AS-8060

Barcode Scanner

User Manual

http://www.argox.com

Version: 1.7

Regulatory Compliance

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Note: All brands and trademarks are the property of their respective owners.

Note: The specifications contained herein are subject to change without notice.

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

設備名稱：條碼閱讀器 Equipment name　　型號（型式）：AS-8060 Type designation (Type)

單元Unit	限用物質及其化學符號（Restricted substances and its chemical symbols）					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
印刷電路板組件	—	○	○	○	○	○
機殼	○	○	○	○	○	○
線材	○	○	○	○	○	○
掃描模組	—	○	○	○	○	○

備考1. 「○」係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 1：“○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考2. 「－」係指該項限用物質為排除項目。

Note 2：The “–” indicates that the restricted substance corresponds to the exemption.

Contents

Introduction

Your AS-8060 is a 1D CCD scanner that has been configured at the factory with default settings.

Since many host systems have unique formats and protocol requirements, Argox provides a wide range of configurable features that may be selected using this bar code based configuration tool. Once the configuration is completed, the scanner stores the settings in nonvolatile memory. The embedded memory saves the settings when the power is turned off.

Turn off the computer's power before connecting the scanner, and then power up the computer once the scanner is fully connected.

You can change a parameter value in the way described below:

✧ Scan the appropriate bar codes in this guide. These new values replace the standard default values in memory.

NOTE: ***Most computer monitors allow scanning the bar codes directly on the screen. When scanning from the screen, be sure to set the document magnification to a level where you can see the bar code clearly, and bars and/or spaces are not merging.***

Application Field:

- ✓ Jewelry Tag
- ✓ Manufacturing
- ✓ Transportation & Logistics
- ✓ Healthcare

Feature:

- ➢ Rich to make daily work simple and easy
- ➢ 2500 pixels CCD image sensor
- ➢ Scan Speed≧270 times/sec
- ➢ Max. reading resolution: 3mil (0.0762mm)
- ➢ Depth of Field: 15~330mm (EAN, 13mil/0.33mm, PCS 90%)
- ➢ Drop resistance: 1.5 meters onto the concrete
- ➢ Auto-sensing (presentation) mode available

※ *Just scan the Presentation Mode barcode on the Stand to easily switch to presentation mode for the AS-8060 scanner.*

Presentation Mode Barcode

Unpacking

Make sure all of the following items are included in your package.

- ✓ Scanner x1
- ✓ Stand x1
- ✓ Quick Start Guide x1
- ✓ USB Cable x1

When you receive your scanner, open the package immediately and inspect for shipping damage. If you discover any damage, contact the shipping company and file a claim. Argox is not responsible for any damage incurred during shipping. Save all package materials for the shipping company to inspect.

Note If any item is missing, please contact your local dealer.

Get started

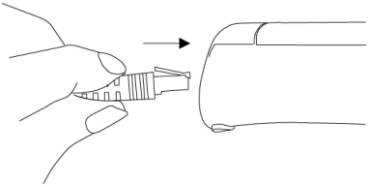
This chapter provides information about how to install, connect and use your scanner to do your work.

Installation

This section describes how to set up your scanner.

Set up your scanner

1. Plug the RJ45 connector into your scanner's RJ45 port, until you hear a click.



2. Connect the USB connector to your computer.
3. Turn on your computer. It detects your scanner automatically.
4. To test your scanner, start a text processing program like Notepad or Microsoft Word. Scan a bar code and see if the data can be sent to your computer. If it's successful, you'll hear a beep and the bar code data shows in the program.

How to scan

AS-8060 emits a light bar when it is scanning. To scan a barcode, make sure the aiming beam crosses every bar and space of the barcode. This bar needs to cross the bar code horizontally to decode it.

Controls and settings

Customize your scanner to work efficiently. AS-8060 offers many features to match your preferences. This chapter provides information about how to change controls and settings of your scanner.

