

Programing Manual

Albasca MK-2200BT

Ver1.0.1

Start Configuration((+SETF))



Chap.1 System Information



Set All default((+RETF))



S/W Version((+SFUR))

2.1 Message Terminator



None((+C9A))



CR+LF((+C9B))



<CR>((+C9C))



LF((+C9D))



TAB((+C9E))

2.2 Character Installation

The preamble and postamble character: You can put 10 ASCII at most in front of the barcode data. When the installation is "0" that means you don't need to add the first and last character. Please find the format as below:

| Preamble Character | Barcode | Postamble Character |
|--------------------|---------|---------------------|
|--------------------|---------|---------------------|

The process for adding the first and last character to the barcode:

1. Scan the barcode of "Start Configuration" and "The Preamble Character Installation".
2. Check the ASCII table to get the ASCII code of the first and last character.

End Configuration((+ENDF))



Start Configuration((+SETF))



3. Scan the barcode of ASCII in the Appendix.
4. Scan the “End Configuration”.

G1/G2 character Insertion: You can put 10 ASCII at most in front of the barcode data. When the installation is “0” that means you don’t need to add the first and last character.

1. Scan the barcode of the “Start Configuration” and “G1 Insert Character”.
2. Check the ASCII table to get the ASCII code of the first and last character.
3. Scan the barcode of ASCII in the Appendix.
4. Scan the “End Configuration”.
5. Repeat the same process to the G2 insertion.
6. Scan the “End Configuration”.

The position of G1/G2 character insertion: To select a character insert to the barcode. You can’t insert any character while the installation is “0”

1. Scan the barcode of the “Start Configuration” and “G1 character insertion position”
2. Check the ASCII table to get the corresponding ASCII code of the insertion position.
3. Scan the “End Configuration”.
4. Repeat the same process to the G2 character insertion position.
5. Scan the “End Configuration”.

Code Transmission: If your application needs to transmit the code (barcode type ID), you have to set “ON” for this feature and the format is ID + Barcode data.

The Preamble Installation (Default:00)



Appendix A((+E4A))

The Postamble Installation (Default:00)



Appendix A((+E5A))

G1 Character Insertion (Default:00)

End Configuration((+ENDF))



Start Configuration((+SETF))



Appendix A((+E6A))

G2 Character Insertion (Default:00)



Appendix A((+E7A))

G1 Character Insertion Position (Default:00)



Appendix A((+E8A))

G2 Character Insertion Position (Default:00)



Appendix A((+E9A))

Code ID Transmission



ON((+EAA))



<OFF>((+EAB))

2.3 Other Installation

Scanning Precision: You can set to scan once or twice and then transfer the bar code data. The twice will reduce the error reading.

Bar Reverse Output Installation: This feature can read the highlight barcode.

Scanning Verify



<Single>((+EDA))



Multi-verify(Max:2)
((+EDB))

End Configuration((+ENDF))



Start Configuration((+SETF))



Chap.3 BAR-CODE INSTALLATION

3.1 UPC-A

Reading



OFF((+F1A))



<ON>((+F1B))

Code ID (Default:F)



<20H-7EH>((+F2A))

UPC-A convert to EAN-13



<OFF>((+F3A))



ON((+F3B))

Transmit Check Character



OFF((+F4A))



<ON>((+F4B))

Truncate Leading Zero



<OFF>((+F5A))



ON((+F5B))

Truncate Leading Digit(Default:00)



<00H-0DH>((+F6A))

Truncate Last Digit(Default:00)



<00H-0DH>((+F7A))

Select Insertion(Default:00)



<00H-02H>((+F9A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.1 UPC-A

Add-On 2/5



<None>((+F8A))



2 digit((+F8B))



5 digit((+F8C))



2 or 5 digit((+F8D))



AUTO_Enable
((+F8E))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.2 UPC-E

Reading



OFF((+G1A))



<ON>((+G1B))

Code ID (Default: G)



<20H-7EH>((+G2A))

UPC-E Convert to UPC-A



<OFF>((+G3A))



ON((+G3B))

Transmit Check Character



OFF((+G4A))



<ON>((+G4B))

Truncate Leading Zero



<OFF>((+G7A))



ON((+G7B))

Truncate Leading Digit(Default:00)



<00H-08H>((+G5A))

Truncate Last Digit(Default:00)



<00H-08H>((+G6A))

Select Insertion(Default:00)



