
Quadruple-density*	8	3	240
CRT I	8	4	80
CRT II	8	6	90
Single-density	24	32	60
Double-density	24	33	120
CRT III	24	38	90
Triple-density	24	39	180
Hex-density*	24	40	360

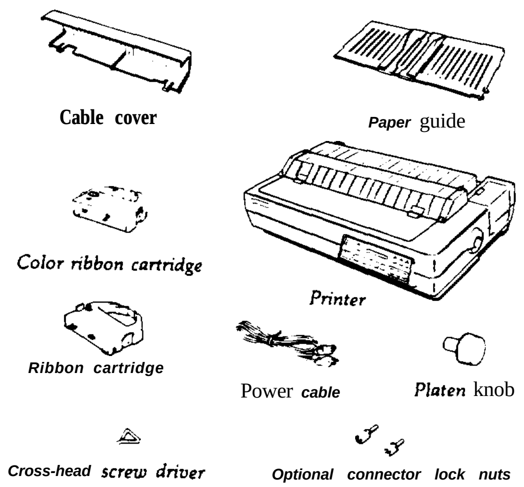
* Adjacent dots cannot be printed in this mode

Commands in Numerical Order

The following list shows control codes and ESC sequences (with their decimal and hexadecimal values), and the page number where the complete command description can be found.

ASCII	Dec.	Hex	Description	Page
BEL	7	07	Beeper	8-12
BS	8	08	Backspace	8-19
HT	9	09	Tab horizontally	8-20
LF	10	OA	Line feed	8-14
VT	11	0B	Tab vertically	8-17
FF	12	0C	Formfeed	a13
CR	13	OD	Carriage return	8-12
SO	14	OE	Select doublewide mode (1 line)	8-25
SI	15	OF	Select condensed mode	824
DC1	17	11	Select printer	8-8
DC2	18	12	Cancelcondensedmode..	8-25
DC3	19	13	Deselect printer	8-9
DC4	20	14	Cancel double-wide mode (1 line)	8-26
CAN	24	18	Cancel line	8-12
DEL	127	7F	Delete character	8-9
ESC so	14	OE	Select double-wide mode (1 line)	8-25
ESC SI	15	OF	Select condensed mode	8-24
ESCEM	25	19	Cut sheet feeder mode	8-10
Esc SP	32	20	Set intercharacter space	8-30
ESC !	33	21	Master Select	g-22
ESC #	3.5	23	Cancel MSB control	8-11
ESC $	36	24	Set absolute print position	8-19
Esc %	37	25	Select user-defined set	8-33
ESC &	38	26	Define user-defined characters	832
ESC'	42	2A	Select graphics mode	8-35
Esc+	43	2B	Select n/360-inch line spacing	8-16
ESC -	45	2D	Turn underlining on/off	8-29
ESC /	47	2F	Select vertical tab channel	8-18
Esco	48	30	Select 1/8-inch line spacing	8-15
ESC 2	50	32	Select 1/6-inch line spacing	8-15
ESC 3	51	33	Select n/180-inch line spacing	8-15
ESc4	52	34	Select italic mode	831
ESC 5	53	35	Cancel italic mode	8-32
ESC 6	54	36	Enable printable characters	8-33
ESC7	55	37	Enable upper control codes	8-34
ESC :	58	3A	Copy ROM to RAM	833
Esc <	60	3c	Unidirectional mode (1 line)	8-9
ESC =	61	3D	Set MSB to 0	E-11
Esc >	62	3E	Set MSB to 1	8-11
ESC ?	63	3F	Reassign graphics mode	8-36
ESC @	64	40	Initialize printer	8-8
ESCA	65	41	Select n/60-inch line spacing	8-16
ESCB	66	42	Set vertical tabs	8-17
Escc	67	43	Set page length in lines	8-13
ESC C 0	67	43	Set page length in inches	8-13
ESCD	68	44	Set horizontal tabs	8-21
ESC E	69	45	Select emphasized mode	8-27
ESC F	70	46	Cancel emphasized mode	8-27
ESC G	n	47	Select double-strike mode	8-28
ESC H	72	48	Cancel double-strike mode	8-28
ESC J	74	4A	Perform n/180-inch line feed	8-16
ESCK	75	4B	Select single-density graphics	8-34
ESC L	76	4C	Select double-density graphics	8-34
ESCM	77	4D	Select 12 cpi	E-23
ESC N	78	4E	Set skip over perforation	8-14
Esco	79	4F	Cancel skip over perforation	8-14
ESC P	80.	50	Select 10 cpi	a23
ESC Q	81	51	Set right margin	8-18
ESCR	82	52	International character set	832
ESC SO	83	53	Select superscript mode	8-28
ESC S1	83	53	Select subscript mode	828
ESCT	84	54	Cancel superscript/subscript	8-29

