Bur3003

Barcode Scanner

User Manual

Service Mailbox
server@nadamoo.cn
nadamoo@126.com

V51.11B

Contents

Technical Parameter 3
Packing list 4
Battery & Charging 4
Set Up Step 5
FAQs 6
Troubleshooting 8
Optional Function settings 9
1. Pairing Mode Setting 9
2. Upload Mode Setting 12
3. Scanning Mode Setting 15
4. Duplicated Barcode Detection 15
5. Beep Setting 16
6. Interface Setting 17
7. Identity Barcode Type 18
8. Keyboard Language Setting 19
9. Case Sensitivity Setting 21
10. Battery Remaining 21
11. Power Off Settings 22
12. End Character Setting 22
13. Barcode Types Able/Disable 23
14. Insert and Delete Character 27
15. ASCII Table 34

In order to correctly use the bar code scanner, please read the instruction carefully and do not arbitrarily scan the settings code otherwise some settings may not be available temporarily.

Please keep this instruction for reference in the future.

If you have any question or concern about the operation of the scanner, please contact us at following Email:

server@nadamoo.cn

nadamoo@126.com

You are suggested to write down the model & the specific scenario and consult the maintenance person should you find the scanner abnormal.

Technical Parameter

Mfr P/N	Bur3003 Serial
Radio Frequency	436.3MHz Wireless
Wireless Range	Indoor 100m, outdoor 400m
Memory	100000 barcodes
Battery capacity	2600mAh
Charging power	DC 5V 400mA
Standby current	18uA-5mA
Working current	15-40mA
Printing Contract	>25%
Light source	650nm LED
LED life	12000 hours
Button life	8000,000 times
Resolution	3.3 mil
Scanning width	30cm
CPU	ARM 32-bit Cortex
Bit Error rate	1/20million
Printing Contract	>25%
Decoding speed	260 times/sec
Scanning angle	rotor angel±30°, inclination± 45°, declination ± 60°
Drop test	2.0m
Certificate	CE, FCC, RoHS , IP54
Applicable 1D barcode	UPC/EAN, UPC/EAN with complementary, Code39, Code39 Full ASCll, Codabar, industrial/Interleaved 2of 5, Code93, MSI, Code11, ISBN, ISSN,China post

Packing list

•Barcode scanner*1
•USB Cable*1
•Instruction Manual*1
•USB Wireless receiver *1

Battery & Charging

The scanner is powered by 2600mAh chargeable battery.
Please ensure that the scanner has enough power before use.

Low battery level indication
The red indicator light flashes three time, it indicates that the power is less than 30%. Please charge the scanner as soon as possible.

The red light flashes three times and then cut down automatically, it indicates that the power is less than 20%. The scanner cannot be powered as it enter into low voltage cutoff mode. please stop scanning and charge the scanner.

Charging indicator:
The red indicator light on the top of the scanner will flash all the time during charging, and it will go off when the scanner is fully charged.

NOTE:
1. Please use computer USB interface or special 5V DC power adapter for charging, the abnormal power will cause permanent damage to scanner and battery

2. The USB cable is not only used for charging, but also used for receiving the barcode. The barcode scanner will automaticlly switch to USB Wired Mode, once the USB cable is inserted into the USB slot of the computer.
In USB Wired Mode, user can scan barcode while charging.

Wireless Mode Set Up Step

The scanner has been paired with the receiver, and set up already.

Step 1, Power on the scanner by pressing the button. The buzzer has a triple beeps, the blue light on the top of scanner will be on.

Step 2. Insert the USB receiver into the USB port of computer. The USB receiver' s blue light will be on.

Step 3. Open notepad on computer and move cursor to the blank where scanning output should be placed. Scanning results can be displayed on computer then.

If the barcode does not displayed, please set up the scanner again according to the following steps.

Step 1. Unplug the USB receiver and plug it in again

Step 2. Within 30 seconds, scan these codes in order.

Restore default

Match

Instant upload mode

USB_HID

Step 3. Open Word on computer, move cursor to the blank, scan a barcode to see if it can be uploaded.

FAQs:

Q1. If i scan a product barcode, will it include the name of the product in the file automatically?

Answer:
The scanner works like a keyboard. The scanner does not interpret what the barcode is, it just "types" out a string of alphabet numeric characters that the barcode represents.

it's up to the database software you are using to interpret what that string of characters means. Once you acquire the barcodes, you have to correlate them to something more meaningful by either purchasing a software service that will interpret the barcode and relate it to a product, or you can use your own internal inventory system to assign the barcodes to specific products.

