## Bur3105

# 2D Barcode Scanner User Manual 

Service mailbox

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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.

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 Email:
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## Product Specification

| Model-Number | Bur3105 |
| :---: | :---: |
| Connection | 433 MHz Wireless |
| Memory | $2 \mathrm{M}=10000$ barcodes |
| Battery capacity | 2200mAh |
| Voltage | DC 5V |
| Standby current | 18uA-5mA |
| Charging power | $5 \mathrm{~V}-400 \mathrm{~mA}$ |
| Printing Contract | >25\% |
| Light source | 617 nm LED |
| LED life | 12000 hours |
| Button life | 8000,000 times |
| Sensor | $640 * 480 \mathrm{CMOS}$ |
| Illumination | 6500K LEDs |
| Indication | Buzzer \& LED |
| Resolution | 3 mil |
| CPU | ARM 32-bit Cortex |
| Printing Contract | >25\% |
| Decoding speed | 500 times/sec |
| Scanning angle | Angle of rotation $360^{\circ}$, inclination $\pm 65^{\circ}$, declination $\pm 60^{\circ}$ |
| Anti-interference | 0-100000Lux Max |
| Drop test | 2.0 m |
| Certificate | CE, FCC, RoHS, IP54 |
| Applicable 1D barcode | UPC-A, UPC-E, EAN-8, EAN-13, Code 128, Code 39, Code 93, Code 11, Interleaved 2 of 5, Standard 2 of 5, Industrial 2 of 5,Coda bar MSI , etc. |
| Applicable 2D barcode | QR Code, Data Matrix, PDF417, Aztec code, Maxicode, etc |

## Packing List

-Bar code scanner*1
-USB cable*1
-Instruction manual*1
-USB base station*1

## LED Description



Pink led 1: charging indicator
During charging, the pink led 1 is flashing all the time.
When the pink led 1 is off, it is fully charged.

Red led 2: Low power indicator
The red led 2 flashs three times when the battery is running low.

## Blue led 3: decoder indicator

Pull the trigger once, the blue led 3 flashes once.

Green led 4: contact status indicator The scanner is in good contact with the base electrode, the green led 4 is on.

If the green led 4 is off, the contact isn't qood.

Blue led 5: Base receiving status indication The blue led 5 is always on, it means the base can receive data. The base receives one bar code and the blue led 5 flashes once.

If the blue led 5 is flashing all the time, then the base can not receive data.

## Set Up Step

The scanner has been paired with the base station, 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 base station into the USB port of computer. The USB base station' $s$ 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 base station and plug it in again

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


1. Resrore default

2. Instant upload mode
. ntant upload mode

3. Match

4. 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 $\mathbf{i}$ 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 30.

Example 2, The original barcode is " abc12345" , the scanning result is " $+\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D} 12348$ ", the scanner put " + " between character.

Solution: Please scan the code "Code 39 FULL ASCII-On" on page 33.
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 end character" 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 39-35)

| "Insert character" | (on page 39) |
| :--- | ---: |
| "All barcode type" | (on page 39) |
| "Data group 1" | (on page 41) |
| "After barcode" | (on page 42) |
| "013 CR/ENTER" | (on page 49) |
| "013 CR/ENTER" | (on page 49) |
| "Save settings" | (on page 43) |

Q7. Is there a way to make the scanner work with a white print on a black background? Answer: To set the scanner to read white bar code on black ground, please scan the code "White in black background - On" on page 28, 37, 38.

## Troubleshooting

| Problem | Possible Reason | Solution |
| :---: | :---: | :---: |
| Insert the USB base station into the PC 's USB port, the base station' $s$ blue led 5 is flashing all the time. | No driver in the computer. | Update USB driver |
|  | The USB port is broken. | Connect the base station to another computer to see it works. |
|  | The base station or the cable is broken. | Contact us for replacement. |
| Put the scanner on the base station, the green led 4 does not turn on. | bad contact of electrode. | Contact us for replacement. |
| Power on the scanner, 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. | Charge the scanner |
| The scanner can not hold the charge. | The PC's USB port is broken. | Connect the base station ot anther USB port for charging. |
|  | The base station or USB cable is broken. | Contact us 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 broken.

The scanner failed to match the USB base station.

Scanner and USB base station are all in good condition. But the barcode can not be sent to computer.

The scanner was set to storage mode, scanned data will be kept in the buff er of scanner

The scanner was set to USB virtual com.

Contact us for the replacement

Unplug the base station and plug it in to $\mathrm{PC}^{\prime}$ s USB port, within 30 seconds scan the following codes in order:

"Resrore default" "match"<br>"instantly upload mode" "USB_HID"

## Optional Function settings

Settings of the bar code scanner can be changed by scanning the setup bar codes included in this manual.

