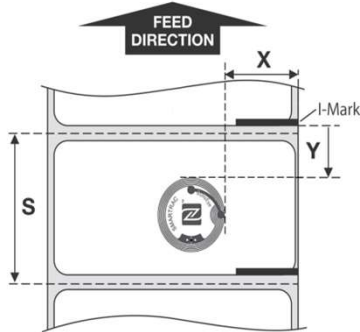


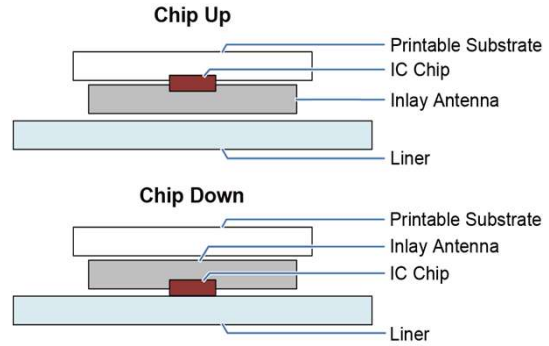
# CL4NX HF Inlay Configuration Guide

In order to successfully configure your CL4NX HF printer, you will need the following information about your label.

## Feed Direction



## Chip Orientation



X: Liner edge to inlay antenna edge.  
 Y: Optimum Encoding Position\*  
 S: Minimum Inlay Separation

\*Y: Measured from tail edge of I-mark to lead edge of inlay antenna when I-mark sensor is used.  
 Measured from lead edge of label to lead edge of inlay antenna when gap sensor is used.

## How to check the Configuration Table

Feed direction affects results, and is signified by the images in the following table.

**Feed Direction**  
 The arrow in the header of table indicates the direction in which labels are output from the printer.

Manufacturer	Inlay [IC Chip]	↑ Feed Direction ↑ Chip Orientation (Up/Down)	X	Label Measurements (mm)			
				Antenna Position			
				Blue	Yellow	Green	
ISO/IEC 15693							
Smartrac	Block [I CODE SLIX]	Up	4-23	Y	0-15	16-23	24-30
				S	85	115	125
Smartrac	BullsEye [I CODE SLIX]	Down	4-23	Y	10-20	21-26	27-30
				S	83	96	108
Smartrac	MiniBlock [I CODE SLIX]	Up	7-23	Y	23-28	29-32	33-36
				S	43	74	78
Smartrac	MiniTrack [I CODE SLIX]	Up	7-23	Y	13-22	23-28	29-33
				S	56	91	95

The values of "Y" and "S" will affect printer configuration with regard to Antenna Position.

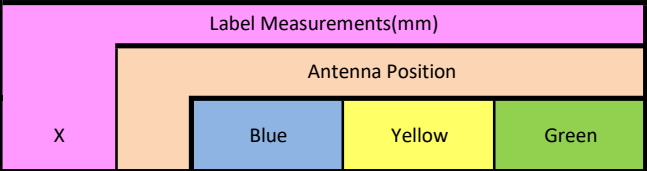
Antenna Positions determined by the values of "Y" and "S".

## CL4NX HF Inlay Placement & Configuration Table

This recommendation has been tested successfully at SATO. Results may vary in the actual customer installation due to overall system tolerances. Validation of functionality in the actual system is therefore recommended.

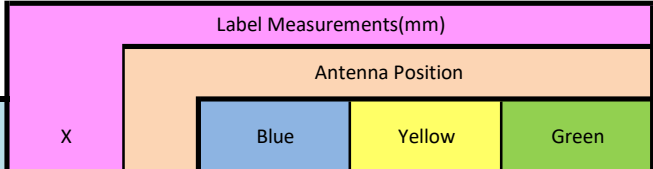
In no event shall SATO be liable for any faults arising out of use of or inability to use the product.

Feed Direction  
The arrow in the header of table indicates the direction in which labels are output from the printer.