ASCII	Dec.	H a	Description	Page
ESC U	85	55	Unidirectional mode on/off	8-10
ESC W	87	57	Turn double-wide mode on/off	8-25
ESC Y	89	59	High-speed dble-density graphics	8-35
ESCZ	90	5A	Quadruple-density graphics	a35
ESC \	92	5C	Set relative print position	8-20
ESC a	97	61	Select justification	8-30
ESC b	98	62	Set vertical tabs in channels	8-17
ESC g	103	67	Select 15 cpi	a23
ESC k	107	6B	Select typestyle family	8-22
ESC l	108	6C	set left margin	8-18
ESC p	112	m	Turn proportional mode on/off	8-24
ESC q	113	n	Select character style	8-29
ESC r	114	72	Select printing color	a27
ESC t	116	74	Select character table	8-31
ESC w	119	77	Turn double-high mode on/off	8-26
Escx	120	78	Select Letter Quality or draft	8-21
ESC (-	40	28	Select Line	8-29



Printer Specifications

Printing

Print method: 24-pin impact dot matrix

Print speed: See table below.

Quality	CPI	Characters/second/line
Draft	10	333
	12	400
LO	10	111
	12	133

Printing direction: Bidirectional logic-seeking for text and graphics. Unidirectional available through SelecType or software command.

Line spacing: 1/6", 1/8", or programmable in increments of 1/60th, 1/180th or 1/360th of an inch

Paper feed speed: 83 ms/line at 1/6" line spacing

Printable columns: See table below.

Character size	Maximum printed characters
10 cpi	136
10 cpi condensed	233
12 cpi	163
12 cpi condensed	272

Buffer: 8 Kbyte

Character fonts:

Font	Available Sizes (characters per inch)
Epson Draft	to.12 15
Epson Roman	10.12.15. Proportional
Epson Sans Serif	10 12.15. Proportional
Epson Courier	10.12.15. Proportional
Epson Prestige	10 12.15. Proportional
Epson Script	10 12.15. Proportional
Epson OCR-A	10.12. Proportional
Epson OCR-B	10.12. Proportional

Characters: 96 standard ASCII character set (including italic characters)
13 international character sets
Epson Extended Graphics characters

Paper feed methods:
Friction
Built-in push feed tractor
Pull tractor (optional)
Double-bin cut sheet feeder (optional)

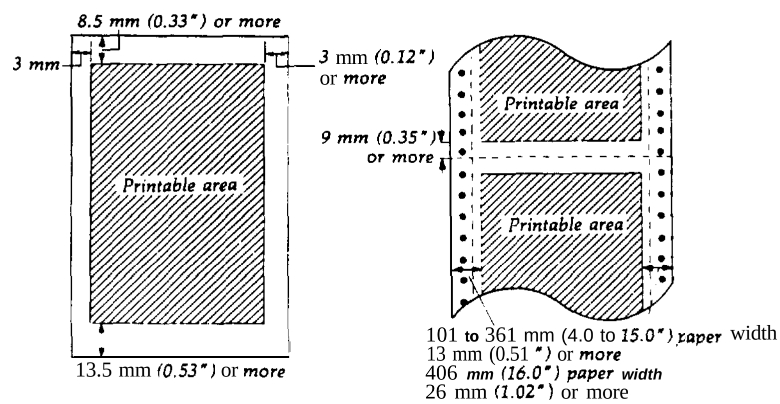
Paper width:
Single sheets
7.15 to 14.3 inches (182 to 364 mm)
Continuous
4.0 to 16.0 inches (101 to 406 mm)
Envelope
No. 6 (166 x 92 mm),
No. 10 (240 x 104 mm)
Label
2-1/2 X 15/16 inches,
4 X 15/16 inches,
4 X 1-7/16 inches,

Paper length:
Single sheets
3.7 to 14.3 inches (94 to 364 mm)

Paper thickness:
Single sheets
0.0026 to 0.004 inches (0.065 to 0.1 mm)
Continuous
0.0023 to 0.018 inches (0.06 to 0.46 mm)
Envelope
0.0063 to 0.0197 inches (0.16 to 0.52 mm)
Label
0.0075 inches (maximum 0.19 mm)

Printable area:

Single sheet — Continuous paper



'For printable area for envelopes, see page A-S.