## 1. Pairing Mode Setting (for wireless mode only)

### 1.1 One scanner to one USB receiver:

One scanner only transmits bar code to one USB receiver.

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


Match
Pairing indication:
(1) If the pairing succeeds, the buzzer beeps "DI da" "di di di"
(2) If the pairing failed, the buzzer beeps "DI---en"

NOTE: 30 seconds after the USB receiver is inserted, the scanner cannot match the USB receiver. If the pairing failed, 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 follow the steps.
(1) Plug the USB receiver A into $\mathrm{PC}^{\prime}$ s USB port.
(2) Scan the code "match" using scanner A to pair the scanner A with the receiver A.
(3) 30 seconds after the USB receiver $A$ is plugged, 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

base B

scanner B

### 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 USBreceiver 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

base A

scanner B

## 2. Upload Mode Setting

### 1.1. 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 buzzer rang "DI" when the barcode is uploaded successfully.
(2) The buzzer rang a slow "DI---en" when the barcode can not be uploaded.

If some character are mixed up, please set the scanner to lower transmission speed. The transmission speed between every character can be changed by scanning the following code. The higher the value, the slower the speed is.


Speed 30


Speed 15


Speed 40


Speed 50


Speed 60

### 1.2. Storage Mode

Read bar codes and store the bar codes in scanner' s own memory. You can upload the data to computer in batches when you need them. Internal storage saves up to 1,0000 bar codes.

Note: In storage mode, the bar code will be stored and will not come up on your computer instantly. The bar code 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 bar code "Storage mode ".


Storage mode
** To upload data from memory, put the cursor in the blank, and then scan the Upload Data ' barcode, it will upload all the stored barcode at a time.


Upload data
** To show total number of stored bar code, put the cursor in the blank, and then scan the "Show total storage" bar code. It will out put "TotalCounters: $x x^{\prime \prime}$.


Show total storage
** Scan the barcode "Clear data" to clear all the stored barcode. (for storage mode only)


Clear data

Scanning indication:
(1) The buzzer rang a fast "DI-en" when the barcode is saved successfully in the built-in memory of the scanner
(2)The buzzer rang 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: In storage mode, the transmission speed between every barcode can be changed by scanning the following code. If some barcodes are missing, please set the scanner to lower transmission speed.

The higher the value, the slower the speed is.



Speed 002


## 3. Scanning Mode Setting

Three kinds of scanning modes are supported.

### 3.1. Manual Trigger mode (default) :

Press the trigger, the scanner will emit light and read the barcode. Release the trigger, the scanner will stop reading barcode and the light 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 light of the scanner will be on at a certain frequency.
The red scanning light will go off once the scanner scans barcode successfully and the scanner will enter into next scanning automatically after a intermittent time. And the red scanning light of the scanner will be on again once the waiting time passes
** Scan the following codes to set the scanner to Continuous Scanning Mode.


Continuous Scanning Mode

### 3.3. Auto-induction Mode

There' s no need to click the trigger under the Auto-induction Mode. Users just need to move the barcodes in front of the scanner. A red light band will show up to read the barcode.

The red light band will go off once the scanner scans barcode successfully or pre-set timeout expires.
** Scan the following codes to set the scanner to Auto-induction Mode .


Auto-induction Mode
** Scan one of the following codes to select the induction sensitivity.


High sensitivity (default)

Note: In Auto-induction Mode. It will be better to set the scanner out to be longer stand-by time interval. Please refer to the instruction on page 25 .

## 4.Anti-duplication Setting

In continuous scanning mode or auto-induction mode, maybe the same bar code is read two or more times.

Here are two ways to avoid this problem.

Method1. Turn on the Anti-duplication function
** Scan the following code to turn on Anti-duplication function.

If you turn on the function, the scanner can not upload the barcode it has read before.


Anti duplication - ON
** Scan the following code to turn off Anti-duplication function.


Anti-duplication-Off

Method 2 : Set the time interval.
** Scan one of the following code to set the time interval.
After reading a bar code, at the pre-set time interval, the scanner can not read the same bar code.

The scanner can read the same bar code only when pre-set time interval passes.


## 5.Battery Remaining

To show up how much the Battery is left, put the cursor in the blank, and then scan the following barcode. It will output "DumpEnergy: xx\%" .


[^0]
## 6. Aiming \& LED Light Setting

### 5.1 Aiming Mode

The red beam that projected by the scanner can help user to find out the best reading distance.

Normal mode: red beam appears when the user press the trigger Always on : red beam always appears when the scanner is electrified ** Scan one of the following code to select the Aiming mode



Always on

### 5.2 White LED light Mode

The white beam offers auxiliary lighting for reading.
When the white beam projects on the target object, it can improve the decoding performance and the adaptability of weak ambient light.