Version information setting code

Version (custom)

000A0

Display internal string (custom)

000A1

Display serial number (custom)

000A2

Factory default

000B0

Enable the code setting function

09990

Disable the code setting function

09991

Interface mode setting code

AS-8060 supports USB HID and virtual COM. By default, your scanner is able to detect the interface automatically. When it detects USB, it selects HID as your scanner's interface.

USB-HID (Default)

000602

USB Virtual Com

000603

Note: If you use the scanner that communicates with your computer via a serial interface (e.g. COM1...COM8), but your computer does not have any serial port, you will require a so-called virtual COM port driver. This virtual COM port driver allows you to assign a virtual COM port connection number to your computer connected via a USB port and enables bidirectional communication between your computer and this scanner.

To download the USB virtual COM port driver of AS-8060 scanner, go to the Argox global website (http://www.argox.com/).

After downloading the driver, start to install it. When you finish installing the driver, it is suggested to restart your computer. The system will automatically detect the scanner.

Scan mode setting code

Trigger mode (default)

013340

Continuous scan mode

013344

Presentation mode

013380

Key delay

013342

Single not triggered

013341

Key delay not triggered

013343

Auto flashing

013345

Sound setting code

Sound on (default)

014201

Sound off

014200

Buzzer frequency 2048

0145800

High volume sound

014300

Low volume sound

014301

Buzzer frequency 2731

0145AAA

Character delete / insert / replacement setting

Code ID off (default)

01400

Code ID on

01401

Rear code ID on

01402

Display code front character (default)

0201x

Hide code front blank

0200[SPACE]

Display code rear character (default)

0203

Hide code rear character n
(“n” indicates a blank key.)

0202[SP]

Display characters inside code
(default)

0205-

Hide – inside code

0204-

Disable A replace 0 in code
(default)

020600

Enable A replace 0 in code

02060A

Display rear characters (default)

023300

Hide rear 4 characters

023304

Hide rear 5 characters

023305

Hide rear 1 characters

023301

Display front characters (default)

023400

Hide front 4 characters

023404

Hide front 5 characters

023405

Display middle characters (default)

023900

Hide 5 middle characters

023905

Forward start from 4th character

024004

FUNC1 replace with 1

0160049

FUNC2 replace with 2

0161050

FUNC3 replace with 3

0162051

FUNC4 replace with 4

0163054

Disable enter replace (default)

0182013

Enter replace with 5

0182055

Serial port setting

Baud rate 600bps

000701

Baud rate 1200bps

000702

Baud rate 2400bps

000703

Baud rate 4800bps

000704

Baud rate 9600bps (default)

000705

Baud rate 19200bps

000706

Baud rate 38400bps

000707

Baud rate 57600bps

000708

Baud rate 115200bps

000709

Serial Port: No Check

001200

Serial port: XON/OFF

001201

Serial port: RTS/CTS

001202

Serial port handshake timeout 2s

0013020

Serial port handshake timeout 5s

0013050

Serial port 8-bit data

00080

Serial port 7-bit data

00081

Serial port 1 stop bit

00090

Serial port 2 stop bits

00091

Serial port No parity check

001000

Serial port odd parity check

001001

Serial port even parity check

001002

Normal function setting code

Enable upload setting barcodes

02501

Disable upload setting barcodes (default)

02500

FUNC cast light upon cancel (default)

01640

Disable change

02510

All uppercase

02511

All lowercase

02512

Uppercase interchange with lowercase

02513

Enable command beep

01411

Disable command beep

01410

Forward image identify (default)

00161

Reverse image identify

00160

Fastest transmit rate

001500

Medium transmit rate (default)

001502

Lower transmit rate

001504

Lowest transmit rate

001506

Prefix / suffix setting

CR

0212@\r

CR+LF

0213@\r\n

All barcodes (rear) add ETX

0211@[ETX]

All barcodes (front) add F2

02160081

All barcodes (rear) add F2

02110081

Cancel all barcodes (rear) format character

0210@

Add STX before barcodes

0217@[STX]