After creating the relationship between your barcode and the corresponded information, when you enter the barcode into the software by the scanner,your software will look up the barcode and then output the related information of your product.

Q2. Why does scanner not read the barcode exactly. When I use the scanner to read a barcode of an item, I get a different result from the barcode itself.

Example 1. There are two separate barcodes together. It scanned the first 12 digits in the barcode but not the last five.

Solution: Please scan the code" UPC/EAN extra code-ON" on page 24.

Example 2. The original UPCE barcoe is "01234565", but the program ask for filling in 12 digits on the cell.
Solution: Please scan the setting code "UPCE to UPCA-On" on page 24.

Example 3. The original barcode is "abc12345", the scanning result is "+A+B+C+D12348", the scanner put "+" between character.

Solution: Please scan the code "Code 39 FULL ASCII-On" on page 25.

If that is not your case, please send us a clear picture of the barcode and the result you get, our customer service will help you to solve the problem.

Q3. Some barcodes can not be read, why?

Answer:
A. Incomplete and unclear barcodes might not be read.
B. It is possible that the setting is off by default for some barcode types which are not commonly used. You need to activate a specific barcode type to get it working.

Please feel free to contact our Customer Service Team for further assistance if you don't know the exact type of barcode that you are referring to.

Q4.Is there any barcodes to remove auto-enter after every scanning?

Answer:
To remove the auto-enter, please read the code" Disable suffix" on page 22.

Q5. How to add Tab?
Answer:
To add Tab, please read the code" Add tab" on page 22.

Q6. Can the scanner send two enter after every scanning?

Answer:
To add two enter, please read these codes in order. (on page 27-37).

"Insert character" (on page 27)
"All barcode type" (on page 27)
"Data group 1" (on page 28)
"After barcode" (on page 30)
"013 CR/ENTER" (on page 34)
"013 CR/ENTER" (on page 34)
"Save settings" (on page 31)

Troubleshooting

Problem	Possible Reason	Solution
Insert the USB receiver into the PC 's USB port, the receiver' s light does not light up or the blue light is flashing.	1. The PC' s USB port is out of condition.	Connect the USB receiver to another USB port.
	2. The USB receiver is out of condition.	Contact **nadamoo@126.com** for the replacement.
Power on the scanner, the scanner has no reaction. the buzzer does not beep, the blue light on the top of scanner does not turn on, the red scanning laser does not show up.	The battery run out.	Connect the scanner to PC' s USB port for charging via USB cable
The scanner can not hold the charge.	The PC' s USB port is out of condition.	Connect the scanner to another USB port for charging.
	The USB cable is out of condition.	Contact **nadamoo@126.com** for the replacement.
Power on the scanner, the buzzer beeps, the blue light on the top of scanner will be on, the red scanning laser does not show up or become a dot.	The laser head is out of condition.	Contact **nadamoo@126.com** for the replacement.
Scanner and USB receiver are all in good condition. But the barcode can not be sent to my computer.	The scanner failed to match the USB receiver.	Unplug the receiver and plug it in to PC' s USB port, and scan the following codes: "Restore default" "match" "instantly upload mode" "USB_HID"
	The scanner was set to storage mode, scanned data will be kept in the buffer of scanner.	
	The scanner was set to USB virtual com.	

Optional Function settings

Settings of the barcode scanner can be changed by scanning the setup barcodes included in this manual.

1. Pairing Mode Setting

1.1 One scanner to one USB receiver: One scanner only transmits barcode to one USB receiver.

Pairing operation:
Plug the USB receiver into your computer ,scan the code "match " to pair the scanner with the USB receiver.

Match

Pairing indication:
(1) If the pairing succeeds, the buzzer will beep "DI-en""di di di"
(2) If the pairing fails, the buzzer will beep "DI---en"

NOTE: 30 seconds after the USB receiver is inserted, the scanner cannot match the USB receiver. If the pairing fails, please unplug the USB receiver and plug it again, then scan the code "match".

`

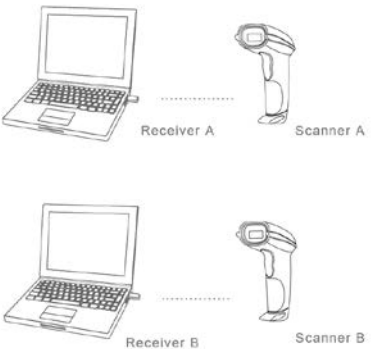
Several units can work independently with different computers in the same area. They won't interface with each other during work.

