

***BCR-200/250 Series*** —————

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**Barcode Reader  
User's Manual**

M95-5034

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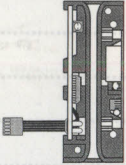
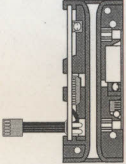
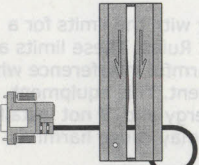
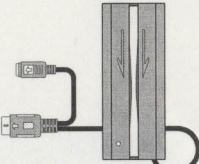
## FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

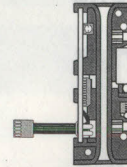
# Information

## BCR-200/250 Series barcode reader

MACHINE TYPE	DECODE BARCODE	FUNCTION															
 <b>BCR-200B/F</b>	<table border="0"> <tr> <td>CODE39 </td> <td>1-2/5 </td> <td>2/5 </td> </tr> <tr> <td>EAN13 </td> <td>EAN8 </td> <td>UPCE </td> </tr> <tr> <td>UPCA </td> <td>CODE128 </td> <td>CODABAR </td> </tr> <tr> <td>CODE93 </td> <td>CODE11 </td> <td></td> </tr> </table> <p>MSR ABA TK2 Interface</p>	CODE39 	1-2/5 	2/5 	EAN13 	EAN8 	UPCE 	UPCA 	CODE128 	CODABAR 	CODE93 	CODE11 		<table border="0"> <tr> <td></td> </tr> <tr> <td><b>B</b> </td> </tr> <tr> <td><b>F</b> </td> </tr> </table> <p><b>B:</b> Red LED <b>F:</b> Infrared</p>		<b>B</b>	<b>F</b>
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UPCA 	CODE128 	CODABAR 															
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 <b>BCR-250KB/F</b> <b>BCR-200KB/F (Without Cover)</b>	<table border="0"> <tr> <td>CODE39 </td> <td>1-2/5 </td> <td>2/5 </td> </tr> <tr> <td>EAN13 </td> <td>EAN8 </td> <td>UPCE </td> </tr> <tr> <td>UPCA </td> <td>CODE128 </td> <td>CODABAR </td> </tr> <tr> <td>CODE93 </td> <td>CODE11 </td> <td></td> </tr> </table> <p>Keyboard Interface</p>	CODE39 	1-2/5 	2/5 	EAN13 	EAN8 	UPCE 	UPCA 	CODE128 	CODABAR 	CODE93 	CODE11 		<table border="0"> <tr> <td></td> </tr> <tr> <td><b>B</b> </td> </tr> <tr> <td><b>F</b> </td> </tr> </table> <p><b>B:</b> Red LED <b>F:</b> Infrared</p>		<b>B</b>	<b>F</b>
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<b>F</b>																	

## Standard Package

### BCR200B/F

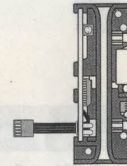


Main unit  
( BCR200B/F )



Use's Manual  
( M95-5034 )

### BCR200LB/F

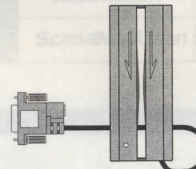


Main unit  
( BCR200LB/F )

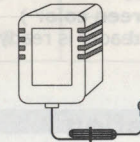


Use's Manual  
( M95-5034 )

### BCR250B/F



Main unit  
( BCR250B/F )

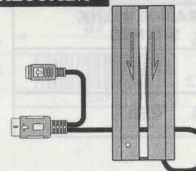


Power Adaptor ( Regulated DC )  
DC5V/120VAC ( APR-1023 )  
or DC5V/230VAC ( APR-1010 )



Use's Manual  
( M95-5034 )

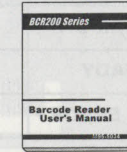
### BCR250KB/F BCR200KB/F



Main unit  
( BCR250KB/F )  
( BCR200KB/F )



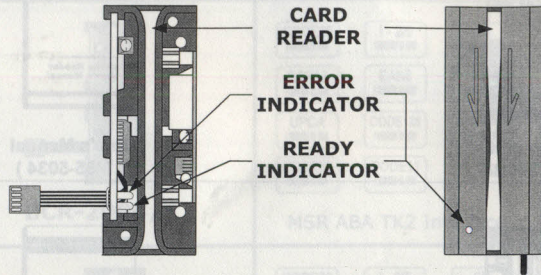
KEYBOARD CABLE  
( WAS-1480 )



