



# **KC-3200ZB**

---

**Wireless Linear Imager Scanner**

## **Configuration Guide**

# Table of Contents

## Chapter 1 System Information

1.1 About this manual	3
1.2 How to set up the parameter	4

## Chapter 2 System Setup

2.1 How to set up output characters	5
2.2 String Options (Prefix & Suffix)	6
2.3 Setup Insertion	7

## Chapter 3 BarCode parameters setting

3.1 UPC-A	11
3.2 UPC-E	14
3.3 EAN-13	17
3.4 EAN-8	19
3.5 Code39	21
3.6 Codabar	24
3.7 Code93	28
3.8 Code128	30
3.9 Interleaved2 of 5	33
3.10 Industrial 2 of 5	35
3.11 Matrix 2 of 5	37
3.12 China Postage	39
3.13 MSI/Plessey	41
3.14 Code 32	43
3.15 Code 11	45
3.16 Telepen	47
3.17 GS1 Data Bar (RSS)	49
3.18 Function Key Emulation & Function Code	50
Appendix	52

# Chapter 1 - System Information

## 1.1 About this manual

This User's Guide provides detailed programming instructions. Barcode scanners are factory programmed for the most common communication setting. If you need to change these settings, programming is accomplished by scanning the bar codes in this guide.

### 1.2 How to set up the parameter -I

- (1) Scan Start Configuration
- (2) Scan all necessary labels for parameters that meet your applications.
- (3) Scan End Configuration to end the programming.



Start configuration



End configuration



Wireless Defaults Setting



Check Version

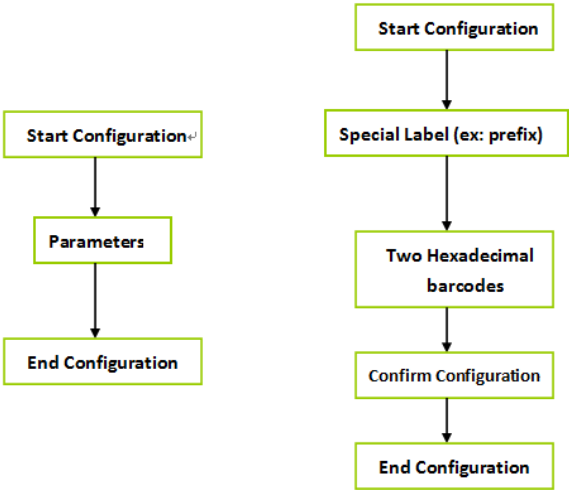
An asterisk (\*) next to an option indicate the default setting.

## 1.2 How to set up the parameter - II

Most of time the scanner only requests one read of parameters when changing to new values. You will hear two beeps when you successfully set to the new values. But for some special parameters, multiple reads are needed to complete the configuration. When use these special parameters. In some cases, you might need to read one or more barcodes, such as:








- ◆ Hexadecimal barcodes. For example: prefix, suffix, etc.
- ◆ Numeric barcodes. For example: inter-character delay, max/min length

To complete the change of setting you will need to read the “Confirm” barcode after you read the parameter. Below is the flow chart to explain two different configurations.





2.1    How to set up output characters

	
Start configuration	End configuration
ITEM	OPTION
Output Characters	
	None
	
	*CR+LF
	
	CR
	
	LF
	
	Tab

## 2.2 String Options (Prefix & Suffix)

This section describes the alterations which can be made to the format of the transmitted data string. A prefix and suffix of maximum 10 direct input may be included in front and at the end of scanned barcode.

### Format

{Prefix} {Code ID} {Bar Code} {Suffix}

### How to set up a prefix?

To configure “##” as prefix

- (1) Scan Start Configuration barcode
- (2) Scan Preamble bar code
- (3) Scan “#” twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End Configuration barcode.

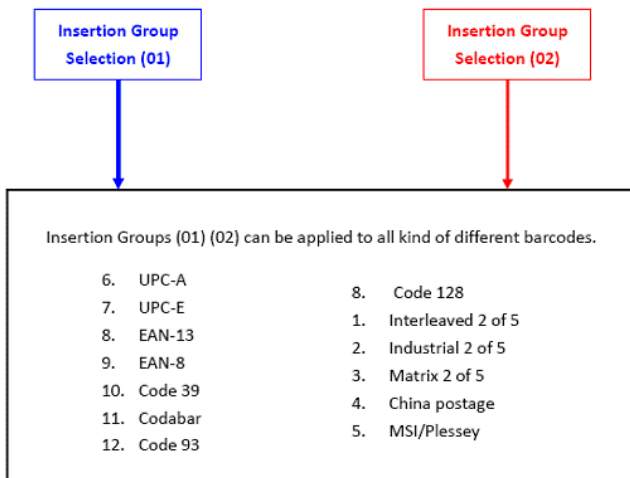
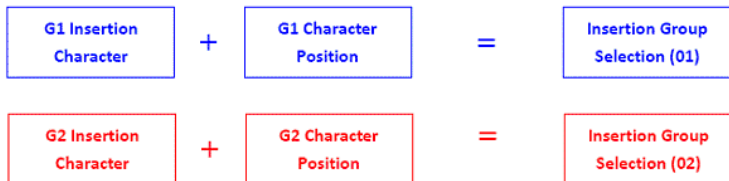
### How to set up a suffix?