Cancel all boots before barcodes

0215@

Add prefix

02240

Add suffix

02241

Exit add pre/suffix Mode

02242

Clear all prefix

02220

Clear all suffix

02200

Enter hidden front character mode

02340

Enter hidden rear character mode

02341

Enter hidden middle character mode

02342

Enter the hidden Nth character mode

02343

Multi-language setting code

English (default)

0005000

Canada (French)

0005001

Dutch (Netherlands)

0005002

Spain (Spanish)

0005003

Argentina (Latin American)

0005004

Brazil (Portuguese)

0005005

Denmark (Danish)

0005006

UK (English)

0005007

Italy (Italian142)

0005008

France (French)

0005009

German (Germany)

0005010

Norway (Northern Sami)

0005011

Sweden, Finland
(Swedish, Finnish)

0005012

Slovak (Slovakia)

0005013

Portuguesa (Portuguese)

0005014

Czech Republic (Czech)

0005015

Belgium (Dutch)

0005016

Turkey-F

0005017

Turkey-Q

0005018

Poland (Polish214)

0005019

Switzerland (German, French)

0005020

Croatia (Srb-Crt)

0005021

Hungary (Hungarian)

0005022

Japan (Japanese)

0005023

Russia (Russian)

0005024

Arabic (Egypt)

0005025

Character table

(For adding pre/suffix)

1001
SOH

1003
ETX

1002
STX

1004
EOT

1006
ACK

1005
ENQ

1007
BEL

1009
TAB

1008
Backspace

1010
Line

1012
FF

1011
VT

1013
Enter

1015
SI

1014
SO

1016
DLE

1018
DC2

1017
DC1

1019
DC3

1021
NAK

1020
DC4

1022
SYN

1024
CAN

1023
ETB

1025
EM

1027
ESC

1026
SUB

1028
FS

1030
RS

1029
GS

1031
US

1033
!

1032
SPACE

1034
“

1036
$

1035
#

1037
%

1039
‘

1038
&

1040
(

1042
*

1041
)

1043
+

1045
-

1044
,

1046

.

1048

0

Note: Used to set address/prefix/suffix

1047

/

1049

1

Note:
Used to set address/prefix/suffix

1051

3

Note:
Used to set address/prefix/suffix

1050

2

Note:
Used to set address/prefix/suffix

1052

4

Note:
Used to set address/prefix/suffix

1054

6

Note:
Used to set address/prefix/suffix

1053

5

Note:
Used to set address/prefix/suffix

1055

7

Note:
Used to set address/prefix/suffix

1057

9

Note:
Used to set address/prefix/suffix

1056
8
Note: Used to set address/prefix/suffix

1058
:

1060
<

1059
;

1061
=

1063
?

1062
>

1064
@

1066
B

1065
A

1067
C

1069
E

1068
D


1070
F


1072
H


1071
G


1073
I


1075
K


1074
J


1076
L


1078
N


1077
M


1079
O


1081
Q


1080
P


1082
R


1084
T

1083
S

1085
U

1087
W

1086
V

1088
X

1090
Z

1089
Y

1091
[

1093
]

1092
\

1094
^

1096
`

1095
_


1097
a


1099
c


1098
b


1100
d


1102
f


1101
e


1103
g


1105
i


1104
h


1106
j


1108
l


1107
k


1109
m


1111
o

1110
n

1112
p

1114
r

1113
q

1115
s

1117
u

1116
t

1118
v

1120
x

1119
w

1121
y

1123
{

1122
z


1124
|


1126
~


1125
}


1127
Delete


1129
F2


1128
F1


1130
F3


1132
F5


1131
F4


1133
F6


1135
F8


1134
F7


1136
F9


1138
F11

1137
F10

1139
F12

1141
HOME

1140
INSERT

1142
Page up

1144
END

1143
Delete

1145
Page down

1147
Left arrow

1146
Right arrow

1148
Down arrow

1149
Up arrow

Enable / disable barcodes

Enable code39

00221

Disable code39

00220

Code39 ID as m

0031m

Enable code39 Full ASCII (default)

00231

Disable code39 Full ASCII

00230

Disable code39 MOD43 Check (default)

00240

Enable code39 MOD43 Check

00241

Enable code39 transmit check

00251

Disable code39 transmit check

00250

Disable code39 transmit “*” (default)

00280

Enable code39 transmit “*”

00281

Disable code32 (default)

01950

Enable code32

Note: It will affect code39.