Use's Manual  
( M95-5034 )

## Technical And Operational Description

### Front Panel Display and Operations



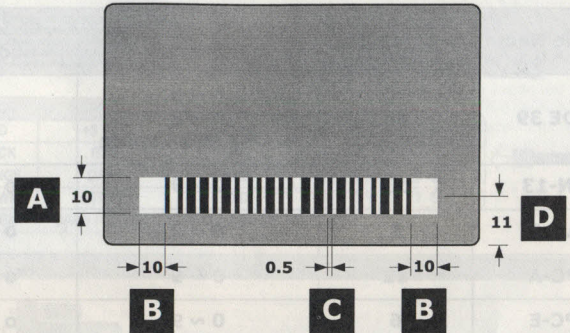
- CARD READER**  
 Follow the graphic for correct card orientation and swipe the card through the entire length of the slot to read.
- ERROR INDICATOR ( Red color )**  
 When encountering erroneous input, defective card, misread, or incorrectly encoded data, the device will turn on the ERROR indicator .
- READY INDICATOR ( Green color )**  
 Indicating the barcode reader is ready to accept new inputs.

### Display Information

STATUS	BCR200B/F BCR200LB/F BCR200KB/F	BCR250B/F BCR250KB/F
POWER ON	RED&GREEN LED BLINK 3 TIMES	ORANGE BLINK 3 TIMES
READY	GREEN LED ON RED LED OFF	GREEN
READ ERROR	RED LED ON GREEN LED OFF	RED

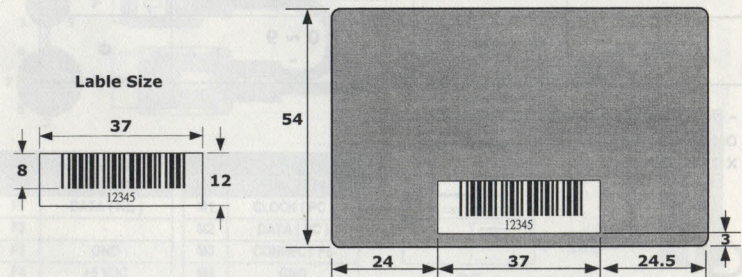
### Barcode Card

#### Standard Card



Item	Parameter	Minimal	Typical	Maximal	Unit
A	Bar Width	5	10	-	mm
B	Quiet Zone	4	10	-	mm
C	Resolution	0.15	0.5	-	mm
D	Scan Position	10.25	11	11.75	mm

#### Test Card



## Supporting Barcode

Barcode Name	Maximal Length	Data Character	Check Code
CODE 39	46	0 ~ 9 A ~ Z + - * / % \$ . space	-
EAN-13	13	0 ~ 9	o
EAN-8	8	0 ~ 9	o
UPC-A	12	0 ~ 9	o
UPC-E	6	0 ~ 9	o
INTERLEAVED 2 of 5	60	0 ~ 9	-
CODABAR	58	0 ~ 9 A B C D + - * / \$ . :	x
CODE 128	57	ASCII = 00 ~ 95 Control Code = 7 (Code A)	o
CODE 93	58	0 ~ 9 - . space \$ / + % (\$) (%) (/) (+) Multilevel Full ASCII	o
CODE 11	58	0 ~ 9 -	o

- : Need or No need  
o : Need  
x : No need

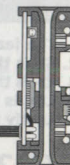
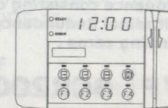
## Connections

### BCR200B/F, BCR200LB/F

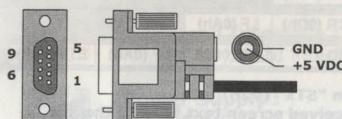


ANY MSR ABA TK2  
/ TTL LEVEL RS232  
INTERFACE MECHINE

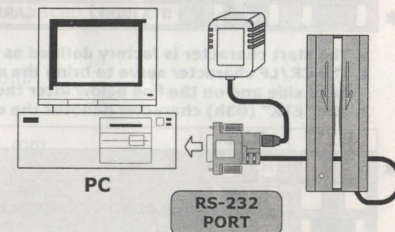
PIN	COLOR	BCR200B/F	BCR200LB/F
1	RED	+5 VDC	+5 VDC
2	BLACK	GND	GND
3	ORANGE	DATA	RXD
4	BROWN	STOBE	TXD
5	GREEN	CARD PRESENT	NO CONNECT



