

WEINTEK LABS., INC.

Barcode Scanner

Demo Project

Contents

1. Overview and Operation 1

2. Setting up the Screen 4

3. Addresses 5

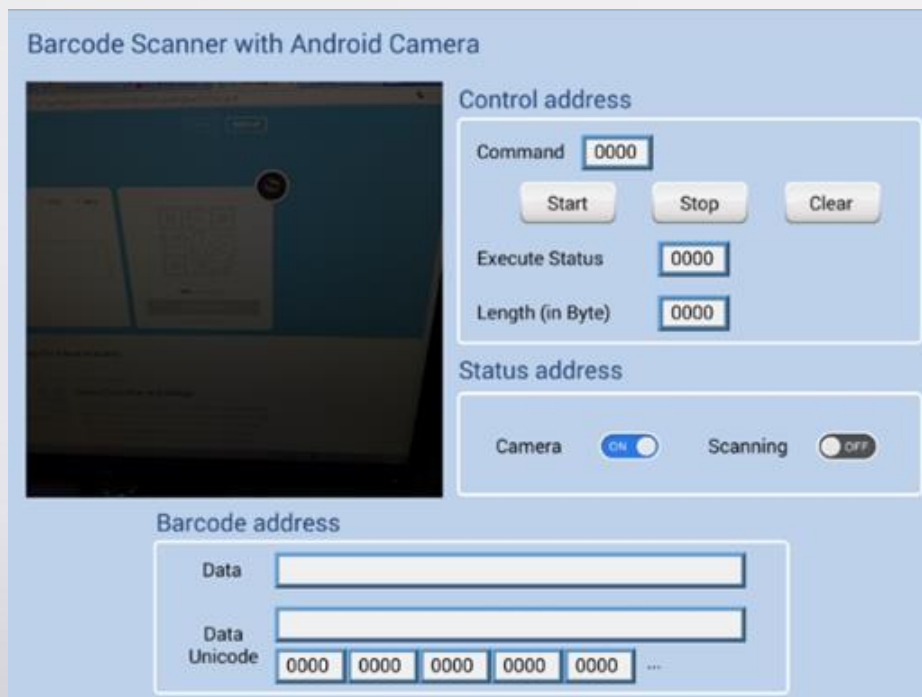
1. Overview and Operation

Overview

This demo project introduces how to use Barcode Scanner. By connecting an Android device equipped with a camera to an HMI using cMT Viewer installed on Android device, the camera can be used to scan barcodes, and the result can be displayed on HMI.

Operation

Step 1. At the beginning, the display is dark.



Step 2. Tap Start button, the status of Scanning turns to ON state, and the display turns bright. The camera is now ready for scanning.

Barcode Scanner with Android Camera



Control address

Command

Execute Status

Length (in Byte)

Status address

Camera ☒ Scanning ☒

Barcode address

Data

Data

Data Unicode ...

Step 3. When a QR code is read (Execute Status turns to 1), the QR code will be captured, and its content will be displayed in Barcode Address group box. Unicode is also allowed.

Barcode Scanner with Android Camera



Control address

Command

Execute Status

Length (in Byte)

Status address

Camera ☒ Scanning ☐

Barcode address

Data

Data

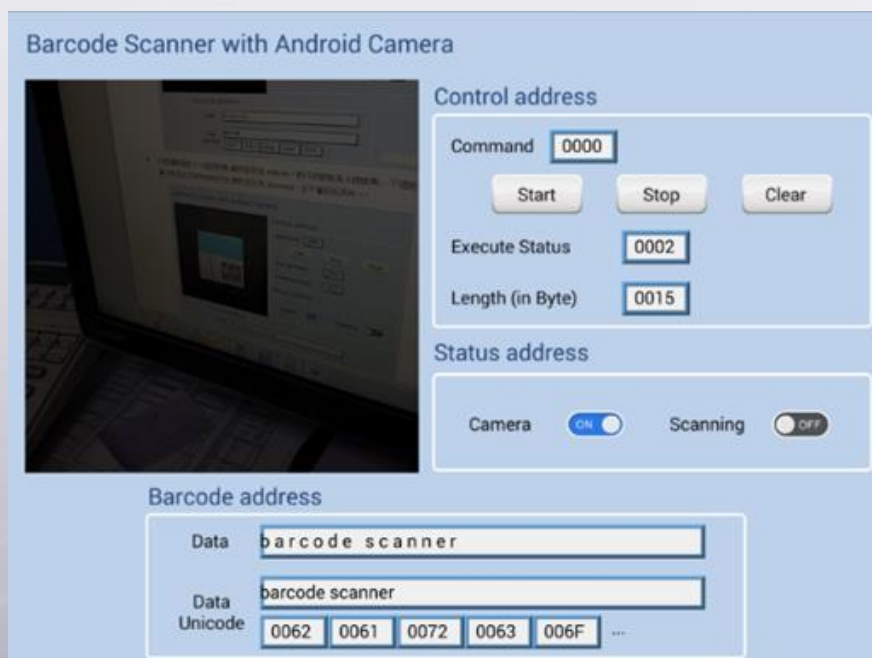
Data Unicode ...