01951

Code39 TAB Mode

0212M\t

System characters hiding code32

01961

System characters sending code32

01960

Setting the CODE39 to a min. length of 1

Software version available before and after V7.53

003201

Setting the CODE39 to a min. length of 2 (default)

Software version available before and after V7.53

003202

Setting the CODE39 to a min. length of 3

Software version available before and after V7.53

003203

Code39 min. length 1 (software version available before V7.53)

00321

Code39 min. length 2 (default)

Software version available after V7.53

00322

Code39 min. length 3

Software version available after V7.53

00323

Enable UPC-A (default)

00341

Disable UPC-A

00340

UPC-A ID as e

0049e

Enable UPC-A change to EAN-13

00391

Disable UPC-A change to EAN-13 (default)

00390

Transcribe the Transmit UPC-A check digit (default)

00421

No-transmit UPC-A check digit

00420

UPC-A display system digit

00400

UPC-A hide system digit

00401

Enable UPC-E (default)

00351

Disable UPC-E

00350

UPC-E ID as f

0050f

Enable UPC-E change to UPCA

00381

Disable UPC-E change to UPC-A (default)

00380

UPC-E hiding system characters

00431

UPC-E sending system characters

00430

UPC-E sending check digits

00441

UPC-E not sending check digits

00440

Enable EAN-13 (default)

00361

Disable EAN-13

00360

EAN-13 ID as d

0051d

Transmit EAN-13Check digit (default)

00461

No-transmit EAN-13 check digit

00460

Enable EAN-13 change to ISBN

00481

Disable EAN-13 change to ISBN (default)

00480

Enable EAN-13 change to ISSN

01501

Disable EAN-13 change to ISSN (default)

01500

Enable EAN-13 multiple verify

00541

Disable EAN-13 multiple verify (default)

00540

Enable EAN-8 (default)

00371

Disable EAN-8

00370

EAN-8 ID as c

0052c

EAN-8 transmit check digit (default)

00571

EAN-8 No-transmit check digit

00570

EAN-8 hide system digit

00561

EAN-8 display system digit (default)

00560

Enable 5-digit supplement

00552

Enable 2-digit supplement

00551

Enable 2-digit
& 5-digit supplements

00553

Disable supplement (default)

00550

Enable code93 (default)

00621

Disable code93

00620

Code93 ID as i

0066i

Enable code93 multiple verify

00681

Disable code93 multiple verify
(default)

00680

Enable Code93 MOD47
(default)

01901

Disable Code93 MOD47

01900

Enable code128 (default)

00691

Disable code128

00690

Code128 ID as a

0081a

Disable code128 multiple verify (default)

00840

Enable code128 multiple verify

00841

Enable codabar (default)

00851

Disable codabar

00850

Codabar ID as v

0094v

Codabar min. length 4

008704

Codabar start /
stop character transmission

00861

Codabar start / stop character
without transmission (default)

00860

Enable interleaved 2 of 5
(default)

00961

Disable interleaved 2 of 5

00960

Interleaved 2 of 5 ID as n

0104n

Interleaved 2 of 5 min. length 4

009704

Enable Interleaved 2 of 5 ID
check

00981

Disable Interleaved 2 of 5 ID
check

00980

No transmission of check on
Interleaved 2 of 5 ID

00991

Transmission of check
on Interleaved 2 of 5 ID

00990

Enable bank mode

01001

Disable bank mode

01000

Enable industrial 2 of 5 (default)

01061

Disable industrial 2 of 5

01060

Industrial 2 of 5 ID as o

01130

Industrial 2 of 5 min. length 3

010703

Enable MSI

01151

Disable MSI (default)