Manufacturer	Inlay [IC Chip]	Feed Direction Chip Orientation(Up/Down)	X	Label Measurements(mm)			
				Blue	Yellow	Green	
<b>ISO/IEC 15693</b>							
Smartrac	Block [I CODE SLIX]	UP	4-23	Y S	0-15 85	16-23 115	24-30 125
	BullsEye [I CODE SLIX]	Down	4-23	Y S	10-20 83	21-26 96	27-30 108
	MiniBlock [I CODE SLIX]	UP	7-23	Y S	23-28 43	29-32 74	33-36 78
	MiniTrack [I CODE SLIX]	UP	7-23	Y S	13-22 56	23-28 91	29-33 95
	Racetrack [I CODE SLIX]	UP	4-18	Y S	0-10 103	11-20 118	21-28 127
Avery Dennison	AD-730x [I CODE SLIX]	UP	4-13	Y S	22-27 50	43-50 85	51-73 90
	AD-714x [I CODE SLIX]	Down	4-13	Y S	0-11 120	12-29 155	45-73 160
	AD-709x [I CODE SLIX]	Down	4-13	Y S	0-11 80	12-26 125	44-69 130
Arizon	AZ-G [I CODE SLI]	UP	4-13	Y S	17-23 45	24-29 75	46-63 80
	AZ-T [I CODE SLI]	Down	7-18	Y S	5-9 76	10-14 106	15-19 108
NHK Spring Co., Ltd.	Label-type Stackable Tag [I CODE SLI]	UP	5-8	Y S	- -	- -	23-27 103
SAG	22.5 × 38mm Plus [Tag-it HF-I Plus]	Down	7-18	Y S	20-23 51	24-27 83	28-31 87
	22.5 × 38mm SLIX [I CODE SLIX]	UP	7-23	Y S	20-24 61	25-29 85	20-24 135
	31 × 14mm SLIX [I CODE SLIX]	UP	7-23	Y S	16-20 59	21-25 74	26-30 75
	15 × 15mm SLIX [I CODE SLIX]	UP	7-23	Y S	24-27 58	28-31 73	32-35 78
	10.5 × 10.5mm SLIX [I CODE SLIX]	UP	12-23	Y S	26-29 31	30-33 58	34-37 63
	45 × 45mm SLIX [I CODE SLIX]	UP	7-23	Y S	11-15 86	16-20 126	21-25 123
Hitachi High-Tech Materials	Square Plus [Tag-it HF-I Plus]	Down	7-18	Y S	5-9 88	10-14 106	15-19 111
	Rectangle Plus [Tag-it HF-I Plus]	Down	7-23	Y S	10-14 112	15-19 132	20-24 135
<b>ISO/IEC 14443 Type A</b>							
Smartrac	BullsEye NFC [NTAG 203]	UP	12-23	Y S	10-19 47	20-24 68	25-29 68
	BullsEye NFC [NTAG 213]	UP	4-23	Y S	10-20 50	21-26 58	27-30 78
	BullsEye NFC [NTAG 216]	UP	4-23	Y S	10-17 52	18-24 70	25-30 72
	BullsEye NFC [MIFARE Ultralight(17pf)]	UP	4-13	Y S	8-15 50	16-23 55	46-48 81
	Circus NFC [NTAG 203]	UP	7-23	Y S	19-26 42	19-26 43	27-32 58
	Circus NFC [NTAG 213]	UP	7-23	Y S	23-26 43	27-30 56	31-34 59
	Midas NFC [NTAG 203]	UP	12-23	Y S	23-26 40	27-30 44	31-33 48
	Midas NFC [NTAG 213]	UP	12-23	Y S	22-26 39	27-30 44	31-34 48
	MiniTrack NFC [NTAG 203]	UP	12-23	Y S	12-20 43	21-27 52	28-32 59

Feed Direction  
The arrow in the header of table indicates the direction in which labels are output from the printer.



Manufacturer	Inlay [IC Chip]	Feed Direction Chip Orientation(Up/Down)	X	Label Measurements(mm)			
				Antenna Position			Green
ISO/IEC 14443 Type A							
				Y	Blue	Yellow	Green
Smartrac	MiniTrack NFC [MIFARE Ultralight(50pf)]	UP	7-13	Y	-	20-24	25-30
				S	-	51	56
	RaceTrack NFC [NTAG 203]	UP	4-13	Y	0-15	16-24	25-30
				S	97	101	113
BOINGTECH	0352 [NTAG 213]	Down	7-23	Y	13-17	18-22	23-27
				S	97	115	117
	0418 [NTAG 210]	UP	7-23	Y	21-25	26-30	31-35
				S	33	52	57
	0435 [NTAG 213]	UP	7-23	Y	10-14	15-19	20-24
S				50	56	59	
0435A [NTAG 213]	UP	7-23	Y	10-14	15-19	20-24	
			S	49	55	59	
	0458 [NTAG 213]	UP	12-23	Y	21-25	26-30	31-35
				S	22	23	34
SAG	46x77-UL [MIFARE Ultralight]	UP	4-8	Y	0-12	13-20	21-26
				S	59	83	95
	38x27-UL [MIFARE Ultralight]	UP	4-18	Y	19-23	24-27	28-31
			S	42	47	51	
	22.5 x 38mm [MIFARE Ultralight EV1]	UP	4-13	Y	16-22	23-29	47-56
				S	45	70	75
Arizon	AZ-U-UL [MIFARE Ultralight]	UP	7-13	Y	0-10	11-15	16-27
				S	89	110	113
	AZ-G-UL [MIFARE Ultralight]	UP	4-23	Y	-	19-26	27-31
S				-	47	50	
AZ-T-UL [MIFARE Ultralight]	UP	7-13	Y	13-19	20-25	26-29	
			S	58	68	71	
Confidex	Links [NTAG 213]	UP	5-18	Y	22-25	26-29	30-33
				S	38	57	62
	Links L [NTAG 203]	UP	7-18	Y	13-16	17-20	21-24
S				48	70	68	
Links L [NTAG 213]	UP	7-18	Y	17-20	21-24	25-28	
			S	54	57	59	
Avery Dennison	AD-721 [NTAG 213]	UP	7-18	Y	20-24	25-29	30-34
				S	37	45	47
	AD-740 [MIFARE Ultralight EV1]	Down	7-18	Y	20-23	24-27	28-31
S				40	59	64	
takling' things	40mm Square [NTAG 213]	Down	7-18	Y	6-9	10-13	14-18
				S	59	83	87
	24mm Round [NTAG 213]	Down	7-18	Y	21-24	25-28	29-32
S				33	53	58	
thinfilm	R20mm NC-1401-W11-SDx [NTAG 213]	UP	7-23	Y	21-25	26-30	31-35
				S	34	42	44
	R20mm NC-1401-W11-SDx [NTAG 213]	UP	7-23	Y	21-25	26-30	31-35
S				34	41	44	
Identiv	NTAG215 38x28mm [NTAG 215]	UP	4-13	Y	5-18	19-25	46-51
				S	55	65	84
Junmp	T160324 25x75mm [NTAG 215]	Down	7-18	Y	16-20	21-25	26-30
				S	52	62	65
ShangYang	φ20mm-NTAG213 [INTAG 213]	UP	7-12	Y	19-22	19-22	22-25
				S	35	40	42

For inlays not included on this list, and orientation of chips, etc., please contact your local SATO dealer or sales office.  
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