Step 4. If the size of the data read exceeds the maximum allowable size set in Read Byte Limit (10 bytes in this project), the Execution Status

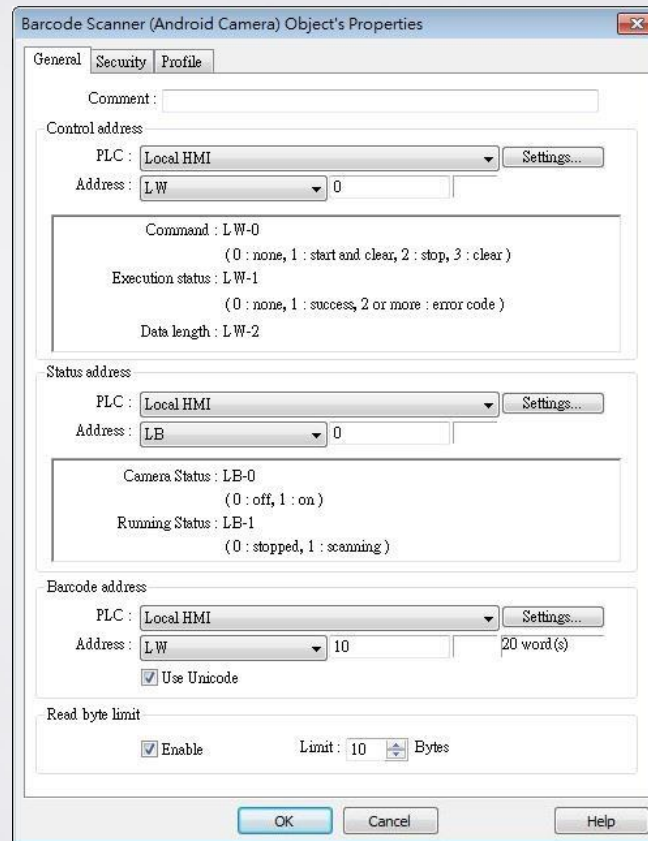
turns to 2 (error code). The exceeding part will still be displayed in the ASCII objects in Barcode Address group box, since the data length displayed depends on ASCII object settings (20 words in this project).



Step 5. After changing to another page, Scanning turns OFF, the parameters are reserved. The parameters will be cleared next time when Start button is tapped, or Clear button is tapped.



2. Setting up the Screen



- Step 1.** Create a Barcode Scanner object, set [Control address] to LW-0, then addresses LW-0~LW-2 can respectively give command, show execution status, and show data length.
- Step 2.** Designate LB-0 as [Status address], then addresses LB-0 and LB-1 respectively show camera status and running status.
- Step 3.** Designate LW-10 as [Barcode address], select [Use Unicode] check box and set data length to 20 words.
- Step 4.** Set [Read byte limit] to 10 bytes, when the data read exceeds this limit, the [Execution status] turns to 2 (error code).
- Step 5.** Create the following objects: Three Numeric objects LW-0~LW-2 (Command, Execution Status, Data Length), three Set Word objects

LW-0 (Start, Stop, Clear), two Toggle Switch objects LB-0~LB-1 (Camera Status, Running Status), two ASCII objects LW-10 (display the content of the scanned barcode), and several Numeric objects LW-10~LW-14 (display Unicode code points).

3. Addresses

The addresses of objects used in this demonstration are listed below.

Object	Address	Object ID	Description
Window 10			
Barcode Scanner	LW-0, LB-0, LW-10	BS_0	Scans barcode.
Numeric	LW-0	ND_2	Gives command.
Numeric	LW-1	ND_0	Displays execution status (including error code).
Numeric	LW-2	ND_1	Displays data length (unit: byte).
Set Word	LW-0	SW_0	Start scanning (command 1).
Set Word	LW-0	SW_1	Stop scanning (command 2).
Set Word	LW-0	SW_2	Clear data (command 3).
Toggle Switch	LB-0	TS_0	Shows camera status.
Toggle Switch	LB-1	TS_1	Shows whether scanning is ready.
ASCII	LW-10	AD_1	Displays data scanned (ASCII).
ASCII	LW-10	AD_0	Displays data scanned (Unicode).
Numeric	LW-10	NE_3	Displays the Unicode code point of the first character.
Numeric	LW-11	NE_4	Displays the Unicode code point of the second character.
Numeric	LW-12	NE_5	Displays the Unicode code point of the third character.
Numeric	LW-13	NE_6	Displays the Unicode code point of the fourth character.
Numeric	LW-14	NE_7	Displays the Unicode code point of the fifth character.