To configure “\$\$” as suffix

- (1) Start configuration barcode
- (2) Scan Postamble barcode
- (3) Scan “\$” twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode.

## 2.3 Setup Insertion

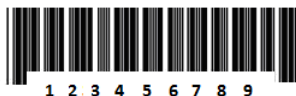
This section describes how to setup the insertion of output.



NOTE :

- ◆ Max. 10 charters can be inserted each time
- ◆ Max. Insertion group is only two.
- ◆ Insertion group (01) or (02) can be used in different kinds of barcodes at the same time

### Example:



:

To insert character “A” before the third digit(3)

Make the decoded data: 12A3456789

### How to set up a character you want to insert

- (1) Scan Start Configuration barcode
- (2) Scan “G1 Insertion character”
- (3) Scan “4” and “1” from FULL ASCII Table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode

### How to set up position you wish to place the character

- (6) Scan Start Configuration barcode
- (7) Scan “G1 Character Position”
- (8) Scan “0” and “3” from FULL ASCII Table (which presents the position)
- (9) Scan Confirm configuration barcode
- (10) Scan End configuration barcode

### How to set up insertion for code 39

Go to chapter 3.5 (code 39)

- (11) Scan Start Configuration barcode
- (12) Scan “Insert group selection” bar code
- (13) scan “0” and “1” from FULL ASCII Table  
(which presents the group- 01 you just set up previously)
- (14) Scan Confirm configuration bar code
- (15) Scan End configuration barcode









Start configuration



End configuration



Confirm configuration

ITEM	OPTION
Preamble (Default : 00)	 Ref: Appendix
Postamble (Default : 00)	 Ref: Appendix
G1 Insertion character (Default : 00)	 Ref: Appendix
G2 Insertion character (Default : 00)	 Ref: Appendix
G1 Character Position to be inserted (Default : 00)	 Ref: Appendix
G2 Character Position to be inserted (Default : 00)	 Ref: Appendix



Start configuration



End configuration

ITEM

OPTION

Bar Code ID



\*Disable



Enable

Accuracy



\* Read 1 Time



Read 2 Times

Reading Level



Bar equals high



Bar equals low

Code Type	ID	Code Type	ID
UPC-A	F	Interleaved 25	N
UPC-E	G	Industrial 25	O
EAN-13	H	Matrix 25	P
EAN-8	I	China Postal Code	Q
Code 39	J	MSI/Plessey	R
Codabar	K	Code 32	S
Code 93	L	Code 11	T
Code 128	M	Telepen	V

Chapter 3 - BarCode parameters setting

How to set up a Code ID?

- (1) Scan Start configuration bar code
- (2) Go to the ASCII Table and scan label that represent the desired characters to be inserted.
- (3) Scan Confirm configuration bar code
- (4) Scan End configuration bar code.



Start configuration



End configuration



Confirm configuration

3.1 UPC-A

ITEM	OPTION
Read	
	Disable
	* Enable
Code ID Setting (Default : F )	
	Ref: Appendix (20-7EH)



Start configuration



End configuration

ITEM	OPTION
UPC-A Expand to EAN-13	
	* Disable
Check Digit Send	Enable
	Disable
Truncate Leading Zero	
	* Disable
Truncate Leading (Default:00)	Enable
Truncate Ending (Default:00)	Ref: Appendix (00-0DH)
Insert group selection	Ref: Appendix (00-0DH)
	Ref: Appendix ( 00—02H )






Start configuration



End configuration

ITEM	OPTION
Supplement digits	
	* NONE
	
	2 digits
	
	5 digits
	
	2 or 5digits
	
	Auto-discriminate Supplement

3.2 UPC-E



Start configuration



End configuration

ITEM	OPTION
Read	
	Disable
	* Enable
Code ID setting (Default : G)	 Ref: Appendix (20-7EH)