01150

MSI ID as s

0053s

MSI min. length 4

011804

Enable Plessey

01161

Disable Plessey (default)

01160

Plessey ID as t

0117t

Plessey min. length 3

011903

Enable code11 (default)

01261

Disable code11

01260

code11 ID as u

0131u

Code11 min. length 4

012804

Code11 auto CK check

01271

Code11 C check (default)

01272

Code11 CK check

01273

Enable Matrix 25 (default)

01461

Disable Matrix 25

01460

Matrix 25 ID as q

00147q

Matrix 25 min. length 2

014802

Matrix 25 min. length 3

014803

Enable postal 25

01571

Disable postal 25 (default)

01570

Postal 25 ID as r

0158r

Postal 25 min. length 5

015905

Postal 25 min. length 7

015907

Enable aerial 25

01871

Disable aerial 25 (default)

01870

Aerial 25 ID as p

0188p

Aerial 25 min. length 7

018907

All EAN change to ISSN

02371

Disable EAN change to ISSN (default)

02370

All EAN change to ISBN

02361

Disable EAN change to ISBN (default)

02360

Enable digital keyboard mode

02581

Disable digital keyboard mode

02580

Enable GS1 Omni-directional

01671

Disable GS1 Omni-directional (default)

01670

GS1 Omni ID as j

0168j

Enable GS1 Limited

01771

Disable GS1 Limited (default)

01770

GS1 Limited ID as k

0178k

Note: The setting code type is code128. When generating a barcode, you must add ^3 before the barcode, ie ^3+****** (required barcode):

The ASCll codes in this table are all decimal. For the hexadecimal, please refer to the attached table 2.

- **Prefix / suffix code setting instructions**

1. The pre/suffix code is divided into a common pre/suffix code and a private pre/suffix code. The common pre/suffix code means that the pre/suffix code is added before a barcode; the private pre/suffix code refers to a certain type of barcode, such as code 128 codes and code 39, a specific barcode to which the pre/suffix is added. You can add up to 32 characters.
2. Common pre/suffix code:
   There are two ways to add the pre/suffix code:
   [1]. Scan a barcode additive, and the setting code is 0223X (prefix code) and 0221X (suffix code), where 0223 and 0221 stands for one common pre/suffix code, where the value of X represents the added character and this X is a binary. For example, to add a common pre/suffix code A, the setting code is 0221A, which means that the suffix code A is added to all barcodes. Input the following data in the software.

   The setting code is 0223A, which means that all barcodes are added with the first code A. Input the following data in the software.

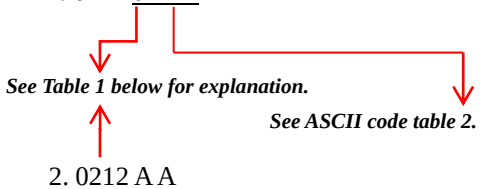
   For example, a common suffix code is added and the setting code is 0221\r. Input the following data in the software.

   [2]. In the second way, the prefix and suffix codes are added. Setting codes are scanned and set through ASCII code. The setting codes are 021100nn (suffix code) and 021600nn (prefix code). This ASCII setting is hexadecimal. Refer to ASCII Table 2 for specific parameters.

For example, if the common suffix code A is needed, the setting code is 02110041 according to the hexadecimal system; if the common prefix code A is needed, the setting code is 02160041 according to the hexadecimal system.

In addition, is needed to add a character after the barcode and then add Enter. If it is needed to add the character "+" after the bar code and then add Enter, the setting code is "0213@+\r", the suffix code is "0212@non-accumulative, 0213@accumulative 2 times, and 0211@accumulative 3 times.

3. Adding an exclusive suffix code
   A certain type of barcode needs to be added with an exclusive suffix code. For example, the Code 128 codes needs to be followed by the letter A; there are two ways to achieve:
   1. 0211 0141



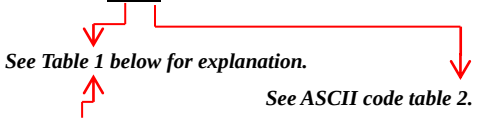
   2. 0212 A A

   If you want to accumulate, use 0213A and 0211A.