Number of copies: Continuous, multi-part, no carbon: one original plus up to five copies. Total thickness must not exceed 0.018' (0.46 mm)

Ribbon:

Black **ribbon cartridge #7762:**
Life expectancy (in Letter Quality **characters,** at 48 dots/character): 3 million

Color ribbon cartridge #7763:
Life expectancy (in Letter Quality **characters,** at 48 dots/character)

Black:	1.0 million
cyan:	0.7 million
Magenta:	0.7 million
Yellow	0.5 million

Film ribbon cartridge #7764:
Life expectancy (at 10 cpi. with bi-directional printing, using 136 columns): 0.1 million'

• This number may vary depending on print direction, characters per inch, or text density per page.

MCBF:	For all components excluding mint head: 5 million lines
MTBF:	6000 power-on hours (at 25% duty)
Print head life:	200 million strokes per wire
Dimensions and **weight:**	Height: 7.7' Width: 26.6' Depth: 20.4' Weight: **approx. 44 lbs**
Voltage:	120 VAC ± 10%
Power consumption:	400 watts maximum
Frequency:	49.5 to 60.5 Hz
Insulation resistance:	10M ohms **between** AC power line and chassis
Dielectric strength (between AC line **and chassis):**	Can withstand 1.25 kV rms applied for one minute
Temperature:	Operation: 40°F to 95°F (5°C to 35°C) Storage: −22°F to 140°F (−30°C to 60°C)
Humidity:	**Operation:** 10% to 80% (without condensation) Storage: 5% to 85% (without condensation)
Shock:	**Operation: Up to** 1 G within 1 ms Storage: Up to 2 G within 1 ms
Vibration:	Operation: Up to 0.25 G at up to 55 Hz Storage: Up to 0.50 G at up to 55 Hz

Reliability

MCBF (Mean Cycle Between **Failure): 100,000 cycles**

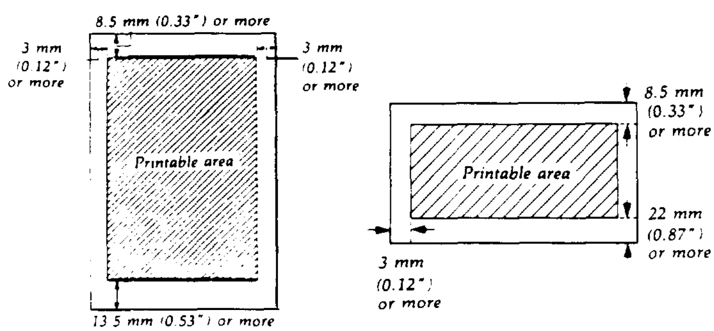
Environmental condition4

Temperature:	Operation:	+41°F (+5°C) to +95°F (+35°C)
	Storage:	-22°F (-30°C) to +158°F (+70°C)
Humidity:	Operation:	15% to 80% without condensation
	Storage:	5% to 90% without condensation

Paper

	Single sheet binlandbin2	**envelope** bin 1
Width	7.17' to 14.3' (182mm to 364mm)	6.50' to 9.49' (166mm to 241mm)
Length	0.27' to 14.3' (210mm to 364mm)	3.62' to 4.09' (92mm to 104mm)
Thickness	0.0028' to 0.0039' (0.07mm to 0.1mm)	0.0063 to 0.0205" (0.16mm to 0.52mm)
Weight:	17 to 22 lb. paper	12 to 24 lb. paper

Printable area:



The Cut Sheet Feeder

Dimensions and weight: 26.7"(W) X 22.9"(D) x 16.5"(H) (mounted on the printer) approx. 13.2 lbs.

Bin capacity:

bin 1

Single sheets: Up to 150 sheets of 22 lb. paper
Up to 185 sheets of 17 lb. paper
(Total thickness should not exceed 0.59' or 15mm)

Envelopes': Up to 25 (plain and bond type)
Up to 30 (air mail)

bin2

Single sheets: Up to 150 sheets of 22 lb. paper
Up to 185 sheets of 17 lb. paper
(Total thickness should not exceed 0.59' or 15mm)

- Envelopes can only be used in bin 1.