<00H-02H>((+G9A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.2 UPC-E

Add-On 2/5



<None>((+G8A))



2digit((+G8B))



5digit((+G8C))



2 or 5 digit((+G8D))



AUTO_Enable
((+G8E))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.3 EAN-13

Reading



OFF((+H1A))



<ON>((+H1B))

Code ID (Default: H)



<20H-7EH>((+H2A))

Transmit Check Character



OFF((+H3A))



<ON>((+H3B))

Truncate Leading Digit (Default:00)



<00H-0DH>((+H4A))

Truncate Last Digit (Default:00)



<00H-0DH>((+H5A))

Select Insertion (Default:00)



<00H-02H>((+H8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.3 EAN-13

Add-On 2/5



<None>((+H6A))



2 Digit((+H6B))



5 Digit((+H6C))



2 or 5 Digit((+H6D))



AUTO_Enable
((+H6E))

ISBN/ISSN Convert



<OFF>((+H7A))



ON((+H7B))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.4 EAN-8

Reading



OFF((+I1A))



<ON>((+I1B))

Code ID (Default: 1)



<20H-7EH>((+I2A))

Transmit Check Character



OFF((+I3A))



<ON>((+I3B))

Truncate Leading Digit (Default:00)



<00H-08H>((+I4A))

Truncate Last Digit (Default:00)



<00H-08H>((+I5A))

Select Insertion (Default:00)



<00H-02H>((+I7A))

End Configuration((+ENDF))



Start Configuration((+SETF))



Add-On 2/5



<None>((+I6A))



2 digit((+I6B))



5 digit((+I6C))



2 or 5 digit((+I6D))



AUTO_Enable
((+I6E))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.5 Code 39

Reading



OFF((+J1A))



<ON>((+J1B))

Code ID (Default: J)



(20H-7EH)((+J2A))

Verification



<OFF>((+J3A))



ON((+J3B))

Transmit Check Character



OFF((+J4A))



<ON>((+J4B))

Min. Length (Default:01)



<01H-50H>((+J6A))

Max. Length

(Default:50H)



<01H-50H>((+J7A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.5 Code 39

Format



<Standard Code39> ((+J9A))



Full ASCII Code39
((+J9B))



Trioptic CODE39
((+J9C))

Transfer Start / End Character



<OFF>((+JDA))



ON((+JDB))

Code 39 Concatenation



<OFF>((+JFA))



ON((+JFB))

Truncate Leading Digit(Default:00)



<00H-32H>((+JAA))

Truncate Last Digit(Default:00)



<00H-32H>((+JBA))

Select Insertion(Default:00)



<00H-02H>((+JCA))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.6 Codabar

Reading



OFF((+K2A))



<ON>((+K1B))

Code ID (Default: K)



<20H-7EH>((+K2A))

Verification



<OFF>((+K3A))



ON((+K3B))

Transmit Check Character



<OFF>((+K4A))



ON((+K4B))

Truncate Leading Digit(Default:00)



<00H-7EH>((+K6A))

Truncate Last Digit(Default:00)



<00H-7EH>((+K7A))

Select Insertion (Default:00)



<00H-02H>((+KCA))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.6 Codabar

Start / End Character Type



<ABCD/ABCD>((+K8A))



abcd/abcd((+K8B))



abcd/tn*e((+K8C))

Transmit Start / End Character



OFF((+K9A))



<ON>((+K9B))

Min. Length (Default:06)



<01H-50H>((+KAA))

Max. Length (Default:50H)



<01H-50H>((+KBA))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.7 Code93

Reading



OFF((+L1A))



<ON>((+L1B))

Code ID (Default: L)



<20H-7EH>((+L2A))

Verification



OFF((+L3A))



<ON>((+L3B))

Transmit Check Character



<OFF>((+L4A))



ON((+L4B))

Select Insertion (Default:00)



<00H-02H>((+L9A))

Truncate Leading Digit (Default:00)



<00H-7EH>((+L7A))

Truncate Last Digit (Default:00)



<00H-7EH>((+L8A))

Min. Length(Default:03)



<01H-50H>((+L5A))

Max. Length(Default:50H)



<01H-50H>((+L6A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.8 Code 128

Reading



OFF((+M1A))



<ON>((+M1B))

Code ID (Default: M)



<20H-7EH>((+M2A))

Verification



OFF((+M3A))



<ON>((+M3B))