   Please refer to Table 1 for other types of barcodes.

Likewise, if a certain type of barcode needs to be added with a prefix code, all Code 128 codes are needed before the letter A; there are two ways to achieve:

1. 0216 0141



2. 0217 A A

If you want to accumulate, use 0218A.

- **Sleep time setting / button timeout setting**

1. Sleep time setting code: 0310nnn
   If XS sleep is required and it is calculated in hexadecimal (4 for base), then the formula: x/4=NNN

   For example, if it takes 60 seconds to automatically shut down, the setting code is 0310015.

   If it takes 5 minutes to automatically shut down, the setting code is 0310015.

   Sleep time limit: 42 minutes and 47 seconds

2. Button timeout setting code: 0235nn
   If the button timeout is 4S, the setting code is 023540.

3. Introduction to the character hiding
   The hidden suffix character setting code is 0233nn. To hide the suffix 5 characters, the setting code is 023305.

   The hidden prefix setting code is 0234nn. If 023405 is to hide the prefix 5 characters, just change the value of nn to change the number of hidden characters.

Two setting codes that hide the middle character must be used at the same time, which are 0239nn (to hidden nn characters in the middle) / 0240nn (to begin hidding after the first nn characters).

》For example, if the barcode is 123456789 and it is required to hide character 456, then the setting codes are 023903 (to hidden 3 middle characters) and 024003 (to begin hiding after the third character), and they can be used together to achieve the function and obtain 123789.

Code table 1 for barcode types		
@	（00）	All
A	（01）	code128
C	（03）	EAN8
D	（04）	EAN13
E	（05）	UPCA
F	（06）	UPCE
I	（09）	CODE93
J	（0A）	GS1 OMNI
K	（0B）	GS1 LIMI
M	（0D）	CODE39
N	（0E）	Interleaved 2 of 5
O	（0F）	Industrial 2 of 5
P	（10）	Aerial25
Q	（11）	Matrix 25
R	（12）	Postal 25
S	（13）	MSI
T	（14）	PLESSEY
U	（15）	CODE11
V	（16）	CODABAR

Lookup table for specific keys and code values (ASCII code values available for standard characters):
F1 = 0x80; F2 = 0x81; F3 = 0x82;
F4 = 0x83; F5 = 0x84; F6 = 0x85;
F7 = 0x86; F8 = 0x87; F9 = 0x88;
F10 = 0x89; F11 = 0x8A; F12 = 0x8B;

Insert = 0x8C; Home = 0x8D;
Page up = 0x8E; Page down = 0x91;
Delete = 0x8F; End = 0x90;
Right = 0x92; Left = 0x93;
Down = 0x94; Up = 0x95;

If CODE93 is added with the STX prefix code, according to the STX ASCII value that is 0x02, then the content of the setting code that should be printed is as shown below.

Tip 1:
ASCII = [F3]‘0’‘2’‘1’‘6’‘I’ [STX]
Binary = [F3] + 0x30 + 0x32 + 0x31 + 0x37 + 0x49 + 0x02
Setting barcode -->

Tip 2:
ASCII = [F3] + ‘0’ + ‘2’ + ‘1’ + ‘6’ + ‘0’ + ‘9’ + ‘0’ + ‘2’
And if CODE93 is added with Home prefix code:
ASCII = [F3] + ‘0’ + ‘2’ + ‘1’ + ‘6’ + ‘0’ + ‘9’ + ‘8’ + ‘D’
(Note: Code93 corresponds to 09 <value of each code that is given in the note on the previous page>, home key value is 0x8D)

ASCII Table 2

Decimal	Hexadecimal	Character
0	0	Null
1	1	Header start
2	2	Text start
3	3	Text end
4	4	Transmission end
5	5	Query
6	6	Confirmation
7	7	Ring
8	8	backspace
9	9	Level positioning character
10	0A	Line feed / new line
11	0B	Vertical positioning character
12	0C	Form feed / new page
13	0D	Enter
14	0E	Shift-out
15	0F	Shift-in
32	20	space
33	21	!
34	22	"