Stacker capacity:

Face down	Single sheets:	Up to 60 sheets of 22 lb. paper up to 75 sheets of 17 lb. paper
	Envelopes:	Up to 10 (plain and bond type) Up to 12 (air mail)
Face up	Single sheets:	up to 150 sheets of 22 lb. paper Up to 185 sheets of 17 lb. paper
	Envelopes:	Up to 25 (plain and bond type) Up to 30 (air mail)

Software

The following is a typical example of a software setup required for proper operation of your cut sheet feeder. Not all software is set up the same, so you may find that a bit of experimentation is required before you find the best equivalent settings to use.

To maintain 54 printed lines per **page** make the following changes:

	Continuous form settings	Cut sheet feeder settings
Page Length	66	61
Top Margin	b	4
Bottom Margin	6	3

Interface Specifications

Your printer is equipped with both a parallel and a serial interface. For specifications for optional interfaces, see the manuals provided with the optional interfaces.

Parallel interface

The following tables describe the parallel interface.

Pm assignments for the parallel interface

Connector pin assignments and a description of their respective interface signals are shown in the following table.

Signal Pin	Return Pin	Signal	Direction	Description
1	19	STROBE	IN	STROBE pulse to read data in Pulse width must be more than 0.5 microseconds at the receiving terminal.
2	20	DATA 1	IN	These signals represent information of the 1st lo 8th bits of parallel data, respectively. Each signal is at HIGH level when data is logical 1 and LOW when it is logical 0.
3	21	DATA 2	IN	
4	22	DATA 3	IN	
5	23	DATA 4	IN	
6	24	DATA 5	IN	
7	25	DATA 6	IN	
8	26	DATA 7	IN	
9	27	DATA 8	IN	
10	2 8	ACKNLG	OUT	About a 11 -microsecond pulse. LOW indicates that data has been received and that the printer is ready lo accept more data.
11	29	BUSY	OUT	A HIGH signal indicates that the printer cannot receive data. The signal goes HIGH in the following cases' 1) During data entry (ea. char: time) 2) During printing 3) When off line 4) During printer-error state.

- All interface conditions are based on TTL level. Both the rise and the fall times of each signal must be less than 0.2 microseconds.
- Data transfer must be carried out by observing the ACKNLG or BUSY signal. Data transfer to this printer can be carried out only after receipt of the ACKNLG signal or when the level of the BUSY signal is LOW.

Printing enabled/disabled signals and control conditions

The following table shows the relationship between printing being enabled or disabled, the on line/off line status, and the receipt of the data on/off control characters, DC1 or DC3.

ON LINE (Indicator on)	SLCT IN	DC1/DC3 (Data on/off control)	ERROR	BUSY	ACKNLG	Printing (Disabled/ enabled)
on line	Low (J9/ interface)	DC1/DC3 (no effect)	High	High/Low	Pulsed ea. char.	Enabled (normal cond.)
on line	High	DC1 Recv'd	High	High/Low	Pulsed ea. char.	Enabled
on line	High	DC3 Recv'd	High	High/Low	Pulsed ea. char.	Disabled*
off line	High/Low (no effect)	DC1/DC3 (no effect)	Low	High	Not generated	Disabled

'While printing is disabled, character data is being received and acknowledged so that the printer can look for another DC1 character, which would allow it to resume printing.

Compatible interfaces

The following is a list of Epson interfaces that are compatible with your LQ printer.

Interface number	Name
X8143	New serial interface
X8148	Intelligent serial interface
#8165	Intelligent IEEE.488 Interface

Default Settings

The following table shows the default conditions that become valid when the printer is initialized.

Item	Reset to:
Top of form position	Current paper position
Left and right margins	SelecType setting
line spacing	1/6-inch line spacing
Vertical tab positions	Cleared
Horizontal tab positions	Every eight characters
VFU channel	Channel 0
Font selection	Reset to the current SelecType setting
Userdefined characters	Hardware: Cleared Software: Deselected only

In addition, the data buffer is cleared when the printer is initialized by **turning on the power or by sending an INIT signal.**

Note: The userdefined character set is not cleared when the printer is initialized by ESC @. I

Choosing from a merm

Because the family of Epson printers shares many commands. you can use an application program even if it does not list the LQ-2550 on its printer selection menu. If the LQ-2550 is not listed, select the first printer available on the following list:

LQ-2500
LQ-1050 (LQ-850)
LQ-1000 (LQ-800)
LQ-500
LQ-1500

If none of these printers is listed, select the first one available on the following list:

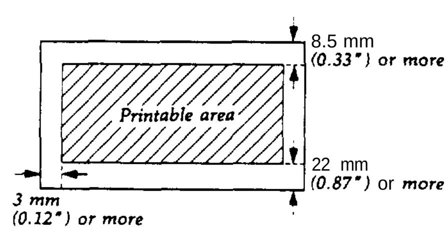
LQ

EX
FX
LX
RX
MX
Epson printer
Standard printer
Draft printer

If you are printing in color, it is recommended that you choose LQ-2550 or LQ-2500.