Start configuration



End configuration








ITEM	OPTION
UPC-E Expand to UPC-A	
	* Disable
Check Digit Send	Enable
	Disable
Truncate Leading (Default:00)	
	* Enable
Truncate Ending (Default:00)	Ref: Appendix (00-08H)
	Ref: Appendix (00-08H)
Insert group selection (Default:00)	
	Ref: Appendix (00-02H)
	Ref: Appendix (00-02H)












Start configuration



End configuration

ITEM	OPTION
Truncate Leading Zero	
	Disable
	
Supplement digits	* Enable
	
	* None
	
	2 digits
	
	5 digits
	
	2 or 5 digits
	
	Auto-discriminate Supplement

3.3 EAN-13









	
Start configuration	End configuration
<hr/>	
ITEM	OPTION
<hr/>	
Read	
	Disable
	<hr/>
	
	* Enable
<hr/>	
Code ID setting (Default : H)	
	Ref: Appendix (20-7EH)
<hr/>	
Check Digit Send	
	Disable
	<hr/>
	
	* Enable
<hr/>	
Truncate Leading (Default : 00 )	
	Ref: Appendix (00-0DH)
<hr/>	
Truncate Ending (Default : 00 )	
	Ref: Appendix (00-0DH)
<hr/>	



Start configuration



End configuration

ITEM	OPTION
Supplement digits	
	* None
	
	2 digits
	
	5 digits
ISBN/ISSN Conversion	
	2 or 5 digits
	
Insert group selection (Default : 00 )	Auto-discriminate Supplement
	
	* Disable
Ref: Appendix (00-02H)	
	Enable
	

3.4 EAN-8



Start configuration



End configuration

ITEM	OPTION
Read	
	Disable
	* Enable
Code ID setting (Default : I)	
	Ref: Appendix (20-7EH)
Check Digit Send	
	Disable
	* Enable
Truncate Leading (Default : 00)	
	Ref: Appendix (00-08H)



Start configuration



End configuration

ITEM	OPTION
Truncate Ending (Default : 00)	 Ref: Appendix (00-08H)
Supplement digits	 * None
	 2 digits
	 5 digits
	 2 or 5 digits
	 Auto-discriminate Supplement
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



3.5 Code39



Start configuration



End configuration







ITEM	OPTION
Read	
	Disable
* Enable	
Code ID setting (Default : J)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	* Disable
Enable	
Check-sum transmission	
	Disable
* Enable	



Start configuration



End configuration






ITEM	OPTION
Append	
	* Disable
	
Min. code length (Default: 00)	Enable
	
	Ref: Appendix (00-32H)
Max. code length (Default: 32H)	
	Ref: Appendix (00-32H)
	
Format	* Standard Code39
	
	Code 39 Full ASCII



Start configuration



End configuration

ITEM	OPTION
Transmit Start/End Character	
	* Disable
	
Truncate Leading (Default: 00)	Enable
	 Ref: Appendix (00-32H)
Truncate Ending (Default: 00)	 Ref: Appendix (00-32H)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)




3.6 Codabar



Start configuration



End configuration








ITEM	OPTION
Read	
	Disable
	
	* Enable
Code ID setting (Default : K)	
	Ref: Appendix (20-7EH)



Start configuration



End configuration








ITEM	OPTION
Check-sum verification	
	Disable
	
Check-sum transmission	* Enable
	
	* Disable
Append	
	Enable
	
Truncate Leading (Default:00)	* Disable
	
	Enable
Truncate Leading (Default:00)	
	Ref: Appendix (00-7EH)



Start configuration



End configuration



ITEM	OPTION
Truncate Ending (Default:00)	 Ref: Appendix (00-7EH)
Start/End type	 * ABCD/ABCD
	 abcd/abcd
	 abcd/tn*e
Start/End transmission	 * Disable
	 Enable
Min. code length (Default: 05)	 Ref: Appendix (00-3CH)



Start configuration



End configuration

ITEM	OPTION
Max. code length (Default: 3CH)	 Ref: Appendix (00-3CH)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)






3.7 Code93



Start configuration



End configuration

ITEM	OPTION	
Read		
	Disable	
		
		* Enable
Code ID setting (Default : L)		
	Ref: Appendix (20-7EH)	
Check-sum verification		
	Disable	
		
		* Enable












Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	
	* Disable
	
	Enable
Min. code length (Default: 00)	 Ref: Appendix (0-50H)
Max. code length (Default: 50H)	 Ref: Appendix (0-50H)
Truncate Leading (Default: 00)	 Ref: Appendix (00-7EH)
Truncate Ending (Default: 00)	 Ref: Appendix (00-7EH)
Insert group selection	 Ref: Appendix (00-02H)