Transmit Check Character



<OFF>((+M4A))



ON((+M4B))

Truncate Leading Digit(Default:00)



<00H-7FH>((+M8A))

Truncate Last Digit(Default:00)



<00H-7FH>((+M9A))

Select Insertion(Default:00)



<00H-02H>((+MCA))

Min. Length(Default:03)



<01H-50H>((+MAA))

Max. Length(Default:50H)



<01H-50H>((+MBA))

End Configuration((+ENDF))



Start Configuration((+SETF))



UCC/EAN128



<OFF>((+M6A))



ON((+M6B))

FNC1 Transmit



<OFF>((+M7A))



ON((+M7B))

FNC2 Concatenation



<OFF>((+M5A))



ON((+M5B))

Application ID transmit



01 & Terminator ((+MDA))



OFF & Terminator ((+MDC))



01 & Terminator ((+MDA))



(01) & Terminator ((+MDB))

Application ID Terminator



<00H-7EH>((+MEA))

IATA Code



<OFF>((+V1A))



ON((+V1B))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.9 Interleaved 2 of 5

Reading



OFF((+N1A))



<ON>((+N1B))

Code ID (Default: N)



<20H-7EH>((+N2A))

Verification



<OFF>((+N3A))



ON((+N3B))

Transmit Check Character



OFF((+N4A))



<ON>((+N4B))

Truncate Leading Digit(Default:00)



<00H-7EH>((+N5A))

Truncate Last Digit(Default:00)



<00H-7EH>((+N6A))

Select Insertion(Default:00)



<00H-02H>((+N9A))

Min. Length(Default:06)



<01H-50H>((+N7A))

Max. Length(Default:50H)



<01H-50H>((+N8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.10 Industrial 2 of 5

Reading



<OFF>((+O1A))



ON((+O1B))

Code ID (Default: 0)



<00H-7EH>((+O2A))

Verification



<OFF>((+O7A))



ON((+O7B))

Transmit Check Character



<OFF>((+O8A))



ON((+O8B))

Truncate Leading Digit(Default:00)



<00H-32H>((+O5A))

Truncate Last Digit(Default:00)



<00H-32H>((+O6A))

Select Insertion (Default:00)



<00H-02H>((+O9A))

Min. Length (Default:06)



<01H-50H>((+O3A))

Max. Length(Default:50H)



<01H-50H>((+O4A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.11 Matrix 2 of 5

Reading



<OFF>((+P1A))



ON((+P1B))

Code ID (Default: P)



<20H-7EH>((+P2A))

Verification



<OFF>((+P3A))



ON((+P3B))

Transmit Check Character



<OFF>((+P4A))



ON ((+P4B))

Truncate Leading Digit(Default:00)



<00H-50H>((+P5A))

Truncate Last Digit(Default:00)



<00H-50H>((+P6A))

Select Insertion(Default:00)



<00H-02H>((+P9A))

Min. Length(Default:06)



<01H-50H>((+P7A))

Max. Length(Default:50H)



<01H-50H>((+P8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.12 China Post Code

Reading



<OFF>((+Q1A))



ON((+Q1B))

Code ID (Default: Q)



<20H-7EH>((+Q2A))

Verification



<OFF>((+Q3A))



ON((+Q3B))

Transmit Check Character



<OFF>((+Q4A))



ON((+Q4B))

Truncate Leading Digit(Default:00)



<00H-50H>((+Q5A))

Truncate Last Digit(Default:00)



<00H-50H>((+Q6A))

Select Insertion(Default:00)



<(00H-02H)>((+Q9A))

Min. Length(Default:06)



<01H-50H>((+Q7A))

Max. Length(Default:50H)



<01H-50H>((+Q8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.13 MSI / Plessey

Reading



<OFF>((+R1A))



ON((+R1B))

Code ID (Default: R)



<20H-7EH>((+R2A))

Verification



<OFF>((+R3A))



MOD 11/10((+R3D))



MOD 10((+R3B))



MOD 10/10((+R3C))

Transmit Check Character



OFF((+R4A))



<ON>((+R4B))

Truncate Leading Digit (Default:00)



<00H-3CH>((+R5A))

Truncate Last Digit (Default:00)



<00H-3CH>((+R6A))

Select Insertion (Default:00)



<00H-02H>((+R9A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.13 MSI / Plessey

Min. Length (Default:06)



<01H-50H>((+R7A))