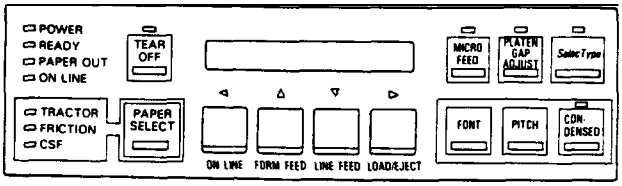
To use all the features of the LQ-2550, however, it is best to use a program with the LQ-2550 on its menu. If your program does not list this printer. contact the software manufacturer to see if an update is available. For further information on using software, see Chapter 4.

WARNING When you print on envelopes, be sure that your application program settings keep the printing entirely within the printable area shown below.



Note: If the printed results are faint. use the PLATEN GAP ADJUST button to adjust the distance between the print head and the platen.

The Display



Roman 10 CPI

Some of the fonts do not offer all pitches. See the table below.

Draft	10. 12. 15
Roman	10. 12. 15. Proportional
Sans Serif	10. 12. 15. Proportional
Courier	10. 12. 15. Proportional
Prestige	10. 12. 15. Proportional
Script	10. 12. 15. Proportional
OCR-A	10. 12. Proportional
OCR-0	10. 12. Proportional

International character sets

country	ASCII coda (hex)											
	23	24	40	5B	5C	5D	5E	60	70	7C	7D	7E
0 U.S.A.	#	$	@	[	\	]	^	`	{	¦	}	~
1 France	#	$	à	°	ç	§	^	`	é	ù	è	¨
2 Germany	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
3 U.K.	£	$	@	[	\	]	^	`	{	¦	}	~
4 Denmark I	#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
5 Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
6 Italy	#	$	@	°	\	é	^	ù	à	ò	è	ì
7 Spam I	₧	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
8 Japan	#	$	@	[	¥	]	^	`	{	¦	}	~
9 Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
10 Denmark II	#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
11 Spain II	#	$	á	¡	Ñ	¿	é	`	í	ñ	ó	ú
12 Latin America	#	$	á	¡	Ñ	¿	é	ü	í	ñ	ó	ú

To select the desired international character set using SelecType, set the **COUNTRY** option by following the steps in the CHANGE MACRO section earlier in this chapter.

The format of the Master Select code is shown below:

ASCII:	ESC	!	n
Decimal:	27	33	n
Hexadecimal:	IB	21	n

The variable *n* is a number that identifies the mode or combination of modes. To find the value of *n*, use the following table to add up either the decimal or hexadecimal numbers for the features you want.

Feature	Dec.	Hex.
10 cpi	0	00
12 cpi	1	01
proportional	2	3 2
condensed	4	04
emphasized	8	08
double-strike	16	10
double-wide	32	20
italics	64	40
underline	128	80

Graphics

Individual graphics option commands

There are four individual graphics option commands that are very much the same as the ESC • command, but each one works for only one graphics option. All these commands are for 8-pin graphics options. Note that the commands contain one less variable than the ESC • command because they don't need to select a graphics option.

The commands are shown below:

Command	Function	ESC * Format
ESC K	Single-density	ESC * 0
ESC L	Double-density	ESC * 1
ESC Y	Double-density, high-speed	ESC * 2
ESC Z	Quadruple-density	ESC * 3

Option	Pins	*m*	Horiz. density dots/in.
Single-density	8	0	60
Double-density	8	1	120
High-speed double-density*	8	2	120
Quadruple-density*	8	3	240
CRT I	8	4	80
CRT II	8	6	90
Single-density	24	32	60
Double-density	24	33	120
CRT III	24	38	90
Triple-density	24	39	180
Hex-density*	24	40	360

* Adjacent dots cannot be printed in this mode

Commands in Numerical Order

The following list shows control codes and ESC sequences (with their decimal and **hexadecimal** values), and the page number where the complete command description can be found.