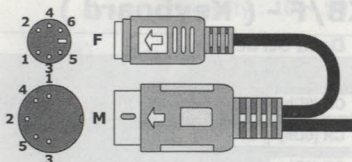
### BCR250B/F



PIN	COLOR	FUNCTION
2	YELLOW	TXD
3	WHITE	RXD
5	BLACK	GND
4,6	CONNECT TOGETHER	
7,8	CONNECT TOGETHER	
1	NO CONNECT	

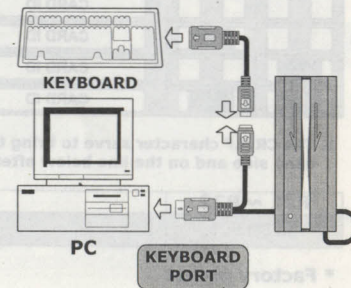


### BCR250KB/F, BCR200KB/F



6 PIN FEMALE	
PIN	FUNCTION
F1	DATA ( KB )
F2	-
F3	GND
F4	+5 VDC
F5	CLOCK ( KB )
F6	CONNECT M3

5 PIN MALE	
PIN	FUNCTION
M1	CLOCK ( PC )
M2	DATA ( PC )
M3	CONNECT F6
M4	GND
M5	+5 VDC



## Programming And Data Structure

### BCR200B/F - ( Magstripe )

R19 ~ R22	Data Structure					
NO SELECT	10 LEADING ZEROS	SS	CARD ID	ES	LRC	10 ENDING ZEROS

1. The leading zeros prepare the receiving unit to accept the data .
2. SS is the start sequence consisting of 11010 ( ; ) .
3. ES is the end sequence consisting of 11111 ( ? ) .
4. LRC is the Longitudinal Redundancy Check character .
5. Lastly follows ending zeros .

### BCR250B/F , BCR200LB/F - ( RS232 )

R19	R20	Data Structure				
<input type="checkbox"/>	<input type="checkbox"/>	CARD ID				
<input type="checkbox"/>	<input type="checkbox"/>	CARD ID	CR (0Dh)			
<input type="checkbox"/>	<input type="checkbox"/>	CARD ID	CR (0Dh)	LF (0Ah)		
* <input type="checkbox"/>	<input type="checkbox"/>	STX (02h)	CARD ID	CR (0Dh)	LF (0Ah)	ETX (03h)

1. The start character is factory defined as an "STX" (02h) .
2. The CR/LF character serve to bring the received screen text back to the left hand side and on the line below after the data bytes have been sent .
3. The "ETX" (03h) character denotes the end of current transmission .

R21	R22	Baudrate	
<input type="checkbox"/>	<input type="checkbox"/>	9600 BPS ( N , 8 , 1 )	
<input type="checkbox"/>	<input type="checkbox"/>	19200 BPS ( N , 8 , 1 )	
<input type="checkbox"/>	<input type="checkbox"/>	4800 BPS ( N , 8 , 1 )	
* <input type="checkbox"/>	<input type="checkbox"/>	2400 BPS ( N , 8 , 1 )	

### BCR250KB/F , BCR200KB/F - ( Keyboard )

R19	R20	Data Structure			
<input type="checkbox"/>	<input type="checkbox"/>	CARD ID			
* <input type="checkbox"/>	<input type="checkbox"/>	CARD ID	CR (0Dh)		
<input type="checkbox"/>	<input type="checkbox"/>	CARD ID	CR (0Dh)	LF (0Ah)	
* <input type="checkbox"/>	<input type="checkbox"/>	CARD ID	CR (0Dh)		

1. The CR/LF character serve to bring the received screen text back to the left hand side and on the line below after the data bytes have been sent .

R21 ~ R22	Function
NO SELECT	RESERVED

\* Factory preset

## Specifications



#### Barcode Card ( for LED ) :

Code 39 , I25 , EAN13 , EAN8 , UPCE , UPCA , CODE 128 , CODABAR , CODE 93 , CODE 11



#### Barcode Card ( for Infrared ) :

Code 39 , I25 , EAN13 , EAN8 , UPCE , UPCA , CODE 128 , CODABAR , CODE 93 , CODE 11



#### ABA Interface : BCR200B/F

Mag-stripe ABA TK2 emulation interface



#### RS232 Interface : BCR250B/F , BCR200LB/F

RS232 , Full-Duplex , 8N1 , 2400 - 19200 bps  
Factory preset:9600 bps



#### Keyboard Interface : BCR250KB/F , BCR200KB/F

PC keyboard interface , Scan code



#### Power Supply :

DC 4.5V ~ 5.5V , 300mA



#### Dimensions :

D 23 x W 90 x H 24 mm  
- Without cover ( BCR200B/F , BCR200LB/F , BCR200KB/F )  
D 33 x W 99 x H 31 mm  
- With cover ( BCR250B/F , BCR250KB/F )