If you want to use them on multiple computers, each with own scanner and receiver. Please set up barcode scanners follow below steps.

(1) Plug the USB receiver A into PC's USB port
(2) Scan the code "match" using scanner A to pair the scanner A with the receiver A.
(3) 30seconds after the USB receiver A is plugged (or unplug the receiver A), plug the USB receiver B into another PC's USB port
(4) Scan the code "match" using scanner B to pair the scanner B with the receiver B.

.....

Match



1.2. Max.32 Scanner - to - One USB receiver

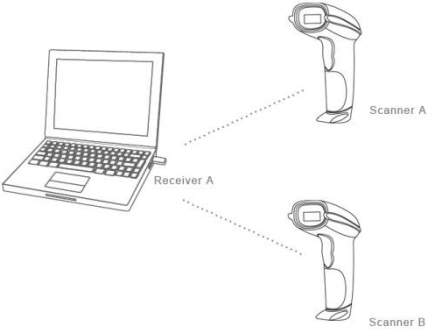
Multiple scanners transmit barcode to one USB receiver. One USB receiver can connect to 32 scanners at most.

Pairing operation:

(1) Plug the USB receiver A into PC 's USB port
(2) Scan the code "match" using scanner A to pair the scanner A with the receiver A
(3) Unplug the USB receiver A and plug it to PC 's USB port again
(4) Scan the code "match" using scanner B to pair the scanner B with the receiver A

...

Match



2. Upload Mode Setting

2.1. Instant Upload Mode : Read barcodes and upload it straight to the file you have opened.

** To set the scanner to upload barcode instantly, scan the following code:

Instant upload mode

Scanning indication:
(1) The blue led 3 flashes once and the buzzer emits a sound like "DI" when the barcode is uploaded successfully.
(2)The blue led 3 flashes once and the buzzer emits a sound like a slow "DI---en" when the barcode can not be uploaded.

Note 1:
The transmission speed between every character can be changed by scanning the following code. If some characters are missing, please set the scanner to lower transmission speed. The higher the value, the slower the speed is.
Please make sure that the USB receiver is plugged.

Speed 00 *

Speed 05

Speed 10

Speed 15

Speed 20

Speed 30

2.2. Storage Mode: Read barcodes and store the barcodes in scanner's own memory. You can upload the data to computer in batches when you need them. Internal storage saves up to 100,000 barcodes.

Note: In storage mode, the barcode will be stored in the scanner and will not come up on your computer instantly. The barcode comes up on your computer only when you scan the settings code "upload data"

** To convert scanner from "instant upload mode" to "storage mode", scan the following barcode "Storage mode ".

Storage mode

** Put the cursor in the blank, and then scan code below to upload data.

Upload data

** Put the cursor in the blank and then scan the code below to show total number of stored barcode.

Show total storage

** Scan the barcode "Zero clearing" to clear all stored barcode. (for storage mode only)

Zero clearing

Scanning indication:

(1) The blue led 3 flashes once and the buzzer emits a sound like a fast "DI-en" when the barcode is saved successfully in the built-in memory of the scanner

(2)The red led 2 flashes once and the buzzer emits a sound like a slow "DI---en" when

the barcode can not be saved in the built-in memory of the scanner. The space of memory is not enough and cannot store any more barcodes. Please upload the saved barcode by scanning the code "Upload Data" and then clear the saved barcode by scanning code "zero clearing".

Note 1:
In storage mode, the transmission speed between every barcode can be changed by scanining the following code. The higher the value, the slower the speed is.

Note 2:
If the character upload speed（on page 12-13） is set to a slower speed，and the barcode upload speed is set to a higher speed. When uploading data in storage mode, the data maybe be lost. If some character or barcode are missing, please set the scanner to lower barcode transmission speed.
Please make sure that the USB receiver is plugged.

Speed 000

Speed 005

Speed 010 *

Speed 040

Speed 050

Speed 060

3. Scanning Mode Setting

3.1. Manual Trigger mode (default) :
User Press the trigger, the scanner will emit a red laser to read the barcode. When user release the trigger, the red laser will go off.

** Scan the following codes to set the scanner to Manual trigger mode .

Manual trigger mode (default)

3.2. Continuous Scanning Mode

There’ s no need to click the trigger in this mode. The red laser of the scanner will be on all the time.

