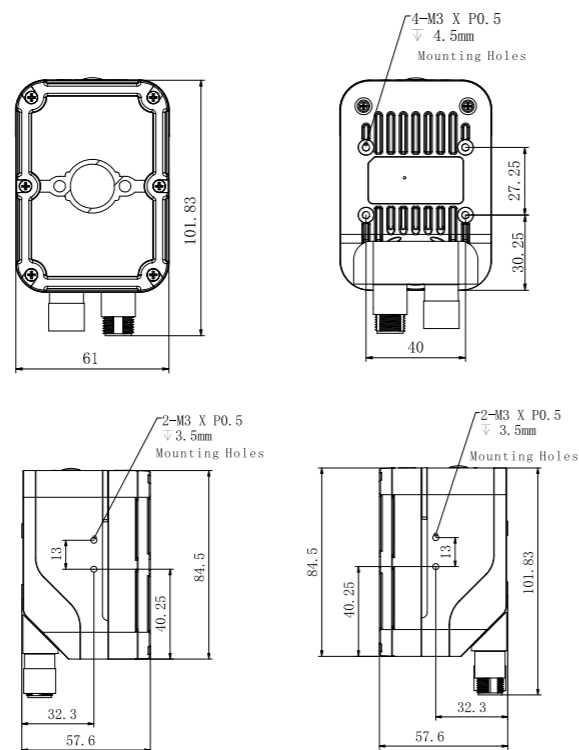


- ① Logo
- ② Button
- ③ Status indicator
- ④ Successful/Failed decoding LED
- ⑤ Mounting holes \*8
- ⑥ Label
- ⑦ Ethernet connector
- ⑧ Data cable connector
- ⑨ Illumination system
- ⑩ Laser aiming
- ⑪ Lens

1

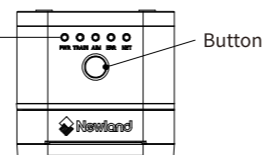
Take standard device as an example:

Units:mm



2

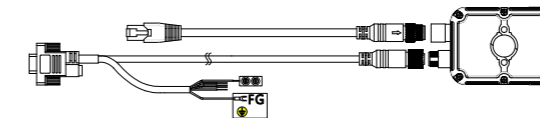
PWR-TRAIN-AIM-ERR-NET  
Left-Right



NET	Network indicator	Steady Green : Ethernet connected Blinking Green : Ethernet links with data transmission
ERR	Device error indicator	Blinking Red : An error has occurred on the device 1.Communication error 2.CMOS abnormality 3.Firmware update failed 4.Abnormal communication with host during networking 5.Script execution error
AIM	Focus indicator	Blinking Yellow : Focusing Steady Yellow : Focusing successfully Yellow LED Off : No focusing operation
TRAIN	Auto-learning indicator	Blinking Yellow : Auto-learning in progress Steady Yellow : Auto-learning success Yellow LED Off : Auto-learning failure
PWR	Power	Steady Green : the device is powered on normally Green LED Off: the device is not powered on
Button	1.Focus+Auto-learning 2.Barcode Programming 3.Trigger	1.Long press for 3 seconds to enter focus/Auto-learning 2.Long press for 9 seconds to enter barcode programming 3.Short press to trigger the device to read the barcode

3

Device wiring diagram:



- Note:
- The FG wire should be grounded.
  - Always turn off the power before connecting or disconnecting the control cable.
  - The power wire (red) must not be exposed, as it may cause a short circuit.

4



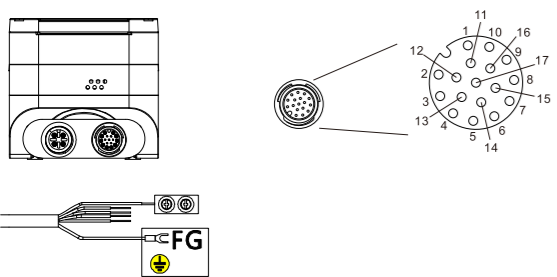
## NLS-Soldier300 Series Fixed Mount Barcode Scanner