Decimal	Hexadecimal	Character
35	23	#
36	24	$
37	25	%
38	26	&
39	27	'
40	28	(
41	29	)
42	2A	*
43	2B	+
44	2C	,
45	2D	-
46	2E	.
47	2F	/
48	30	0
49	31	1
50	32	2
51	33	3
52	34	4
53	35	5
54	36	6
55	37	7
56	38	8
57	39	9
58	3A	:
59	3B	;
60	3C	<
61	3D	=
62	3E	>
63	3F	?

Decimal	Hexadecimal	Character
64	40	@
65	41	A
66	42	B
67	43	C
68	44	D
69	45	E
70	46	F
71	47	G
72	48	H
73	49	I
74	4A	J
75	4B	K
76	4C	L
77	4D	M
78	4E	N
79	4F	O
Decimal	Hexadecimal	Character
16	10	Data link translation
17	11	Device control 1
18	12	Device control 2
19	13	Device control 3
20	14	Device control 4
21	15	Reverse confirmation
22	16	Synchronous idle
23	17	Transmission block end
24	18	Cancel
25	19	Media end
26	1A	Interchange
27	1B	Translation

Decimal	Hexadecimal	Character
28	1C	File separator
29	1D	Group separator
30	1E	Record separator
31	1F	Unit separator
80	50	P
81	51	Q
82	52	R
83	53	S
84	54	T
85	55	U
86	56	V
87	57	w
88	58	X
89	59	Y
90	5A	Z
91	5B	[
92	5C	\
93	5D	]
94	5E	^
95	5F	_
96	60	`
97	61	a
98	62	b
99	63	c
100	64	d
101	65	e
102	66	f
103	67	g
104	68	h

Decimal	Hexadecimal	Character
105	69	i
106	6A	j
107	6B	k
108	6C	l
109	6D	m
110	6E	n
111	6F	o
112	70	p
113	71	q
114	72	r
115	73	s
116	74	t
117	75	u
118	76	v
119	77	w
120	78	x
121	79	y
122	7A	z
123	7B	{
124	7C	|
125	7D	}
126	7E	~
127	7F	DEL

Specifications

Standard Feature	
Symbologies	UPC-A, UPC-E, EAN-13, EAN-8, Codabar, Code 39 Full ASCII, China Post, Plessey, MSI, Code 93, Code 128, Industrial 2 of 5, Interleave 2 of 5, Matrix 2 of 5, Code 11, ISBN, ISSN, Code32 (Italian Pharmcode), Code39 extended, GS1-128 and ITF-14, SISAS, GS1 Omnidirectional, GS1 Limited, Aviation25, RSS14
Depth of Field	25~100mm (Code39, 4mil, PCS90%) 15~330mm (EAN, 13mil, PCS90%)
Characteristics	
Dimensions	102mm x 71mm x 177mm
Weight	190g
Power	DC5V±1%
Trigger Switch	>1,000,000 cycles
Light Source	RED LED 620nm~630nm
Image Sensor	2500 point pixel CCD image sensors
Interface	USB-HID, USB-Virtual COM
Indication	LED, Beeper
Performance	
Resolution	3mil (0.0762mm)
Print Contrast	Min. 20%
Scan Rate	>=270 time/s
Scan Angle	Yaw±55°, Rotation±30°, Pitch±65°
Environment	
Light Strength	70,000 Lux
Temperature	Operating temp.: -20°C to 50°C Storage temp.: -40°C to 70°C
Humidity	5% to 95% (Non-condensing)
Drop	Withstands multiple times 1.5meters drops to concrete
Sealing	IP42
Regulatory	
Regulatory Approvals	CE, FCC, BSMI

*Argox reserves the right to enhance and modify the specifications without prior notice. Please check them from Argox sales representative for most updated specifications.