****** Scan the following codes to set the scanner to Continuous Scanning Mode.

Continuous Scanning Mode

4. Duplicate Barcode Detection

**If you scan the setup barcode” Same Barcode Detection-permanent ” the scanner can not upload the barcode it has read before unless scan different barcode and then go back ,or turn off the scanner and then turn it on.

**If you want the scanner able to read the same barcode at a certain time interval, you can choose an interval of 1 second, 2 seconds ... or a longer period of time, up to 25 seconds.

For example, ” Same Barcode Detection-2 seconds “, scanner will read the same barcode again after every 2 second. The calculation of time starts from scanning the bar code, regardless of whether the bar code is scanned successfully or not, it is calculated from the last scan.

** Scan ” Same Barcode Detection-Off ” to turn off this function.

Same Barcode Detection-permanent

Same Barcode Detection-1 second

Same Barcode Detection-2 seconds

Same Barcode Detection-3 seconds

Same Barcode Detection-4 seconds

Same Barcode Detection-5 seconds

Same Barcode Detection-10 seconds

Same Barcode Detection-15 seconds

Same Barcode Detection-25 seconds

Same Barcode Detection-Off

5. Beep Setting

**Scan one of the following barcodes to adjust the size of the decoding buzzer and startup sound.

Low volume

Medium volume

High volume (default)

Beep-Off

6. Interface Setting

6.1. USB-HID mode

In the HID protocol, there are 2 entities: the "host" and the "device".
The host communicates with the device and receives input data from the device on

actions performed by the human.
The most common example of a "host" is a PC.
The "device" is the entity that directly interacts with a human, such as a keyboard or mouse.

** To set the scanner as a keyboard to enter the barcode , please unplug the USB receiver and plug it in again, and then read the following code "USB_HID"

USB_HID

6.2. USB virtual COM mode

In USB virtual COM mode, the scanner needs to work with driver and serial software.

Expected final behavior is that even if you open up another page , the scanned information will show up in the window of serial software.

The scanned barcode won't come up on universal software like notepad, excel, word etc.

Please contact us if you need to set it to USB virtual COM mode, we will send you the driver and the serial software.

7. Identity Barcode Type

This setting is to identify what type of the barcode is, follow the below steps to confirm:

Situation 1: Scan the code "Add ID front-on" below, then scan your goal barcode, there

will be a character BEFORE the barcode you scanned, and this character states your Barcode Type. After that, if you don't need this prefix any more, please scan the code "Add ID front-Off (default)" to hide it.

Add ID front - ON

Scan Goal Barcode

Add ID front-Off

Barcode type	ID	Barcode type	ID
CODE 93	h	MSI/PLESSEY	l
CODABAR	k	EAN-8	d
UPC-A	b	EAN-13	e
UPC-E	c	INTERLEAVED 2/5	i
ISBN	f	CODE 11	m
CODE 39	a	CODE 128	g

8. Keyboard Language Setting

The scanner support 25 international keyboards:
You are suggested to set the keyboard type of the scanner to be in agreement with that in real use by scanning the correspondent barcode listed below.

UNITED STATES (default)

FRENCH

SERBIA/YUGOSLAVIA

BELGIUM

GERMANY

SLOVENIA

BRAZIL

HUNGARY

SPAIN

CANADIAN-FRENCH

ITALY

SWEDEN

CROATIA

SWITZERLAND (FRENCH)

NETHERLANDS

CZECHOSLOVAKIA (SLOVAK)

UNITED KINGDOM

POLAND

FINLAND

LATIN AMERICA

CZECHOSLOVAKIA (CZECH)

SWITZERLAND (GERMAN)

NORWAY

DENMARK

UNIVERSAL

PORTUGAL

9. Case Sensitivity Setting

The scanner can change all the letter cases of barcode into uppercase or lowercase.

Letter case of barcodes can be altered through scanning correspondent bar code below.

Note: Please deactivate caps lock on keyboard first.

All Capital

All lowercase

Swap Capital/ lowercase

Cancel capital/lowercase settings

10. Battery Level

To know how much electricity remains, put the cursor in the blank and then scan the following barcode.

Battery level

11. Power Off Settings

The scanner will be powered off if there is no operation on it over 2 minutes. Short press on the trigger can wake it up.

Scan one of the following barcode to set the time interval,when it's idle exceeding the time interval you set,the scanner will be power off.

20s Automatic power off

50s Automatic power off

5mins Automatic power off

30mins Automatic power off

Power off

Never power off

12. End Character Setting

By default, the scanner is sending a 'carriage return' after scanning a code (the same as pressing the 'enter' key) .