# Quick Start

V3.0

## Cable Pinout and IO Description

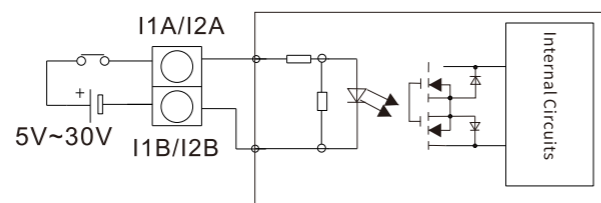
IO



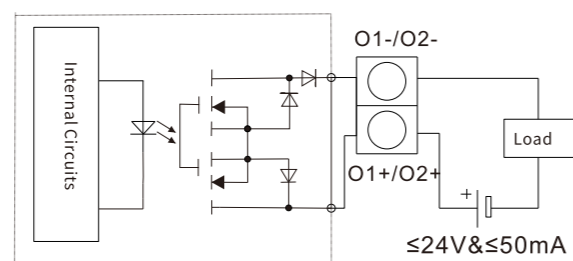
Pin	Definition	Description
1	RS232-TX	Serial port sender
2	FG	Frame ground (yellow-green)
3	RS232-RX	Serial port receiver
4	GND	Power ground (black)
5	GND	Signal ground
6	I1A	Trigger signal input I1A(Brown)
7	I1B	Trigger signal input I1B(Pink)
8	I2A	Trigger signal input I2A(Green)
9	I2B	Trigger signal input I2B(Grey)
10	O1+	Signal output for good read O1+(Orange)
11	O1-	Signal output for good read O1-(White)
12	O2+	Signal output for not good read O2+(Yellow)
13	O2-	Signal output for not good read O2-(Purple)
17	VIN	VIN(Red)

5

### Trigger input circuit

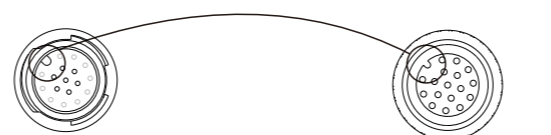


### Signal output circuit



6

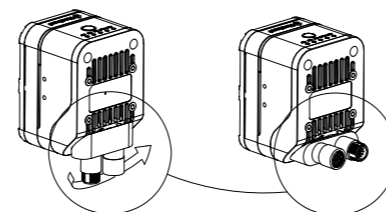
## Connect the Cables



- When connecting the cable, align the protruding part of the connector with the slot in the control port and insert it.
- Turn the connector nut on the cable clockwise and tighten it.

Note: If the connector is rotated without proper alignment during insertion, it may bend the pins and cause communication failure.

- The device connector can be rotated to adjust the cable connection direction.



7

## Laser Safety Warning



### Warning

Please follow the regulations below, otherwise it may lead to a hazard to the eyes and skin.

- The Soldier300 scanner is the class 2 laser product.
  - Do not stare into the beam.
  - Do not aim the laser at persons.
  - Be cautious about the laser path.
- Please position the device at a location where the laser path is not at the same height as the human's eye.
- Turn off the laser aiming LED when there is no need to adjust the position.
- Operate the device according to warnings and laser safety labels.

### Laser Specifications

Type	Red laser
Wavelength	645-658nm
Classification	Class 2
Output	< 1.0 mW

8

## Troubleshooting

If the scanner is not functioning properly, follow these troubleshooting steps:

- Check the Data Cable Connection: Ensure the data cable is securely connected to the scanner and the original cable is being used.
- Inspect Barcode Label Quality: The scanner may fail to read barcodes that are severely wrinkled or smudged. Ensure the barcode labels are intact and undamaged.
- Verify Barcode Type Settings: Check if the barcode type you are scanning is enabled. If not, enable the corresponding barcode type first.

For more information about the scanner, please visit the Newland website at <https://www.newlandaidc.com>.



PN:1060091436



# NLS-Soldier300 Series Fixed Mount Barcode Scanner

## Quick Start



### 1 Scanner Information



@QRYSYS

【Query All Information】



@NETDEF

【Restore the Factory Defaults of Ethernet】



@SCNMOD17

【Standard Mode】



@SCNTFC0

【Level Trigger Mode】

### 2 Default Settings



@FACDEF

【Restore All Factory Defaults】

### 3 Scan Mode



@SCNMOD18

【Continuous Mode】



@SCNMOD19

【Burst Mode】



@SCNTFC1

【Pulse Mode】

1

2

3

4

### 5 Input IO Level Control



@EIOIP11

【Set to Active High for Input 1】



@EIOIP21

【Set to Active High for Input 2】



@AMLENA0

【Disable】



@AMLENA2

【Always On】



@TSUENA1;TSUSET0D

【Set to CR(0X0D)】



@EIOIP10

【Set to Active Low for Input 1】



@EIOIP20

【Set to Active Low for Input 2】



@AMLENA1

【Enable】



@TSUEAN0

【Disable】



@TSUENA1;TSUSET0D0A

【Set to CRLF(0X0D,0X0A)】

5

6

7

8

### 7 Terminator Suffix