Normal mode: white beam appears when the user press the trigger Always on : white beam always appears when the scanner is electrified ** Scan one of the following code to select the led light mode


Normal mode(default)


Always on

## 7. Case Sensitivity Setting

The scanner can change all the letter cases of barcode into uppercase or lowercase. It takes "Not to Alter the Letter Case of barcodes" as default, letter case of barcodes can be altered through scanning correspondent bar code below.

Note: Please deactivated caps lock on keyboard first.
** Scan one of the following code to select the letter case


All upper case


Swap upper case/ lower case


All lower case


Not altering the Letter Case (default)

## 8. Identify Barcode Type

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

Scan code "Add Code ID " 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 ID any more, scan the code "Turn off ID (default)" to hide it.


Add Code ID


Turn off ID (default)

## Code ID

A
Barcode Type

B
UPC-A, UPC-E, EAN-8, EAN-13
Code 39
C
Codabar
D
Code 128
E
Code 93
F
Interleaved 2 of 5
H
I
N
P

Q
CODE11
MSI
GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded PDF417
DataMatrix(DM)
R
QR
S
Aztec Code
Maxi Code

## 9. Frequently-used End Character Setting

By default, the scanner is sending a 'carriage return' after scanning a code (the same as pressing the 'enter' key).
To add TAB Key, please scan the code " TAB"


Disable end character


Carriage Return \& Line-Feed


Carriage Return


TAB

## 10. Beep Setting

**Scan one of the following bar code to select the decoding beep mode


Beep-Off


Medium volume


Low volume


High volume -Default
** Scan one of the following barcode to select the booting beep mode


Beep-Off


Medium volume


Low volume


High volume -Default

## 11. Interface Setting

### 11.1 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.

If you want to set the scanner as a keyboard to enter the barcode, please read code "USB_HID"


USB_HID

### 11.2 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.

Please let us know if you need to set it to USB virtual COM mode, we will send you the driver.

## 12.Stand-by Setting

By default, it is set to be 1 minutes. The scanner will enter into stand-by mode if there is no operation on it over 1 minutes. In stand-by mode, the CPU is still working. 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 enter into stand-by mode.

** Scan the following code to power off the scanner. The electricity consumption is 0 .


Power off

## 13.Keyboard Language Setting

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


BRAZIL


FRANCE


BELGIUM


DENMARK


GERMANY


HUNGARY


ITALY


NETHERLANDS


SLOVENIA


CROATIA


PORTUGAL


SERBIA/YUGOSLAVIA


CANADIAN-FRENCH


CZECHOSLOVAKIA (CZECH)


SWITZERLAND (GERMAN)


CZECHOSLOVAKIA (SLOVAK)


POLAND


UNIVERSAL

## 14.Enable / Disable Barcode Type

One-dimensional code


1D code (white in black background)


White in black background-On
UPC-A


UPCA Check digit-On*


UPCA Check digit-Off

UPC-E


UPCE Check digit-On*


EAN-8


EAN-13


EAN13-On*


## UPC/EAN Extra Code



Code 128


Code128-Off

Interleaved 2 of 5


Interleaved 2 of $5-$ On, Code1


Interleaved 2 of 5-On, Code2

Note: To enable it to read the interleaved 2 of 5 code, please read the 2 setting code above orderly.

Interleaved 2 of 5-Off*


Interleaved 2 of 5 check digit-On


Interleaved 2 of 5 check digit-Off*

## Matrix 2 of 5



Matrix 2 of $5-$ On, code 1


Matrix 2 of 5-On, code 2

Note: To enable it to read the Matrix 2 of 5, please read the 2 setting code above orderly.


Matrix 2 of 5-Off*


Matrix 2 of 5 check digit-On


Matrix 2 of 5 check digit-Off*

Industrial 2 of 5


Industrial 2 of 5-On, code 1

Note: To enable it to read the Industrial 2 of 5code, above orderly.


Industrial 2 of 5-Off*

Standard 2 of 5


Standard 2 of 5-On, code1


Standard 2 of 5-On Code2

Note: To enable it to read the Standard 2 of 5 code, please read the 2 setting code above orderly.


Standard 2 of 5-Off*


Standard 2 of 5 check digit-On


Standard 2 of 5 check digit-Off*

Code 39


Code39-On*


Code39 Full ASCII-On


Code39 start\&stop digit -On


Code 39 check digit-On


Code39 Full ASCII-Off*


Code39 start\&stop digit -Off*


Code39 check digit-Off*


Code39 any length string-On

Code 93


Code 11


Code11 check digit-On


Code11 check digit-Off*

ITF14


ITF14-On


ITF14-Off*


ITF14 Check digit-On


ITF14 Check digit-Off*

Codabar


MSI


Note: To enable it to read the MSI code, please read the 2 setting code above orderly.