CR/ENTER (default)

CR+LF

Tab

Disable suffix

eg.

To add Carriage Return, please read code " Add Carriage Return"
To remove Carriage Return,please read code " disable suffix "

13. Barcode Types Able/Disable

The code ending with word "*" is the default settings.

UPCA:	
UPCA-On*	UPCA-Off
Show UPCA check digit*	Hide UPCA check digit
Show UPCA Leading digit*	Hide UPCA leading digit
UPCA to EAN13-On	UPCA to EAN13-Off*
UPCE	
UPCE-On*	UPCE- Off
Show UPCE check digit*	Hide UPCE check digit
Show UPCE leading digit*	Hide UPCE leading digit

UPCE to UPCA-On	UPCE to UPCA-Off*
EAN13	
EAN13-On*	EAN13-Off
Show EAN13 check digit*	Hide EAN13 check digit
EAN13 to ISBN-On	EAN13 to ISBN - Off*
EAN13 to ISSN - On	EAN13 to ISSN - Off*
EAN8	
EAN8 - On*	EAN8-Off
Show EAN8 check digit*	Hide EAN8 check digit
UPC/EAN Extra code	
UPC/EAN extra code-On	UPC/EAN extra code-Off*

CODABAR	
CODABAR-On*	CODABAR-Off
Show CODABAR start/stop digit	Hide CODABAR start/stop digit*
Show Code39 start/stop digit	Hide Code39 start/stop digit*
Code32	
Code32- On	Code32-Off*
Show Code32 check digit	Hide Code32 check digit*
Code128	
Code128-On*	Code128-Off
Code93	
Code93-On	Code93-Off*
Code11	
Code11-On	Code11-Off*

Industrial 2 of 5	
Industrial 2 of 5 -On*	Industrial 2 of 5 -Off
Interleaved 2 of 5	
Interleaved 2 of 5 -On*	Interleaved 2 of 5 -Off
MSI	
MSI-On	MSI-Off*
GS1-On	GS1-Off*

14. Insert and delete character

The barcode scanners permit special characters to be added at the beginning (prefix) or end (suffix) of the scanned barcode. The character also can be deleted.

First step: Scan one of the following setup code to choose the event.

Insert character

Delete character

Second step: Scan one of the following setup code to choose the barcode type.

All barcode type	UPCE
UPCA	EAN8
EAN13	ISBN/ISSN
Code39	Code128
Code93	Codabar
Interleaved 2 of 5	Industrial 2 of 5
MSI	Code11

China post	GS1D
GS1L	GS1E
Code32	

Note: if you do not choose the barcode type, the setting will take effect for all barcode type by default.

Third step : Scan one of the following setup code to choose the data group.

Group 1	Group 2
Group 3	Group 4
Group 5	Group 6
Group 7	Group 8

Note 1: if you do not choose the data group, the scanner will take "Data group 1" as default setting.

Note 2:

The data group is used to distinguish between different setting events.
it work on the following circumstances:

1). Differentiating the setting for different barcode types
2). Differentiating the setting for different position

Different events can take effect at the same time.

Example 1 :

If you want to put "A" before the Code39 type barcode, put "B" before the Code128 type barcode .
The setting steps is :
*Insert character> Code39>**Data group 1** > Before barcode> 065 A> Saving settings*
*Insert character> Code128>**Data group 2** > Before barcode> 066 B> Saving settings*

After that,
when the scanner read a Code39 barcode, it will add " A" before the barcode. When it read a Code128 barcode, it will add "B" before the barcode.
when it read other type barcode ,like UPC, it will not add any character.

Example 2:

If you want to insert tabs in the third, sixth and Eighth digits of the barcode
The setting steps is :
*Insert character > All barcode type > **Data group 1** > 003 ETX > 009 Tab > Saving settings*
*Insert character> All barcode type > **Data group 2** > 006 ACK > 009 Tab> Saving settings*
*Insert character> All barcode type > **Data group 3** > 008 Back Space > 009 Tab> Saving settings*

Fourth steps ： Scan one of the following setup code to choose the position

Before barcode

After barcode

Fifth steps ： Choose the character you want to add or the digit you want to delete.

Character table please refer to ASCII code table on page 34.

Note 1：
Ten characters can be added or deleted at most.

Note 2：
For the character deleting event, below is the corresponding deleting characters table.