ASCII	Dec.	Hex	Description	Page
BEL	7	07	Beeper	8-12
BS	8	08	Backspace	8-19
HT	9	09	Tab horizontally	8-20
LF	10	0A	Line feed	8-14
VT	11	0B	Tab vertically	8-17
FF	12	0C	Formfeed	8-13
CR	13	0D	Carriage return	8-12
s o	14	0E	Select double-wide mode (1 line)	8-25
SI	15	0F	Select condensed mode	8-24
DC1	17	11	Select printer	8-8
DC2	18	12	Cancel condensed mode	8-25
DC3	19	13	Deselect printer	8-9
DC4	20	14	Cancel double-wide mode (1 line)	8-26
CAN	24	18	Cancel line	8-12
DEL	127	7 F	Delete character	8-9
Esc so	14	OE	Select double-wide mode (1 line)	8-25
ESC SI	15	OF	Select condensed mode	8-24
ESCEM	2.5	19	Cut sheet feeder mode	8-10
Esc SP	32	20	Set intercharacter space	8-30
ESC !	33	21	Master Select	a22
ESC #	3.5	23	Cancel MSB control	8-11
ESC $	36	24	Set absolute print position	8-19
ESC %	37	25	Select user-defined set	a33
ESC &	38	26	Define user-defined characters	8-32
ESC'	42	2A	Select graphics mode	8-35
ESC +	43	2B	Select n/Winch line spacing	8-16
ESC -	45	2D	Turn underlining on/off	8-29
ESC /	47	2F	Select vertical tab channel	8-18
Esco	4 8	3 0	Select 1/8-inch line spacing	8-15
ESCZ	50	32	Select 1/6-inch line spacing	8-15
ESC 3	51	33	Select n/180-inch line spacing	8-15
Esc4	52	34	Select italic mode	8-31
ESCS	53	3.5	Cancel italic mode	a32
ESC 6	5 4	3 6	Enable printable characters	8-33
ESC 7	55	37	Enable upper control codes	834
ESC :	58	3A	Copy ROM to RAM	8-33
ESC <	60	3c	Unidirectional mode (1 lime)	a9
ESC =	61	3D	Set MSB to 0	8-11
ESC >	62	3E	Set MSB to 1	8-11
ESC ?	63	3F	Reassign graphics mode	8-36
ESC @	6 4	4 0	Initialize printer	8-8
ESC A	65	41	Select n/60-inch line spacing	8-16
ESC B	6 6	4 2	Set vertical tabs	8-17
ESC C	67	43	Set page length in lines	8-13
ESC C0	67	43	Set page length in inches	8-13
ESC D	6 8	4 4	Set horizontal tabs	821
ESC E	69	4s	Select emphasized mode	8-27
ESC F	70	46	Cancel emphasized mode	a27
ESC G	71	47	Select double-strike mode	8-28
ESC H	72	48	Cancel double-strike mode	8-28
ESC J	74	4A	Perform n/W-inch line feed	8-16
ESC K	75	4B	Select single-density graphics	8-34
ESC L	76	4C	Select double-density graphics	834
ESC M	77	4 D	Select 12 cpi	a23
ESC N	78	4E	Set skip over perforation	8-14
ESC O	79	4F	Cancel skip over perforation	8-14
ESC P	80	50	Select 10 cpi	a23
ESC Q	81	51	Set right margin	8-18
ESC R	82	52	International character set	832
ESC SO	83	53	Select superscript mode	828
ESC S1	83	53	Select subscript mode	828
ESC T	84	54	Cancel superscript/subscript	8-29
ESC U	85	55	Unidirectional mode on/off	8-10
ESC W	87	57	Turn double-wide mode on/off	8-25
ESC Y	8 9	5 9	High-speed dble-density graphics	a35
ESC Z	90	5A	Quadruple-density graphics	a35
ESC \	92	5C	Set relative print position	a20
ESC a	97	61	Select justification	a30
ESC b	98	62	Set vertical tabs in channels	8-17
ESC g	103	67	Select 15 cpi	a23
ESC k	107	6B	Selecttypestylefamily	a22
ESC l	108	6C	Set left margin	8-18
ESC p	112	7 0	Tim proportional mode on/off	a24
ESC q	113	71	Select character style	a29
ESC r	114	72	Select printing color	a27
ESC t	116	74	Select character table	8-31
ESC w	119	77	Turn double-high mode on/off	8-26
ESC X	120	7 8	Select Letter Quality or draft	a21