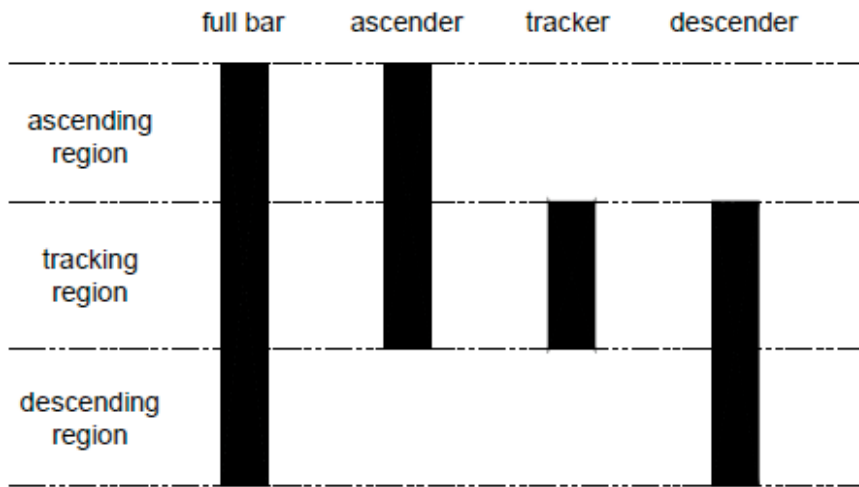




Barcode Specification

1 Intelligent Mail Barcode

The Intelligent Mail barcode is a height-modulated barcode that encodes up to 31-digits of mailpiece data into 65 vertical bars using 4-state symbology. These bars may be present in one of four possible states full bar, ascender, tracker and descender.



The Intelligent Mail barcode consists of a 20-digit Tracking Code (Barcode ID, Service Type ID, Mailer Identifier (MID), and Serial Number) and up to 11-digit Routing Code (Destination ZIP Code). Depending on mail volume and services selected, the Intelligent Mail barcode construct will change as seen in the figures below.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Barcode ID [2N]		Service Type ID [3N]			Mailer ID [6N]						Serial Number [9N]							Routing ZIP Code [none, 5, 9, or 11N]												

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Barcode ID [2N]		Service Type ID [3N]			Mailer ID [9N]						Serial Number [6N]				Routing ZIP Code [none, 5, 9 or 11N]															



For example, a tracking code of **53379777234994544928** and a routing code of **51135759461** will be encoded into the following 65-character string:

DAFDTDAFFDFTDADTDDFTTFFDTATATFFFDFTTFFFTFDDTDAAFATDFTFDFTTTDTTFDA

When the string is printed with the Intelligent Mail barcode command <BS>, the below barcode (not actual image) will be produced:



For more details regarding the IMB, please refer to the RIBBS web site at <http://ribbs.usps.gov/onecodesolution/>.



2 ESC + BS Command Specification

Barcode			
Printer	S84xx		
USPS Barcode Specification		ESC+BS	
HEX Code	ESC	BS	Parameter
	<1B>16	<42>16<53>16	aabbccccccccddddde~e
Default Value	NIL		
Valid Range & Terms of Command	When Power is Switched Off	The set parameter is not maintained	
	Valid Range within Items	The set parameter becomes invalid	
	Valid Range between Items	The set parameter becomes invalid	

【Function】

To specify printing of USPS Intelligent Mail Barcode (IMB)

【Format】

<BS>aabbccccccccddddde~e

• Parameter

- a 「Barcode ID」 =
 - 2 digits specification
 - ※Second digit must be 0, 1, 2, 3 or 4
- b 「Service Type ID」 =
 - 3 digits specification
- c 「Mailer ID」 =
 - 9 digits specification (if Sequence Number consists of 6 digits)
 - 6 digits specification (if Sequence Number consists of 9 digits)
- d 「Sequence Number」 =
 - 6 digits specification (if Mailer ID consists of 9 digits)
 - 9 digits specification (if Mailer ID consists of 6 digits)
- e 「Routing Code」 =
 - 0 digits specification (if unused)
 - 5 digits specification
 - 9 digits specification
 - 11 digits specification

※Refer to IMB code table for valid parameters

【Coding Example】

Barcode Identifier : 53, Special Service Code : 379, Customer Identifier : 777234
 Sequence Number : 994544928, Routing Code : 51135759461

<A>
 <V>100<H>200<BS>5337977723499454492851135759461
 <Q>1
 <Z>



Intelligent Mail Barcode (IMB) Code Table

					S				I				S				O			
					0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
b8	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
b7	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1
b6	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
b5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
b4	b3	b2	b1		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	0	0	0				0												
0	0	0	1	1				1												
0	0	1	0	2				2												
0	0	1	1	3				3												
0	1	0	0	4				4												
0	1	0	1	5				5												
0	1	1	0	6				6												
0	1	1	1	7				7												
1	0	0	0	8				8												
1	0	0	1	9				9												
1	0	1	0	A																
1	0	1	1	B																
1	1	0	0	C																
1	1	0	1	D																
1	1	1	0	E																
1	1	1	1	F																