001 SOH	One character
002 STX	Two characters
003 ETX	Three characters
004 EOT	Four characters
005 ENQ	Five characters
006 ACK	Six characters
007 BEL	Seven characters
008 Back Space	Eight characters
009 HT/TAB	Nine characters

010 LF	Ten characters

Sixth steps: Scan the below code to save the setting

Save setting

To remove the insert setting, scan the following code in order

Insert character

Clear setting

To remove the insert setting, scan the following code in order

Delete character

Clear setting

Insert or delete operation for example

In the process of setting, scan the irrelevant barcode, the scanner will exit setting status.

Example 1: Insert character: 123456789(Code128)

Insert Ab before barcode	Insert Cd after the third digit of the barcode	Insert Ef after barcode
1, Insert Characters		
2, All barcode types		
3, Data Group 1		
4, Before barcode	003 ETX	After Barcode
5, 065 A	067 C	069 E
6, 098 b	100 d	102 f
Each data group can insert within 10 characters		
7, Save Settings		
Setup result		
Ab123456789	123Cd456789	123456789Ef
Removal of insert character settings, Please scan in turn	Insert Characters	Clear settings

Ⅰ: Can set different bar code type, make this setting to this kind of bar code is effective

Ⅱ: Can set different data group, make different Settings take effect at the same time

Example 2：Delete Character, 123456789(Code128)

Delete one digit before barcode	Delete two digit after the third digit of the barcode	Delete three digit after barcode
1, Delete characters		
2, All barcode types		
3, Data Group 1		
4, Before barcode	003 ETX	After Barcode
5, 001 SOH	002 STX	003 ETX
6, Save Settings		
Setup result		
23456789	1236789	123456
Removal of delete character settings, Please scan in turn	Delete characters	Clear settings

Ⅰ：Can set different bar code type, make this setting to this kind of bar code is effective

Ⅱ：Can set different data group, make different Settings take effect at the same time

ASCII Table

000 NUL/SP	001 SOH	002 STX
003 ETX	004 EOT	005 ENQ
006 ACK	007 BEL	008 Back Space
009 HT/TAB	010 LF	011 VT
012 FF	013 CR/ENTER	014 SO
015 SI	016 DLE	017 DC1
018 DC2	019 DC3	020 DC4
021 NAK	022 SYN	023 ETB
024 CAN	025 EM	026 SUB
027 ESC	028 FS	029 GS
030 RS	031 US	032 SP
033 !	034 "	035 #
036 $	037 %	038 &
039 '	040 (	041)
042 *	043 +	044 ,
045 -	046 .	047 /

048 0	049 1	050 2
051 3	052 4	053 5
054 6	055 7	056 8
057 9	058 :	059 ;
060 <	061 =	062 >
063 ?	064 @	065 A
066 B	067 C	068 D
069 E	070 F	071 G
072 H	073 I	074 J
075 K	076 L	077 M
078 N	079 O	080 P
081 Q	082 R	083 S
084 T	085 U	086 V
087 W	088 X	089 Y
090 Z	091 [	092 \
093]	094 ^	095 _

096 `	097 a	098 b
099 c	100 d	101 e
102 f	103 g	104 h
105 i	106 j	107 k
108 l	109 m	110 n
111 o	112 p	113 q
114 r	115 s	116 t
117 u	118 v	119 w
120 x	121 y	122 z
123 {	124 |	125 }
126 ~	127 DEL	128 F1
129 F2	130 F3	131 F4
132 F5	133 F6	134 F7
135 F8	136 F9	137 F10
138 F11	139 F12	140 l_Shift on
141 l_Shift off	142 r_Shift on	143 r_Shift off

144 l_Alt on	145 l_Alt off	146 r_Alt on
147 r_Alt off	148 l_Ctrl on	149 l_Ctrl off
150 r_Ctrl on	151 r_Ctrl off	152 /(KP)
153 *(KP)	154 -(KP)	155 +(KP)
156 _(KP)	157 Enter(KP)	158 0(KP)
159 1(KP)	160 2(KP)	161 3(KP)
162 4(KP)	163 5(KP)	164 6(KP)
165 7(KP)	166 8(KP)	167 9(KP)
168 Inert	169 Delete	170 Home
171 End	172 Page Up	173 Page Down
174 Up	175 Down	176 Left
177 Right	178 Center	179 Insert
180 Delete	181 Home	182 End
183 Page Up	184 Page Down	185 Up
186 Down	187 Left	188 Right
189	190 Num Lock	191 caps lock
192 scroll lock		

FCC Caution.

a、§ 15.19 Labeling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

b、§ 15.21 Changes or modification warning.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

c、§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.