3.8 Code 128



Start configuration



End configuration

ITEM	OPTION	
Read		
	Disable	
		
		* Enable
Code ID setting (Default : M)		
	Ref: Appendix (20-7EH)	
Check-sum verification		
	Disable	
		
		* Enable



Start configuration



End configuration






ITEM	OPTION
Check-sum transmission	
	* Disable
	Enable
FNC2 Append	
	* Disable
	Enable
UCC/EAN128	
	* Disable
	Enable
FNC1 transmission	
	* Disable
	Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default: 00)	 Ref: Appendix (00-7FH)
Truncate Ending (Default: 00)	 Ref: Appendix (00-7FH)
Min. code length (Default: 00)	 Ref: Appendix (00-7FH)
Max. code length (Default: 7FH)	 Ref: Appendix (00-7FH)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)






3.9 Interleaved 2 of 5



Start configuration



End configuration






ITEM	OPTION
Read	
	* Disable
	
Enable	
Code ID setting (Default : N)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	* Disable
	
Enable	
Check-sum transmission	
	Disable
	
* Enable	



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-7EH)
Truncate Ending (Default : 00)	 Ref: Appendix (00-7EH)
Min. code length (Default : 00)	 Ref: Appendix (00-7FH)
Max. code length (Default : 7FH)	 Ref: Appendix (00-7FH)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

3.10 Industrial 2 of 5



Start configuration



End configuration








ITEM	OPTICON
Read	
	* Disable
	Enable
Code ID setting (Default : 0)	 Ref: Appendix (20-7EH)
Min. code length (Default : 00)	 Ref: Appendix (00-32H)
Max. code length (Default : 32H)	 Ref: Appendix (00-32H)



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-32H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-32H)
Check-sum verification	<div>  <div>* Disable</div> </div> <hr/> <div>  <div>Enable</div> </div>
Check-sum transmission	<div>  <div>* Disable</div> </div> <hr/> <div>  <div>Enable</div> </div>
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



3.11 Matrix 2 of 5



Start configuration



End configuration

ITEM	OPTION
Read	
	* Disable
Enable	
Code ID setting (Default : P)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	* Disable
Enable	



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	
	Disable
	* Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min. code length (Default : 0B)	 Ref: Appendix (00-50H)
Max. code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

3.12 CHINA POSTAL CODE



Start configuration



End configuration






ITEM	OPTION
Read	
	* Disable
Enable	
Code ID setting (Default : Q)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	* Disable
Enable	
Check-sum transmission	
	Disable
* Enable	



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min.code length (Default : 00)	 Ref: Appendix (00-50H)
Max.code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

3.13 MSI/Plessey



Start configuration



End configuration








ITEM	OPTION
Read	
	* Disable
Enable	
Code ID setting (Default : R)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	* Disable
	MOD 10
	MOD 10/10
MOD 11/10	



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	
	Disable
	
Truncate Leading (Default : 00)	
	Ref: Appendix (00-3CH)
Truncate Ending (Default : 00)	
	Ref: Appendix (00-3CH)
Min. code length (Default : 00)	
	Ref: Appendix (00-3CH)
Max. code length (Default : 3CH)	
	Ref: Appendix (00-3CH)
Insert group selection (Default : 00)	
	Ref: Appendix (00-02H)

3.14 CODE 32



Start configuration



End configuration




ITEM	OPTION
Read	
	* Disable
Code ID Setting (Default:S)	
	Ref: Appendix (20-7EH)
Check-sum verification	Disable
	* Enable
Check-sum transmission	
	Disable
	* Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-0AH)
Truncate Ending (Default : 00)	 Ref: Appendix (00-0AH)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



3.15 CODE 11



Start configuration



End configuration








ITEM	OPTION
Read	
	* Disable
Enable	
Code ID setting (Default:T)	
	Ref: Appendix (20-7EH)
Check-sum verification	
	Disable
* Enable	



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	
	* Disable
	
	Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min. code length (Default : 00)	 Ref: Appendix (00-50H)
Max. code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

3.16 Telepen



Start configuration



End configuration








ITEM	OPTION
Read	
	* Disable
Code ID setting (Default:V)	Enable
Check-sum verification	Ref: Appendix (20-7EH)
	Disable
Data Format	* Enable
	Only Numnic
	*Full ASCII



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	
	* Disable
	
Truncate Leading (Default : 00)	Enable
	
Truncate Ending (Default : 00)	Ref: Appendix (00-40H)
	