Max. Length (Default:50H)



<01H-50H>((+R8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.14 CODE32

Reading



<OFF>((+S1A))



ON((+S1B))

Code ID (Default: S)



<20H-7FH>((+S2A))

Verification



<OFF>((+S3A))



ON((+S3B))

Transmit Check Character



<OFF>((+S4A))



ON((+S4B))

Truncate Leading Digit(Default:00)



<00H-0AH>((+S5A))

Truncate Last Digit(Default:00)



<00H-0AH>((+S6A))

Select Insertion (Default:00)



<00-02H>((+S7A))

Transmit "A"



<OFF>((+S8A))



ON((+S8B))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.15 Code 11

Reading



<OFF>((+T1A))



ON((+T1B))

Code ID (Default: T)



<20H-7EH>((+T2A))

Verification



<OFF>((+T3A))



ON((+T3B))

Transmit Check Character



<OFF>((+T4A))



ON ((+T4B))

Truncate Leading Digit (Default:00)



<00H-50H>((+T5A))

Truncate Last Digit (Default:00)



<00H-50H>((+T6A))

Select Insertion(Default:00)



<00H-02H>((+T9A))

Min. Length (Default:06)



<01H-50H>((+T7A))

Max. Length (Default:50H)



<01H-50H>((+T8A))

End Configuration((+ENDF))



Start Configuration((+SETF))



3.16 GS1 Code (Option)

GS1-14

Reading



OFF ((+U1B))



<ON> ((+U1A))

Code ID (Default: U)



<20H-7EH>((+UUA))

Application ID transmit



OFF ((+UAA))



01 ((+UAB))



(01) ((+UAC))

Symbol ID transmit



OFF((+UDA))



ON ((+UDB))

Transmit Check Character



OFF((+UGA))



<ON> ((+UGB))

GS1-14 To UPC/EAN



<OFF> ((+U4B))



ON ((+U4A))

End Configuration((+ENDF))



Start Configuration((+SETF))



GS1- Limited

Reading



<OFF> ((+U2B))



<ON >((+U2A))

Code ID (Default: V)



<20H-7EH>((+UVA))

Application ID transmit



OFF((+UBA))



01 ((+UBB))



(01) ((+UBC))

Symbol ID transmit



OFF((+UEA))



ON ((+UEB))

Transmit Check Character



OFF((+UHA))



<ON >((+UHB))

End Configuration((+ENDF))



Start Configuration((+SETF))



GS1- Expanded

Reading



OFF ((+U3B))



<ON >((+U3A))

Code ID (Default: W)



<20H-7EH>((+UWA))

Application ID transmit



01 & Terminator ((+MDD))



OFF& Terminator ((+MDC))



(01) ((+MDE))



01 ((+MDA))

FNC1 Transmit



<OFF>((+M7A))



ON((+M7B))

Application ID Terminator(Default:00)



<01H-7EH>((+MEA))

Symbol ID transmit



<OFF>((+UFA))



ON ((+UFB))

End Configuration((+ENDF))





APPENDIX A -- ASCII

CODE



0



A



1



B



2



C



3



D



4



E



5



F



6



Y



7



N



8



9





ASCII Table

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-----|-----|----|---|---|---|---|-----|
| 0 | NUL | DLE | SP | 0 | @ | P | ` | p |
| 1 | SOH | DC1 | ! | 1 | A | Q | a | q |
| 2 | STX | DC2 | “ | 2 | B | R | b | r |
| 3 | ETX | DC3 | # | 3 | C | S | c | s |
| 4 | EOT | DC4 | \$ | 4 | D | T | d | t |
| 5 | ENQ | NAK | % | 5 | E | U | e | u |
| 6 | ACK | SYN | & | 6 | F | V | f | v |
| 7 | BEL | ETB | ‘ | 7 | G | W | g | w |
| 8 | BS | CAN | (| 8 | H | X | h | x |
| 9 | HT | EM |) | 9 | I | Y | i | y |
| A | LF | SUB | * | : | J | Z | j | z |
| B | VT | ESC | + | ; | K | [| k | { |
| C | FF | FS | , | < | L | ¥ | l | |
| D | CR | GS | - | = | M |] | m | } |
| E | SO | RS | . | > | N | ^ | n | ~ |
| F | SI | US | / | ? | O | _ | o | DEL |



Start Configuration((+SETF))



End Configuration((+ENDF))