## PLESSEY



Plessey-On


Plessey-Off*

GS1-128


GS1-128-On*


GS1-128-Off*

GS1-Databar


GS1-Databar-Off*

Code 32


Code32-On


Code32 prefix A-on


Code32 prefix A-Off*

QR code


White in black background-On

## Data Matrix



Data Matrix-On*


White in black background-On


White in black background-Off*


White in black background-Off*

PDF 417



White in black background-On


White in black background-Off*

Aztec code


Maxi Code


## 15. 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.


Second step: Scan one of the following setup code to choose the barcode type. Note: if you do not choose the barcode type, the setting will take effect for all barcode type by default.


All barcode type*

Coda bar



UPC\&EAN


Code128


Code39


Code93


Interleaved 2 of 5


GS1-Databar


Aztec Code


Matrix 2 of 5


Code11


Data Matrix


Maxi Code


MSI


QR


Industrial 2 of 5, ITF14


Bookland EAN/ISBN,ISSN


PDF417

Third step : Scan one of the following setup code to choose the data group. Note 1: if you do not choose the data group, the scanner will take "Data group 1" as default setting.


Data group 1*


Data group 5


Data group 2


Data group 6


Data group 3


Data group 7


Data group 4


Data group 8

## 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).Distinguish add / delete prefix or suffix

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 charater>Code39>Data group $1>$ Before barcode> 065 A> Saving settings
Insert charater>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 put " $A$ " before barcode, put " $B$ " after barcode.
The setting steps is :
Insert charater > All barcode type > Data group $1>$ Before barcode $>065$ A > Saving settings
Insert charater> All barcode type > Data group $2>$ After barcode > 066 B> Saving settings

After that,
when the scanner read barcode 123456789, the barcode received by the computer will be A123456789B.

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 see page 44.

## 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

Note: In the course of character setting, if other unrelated barcodes are scanned, the scanner will exit the character setting.

Insert character operation example

Original barcode : 123456789
|||||||||||||||||||||

|  | Insert A before barcode | Insert C after third bits of barcode | Insert E after barcode |
| :---: | :---: | :---: | :---: |
| Step <br> 1 | Insert character | Insert character | Insert character |
| Step <br> 2 | All barcode type | All barcode type | All barcode type |
| Step <br> 3 | Data group 1 | Data group 1 | Data group 1 |
| Step <br> 4 |  |  | After barcode |


| Step <br> 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Step <br> 6 |  | Save setting | Save setting |
| Result: | A123456789 | $123 C 456789$ | 123456789 E |

If you want to clear the previous inserted character, please scan the following codes orderly:


Insert character


Clear setting

## Delete character operation example

Original barcode : 123456789

## ||||||||||||||||||||

| Delete one character |
| :---: | :---: | :---: | :---: | :---: |
| before barcode | | Delete two character |
| :---: |
| after third bits of |, | Delete three character |
| :---: |
| after barcode |


| $\begin{gathered} \text { Step } \\ 4 \end{gathered}$ |  |  | After barcode |
| :---: | :---: | :---: | :---: |
| Step 5 | @09001@ 001 SOH |  | 003 ETX |
| $\begin{aligned} & \text { Step } \\ & 6 \end{aligned}$ |  |  | Save setting |
| Result: | 23456789 | 1236789 | 123456 |

If you want to cancel the previous deleted character, please scan the following codes orderly:

delete character


Clear setting

ASCLL Barcode Table


003

006 ACK



001 SOH


004 EOT


007 BEL


008 Back Space


012 FF


015 SI

@09013@
013 CR/ENTER


016 DLE



024 CAN


027 ESC



022 SYN


026 SUB


031 US




037 \%


042


@09046@
046


051


0546



057 9


058

@09061@
$061=$



064
@


066 B


072 H

@09073@
073


074 J


@09084@
084 T


087 W


090
Z


082 R


085 U


091


092


096


099


101


102 f


103
104 h


105


108 I


111
-


114 r


106 j


109 m


112 p


115 s


107 k


110 n


113 q


116 t


117 u


120 x


123


126


118


121 y


124


127 DEL


128 F1


129 F2


132 F5



130
F3


133
F6


136 F9


139 F12


131 F4


134 F7


137
F10

138 F11




140 I_Shift on


141 I_Shift off


142 r_Shift on


143 r_Shift off


144 I_Alt on


147 r_Alt off


150 r_Ctrl on

@09145@
145 I_Alt off


148 I_Ctrl on


151 r_Ctrl off


152 /(KP)


156 _(KP)


162 4(KP)



154 -(KP)

@09157@
157 Enter(KP)


163 5(KP)


158 0(KP)


164 6(KP)


168 Inert


171 End


174 Up

@09166@
166 8(KP)


169 Delete


172 Page Up


175 Down


176 Left


180 Delete


183 Page Up



178 Center


182 End


185 Up


187 Left


188 Right

<br>190 Num Lock



192 scroll lock


[^0]:    Battery Reserve