Min. code length (Default : 00)	Ref: Appendix (00-40H)
	
Max. code length (Default : 40H)	Ref: Appendix (00-40H)
	
Insert group selection (Default : 00)	Ref: Appendix (00-02H)
	

3.17 GS1 Data Bar (RSS)

	
Start configuration	End configuration
ITEM	OPTION
RSS-14	
	開啟
RSS-14 LIMITED	
	關閉
RSS-14 EXPANDED	
	開啟
RSS TO UPC/EAN	
	關閉
RSS TO UPC/EAN	
	開啟
RSS TO UPC/EAN	
	關閉
RSS TO UPC/EAN	
	開啟
RSS TO UPC/EAN	
	關閉

3.18 Function Key Emulation



Start configuration





















End configuration

ITEM	OPTION
Function Key	
	* Disable
Code 39 format	Enable
	Full ASCII Code 39

To scan a function key barcode label, Full ASCII Code 39 must be enabling.  
Please refer to Full ASCII Code 39 Table to produce the function key barcode label.

Function Code

 UP(\$A)	 F1(\$Q)
 DOWN(\$B)	 F2(\$R)
 LEFT(\$C)	 F3(\$S)
 RIGHT(\$D)	 F4(\$T)

 PAGE UP(\$E)	 F5(\$U)
 PAGE DOWN(\$F)	 F6(\$V)
 BS(\$H)	 F7(\$W)
 TAB(\$I)	 F8(\$X)
 HOME(\$K)	 F9(\$Y)
 END(\$L)	 F10(\$Z)
 ENTER(\$M)	 ESC(%A)
 INSERT(\$N)	 F11(%B)
 DELETE(\$O)	 F12(%C)

## **Appendix A –**



Dec	Hex	Char.	Dec	Hex	Char.
0	00	NUL	32	20	SP
1	01	SOH	33	21	!
2	02	STX	34	22	"
3	03	ETX	35	23	#
4	04	EOT	36	24	\$
5	05	ENQ	37	25	%
6	06	ACK	38	26	&
7	07	BEL	39	27	'
8	08	BS	40	28	(
9	09	HT	41	29	)
10	0A	LF	42	2A	*
11	0B	VT	43	2B	+
12	0C	FF	44	2C	,
13	0D	CR	45	2D	-
14	0E	SO	46	2E	.
15	0F	SI	47	2F	/
16	10	DLE	48	30	0
17	11	DC1	49	31	1
18	12	DC2	50	32	2
19	13	DC3	51	33	3
20	14	DC4	52	34	4
21	15	NAK	53	35	5
22	16	SYN	54	36	6
23	17	ETB	55	37	7
24	18	CAN	56	38	8
25	19	EM	57	39	9
26	1A	SUB	58	3A	:
27	1B	ESC	59	3B	;
28	1C	FS	60	3C	<
29	1D	GS	61	3D	=
30	1E	RS	62	3E	>
31	1F	US	63	3F	?

Dec	Hex	Char.	Dec	Hex	Char.
64	40	@	96	60	'
65	41	A	97	61	a
66	42	B	98	62	b
67	43	C	99	63	c
68	44	D	100	64	d
69	45	E	101	65	e
70	46	F	102	66	f
71	47	G	103	67	G
72	48	H	104	68	h
73	49	I	105	69	i
74	4A	J	106	6A	j
75	4B	K	107	6B	k
76	4C	L	108	6C	l
77	4D	M	109	6D	m
78	4E	N	110	6E	n
79	4F	O	111	6F	o
80	50	P	112	70	P
81	51	Q	113	71	q
82	52	R	114	72	r
83	53	S	115	73	s
84	54	T	116	74	t
85	55	U	117	75	u
86	56	V	118	76	v
87	57	W	119	77	w
88	58	X	120	78	x
89	59	Y	121	79	y
90	5A	Z	122	7A	z
91	5B	[	123	7B	{
92	5C	\	124	7C	
93	5D	}	125	7D	}
94	5E	^	126	7E	~
95	5F	_	127	7F	DEL

# Table-Hex    HEXADCIMAL



1



2



3



4



5



6



7



8



9



0



A



B



C



D



E



F



Confirm configuration



End Configuration

## Function Key Table

	0	1
0	NULL	
1	UP	F1
2	DOWN	F2
3	LEFT	F3
4	RIGHT	F4
5	PAGE UP	F5
6	PAGE DOWN	F6
7		F7
8	BS	F8
9	TAB	F9
A		F10
B	HOME	ESC
C	END	F11
D	ENTER	F12
E	INSERT	
F	DELETE	



Version: 2.0-ZB