#### Environment :

Operating Temp : 0 ~ 55 Deg.C  
Storage Temp : -10 ~ 55 Deg.C  
Humidity : 10 ~ 90 % relative

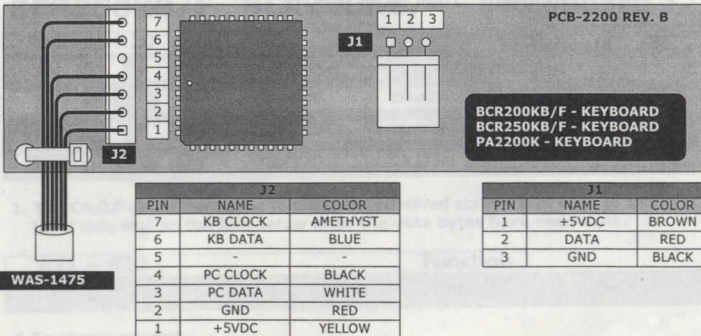
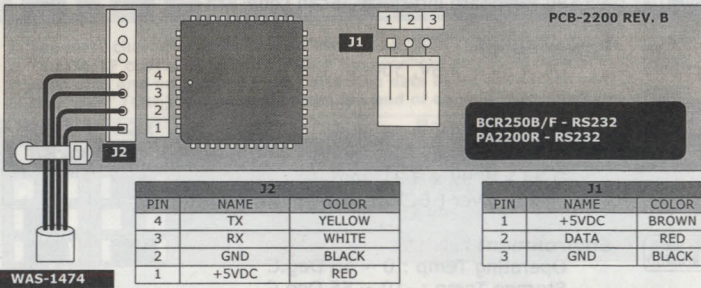
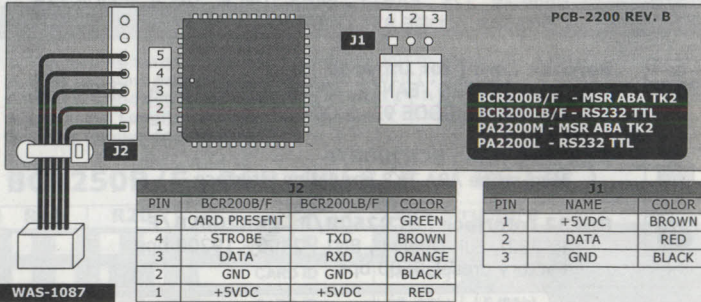


#### Mounting :

Any surface

# Appendix

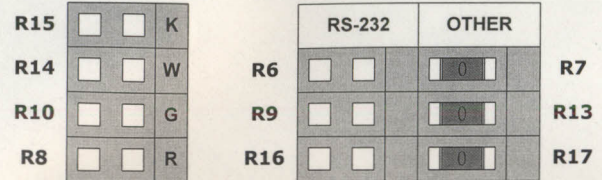
## Wire Connect To PCB



## Interface Setup

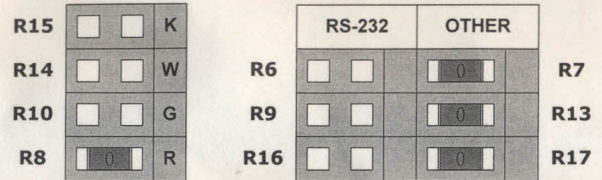
### BCR200B/F, PA2200M

### MSR ABA TK2



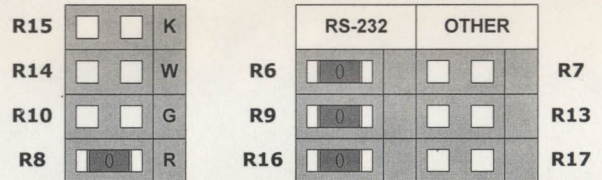
### BCR200LB/F, PA2200L

### RS232 TTL



### BCR250B/F, PA2200R

### RS232



### BCR250KB/F, BCR200KB/F, PA2200K

### KEYBOARD

