QRCode Function Setting Steps

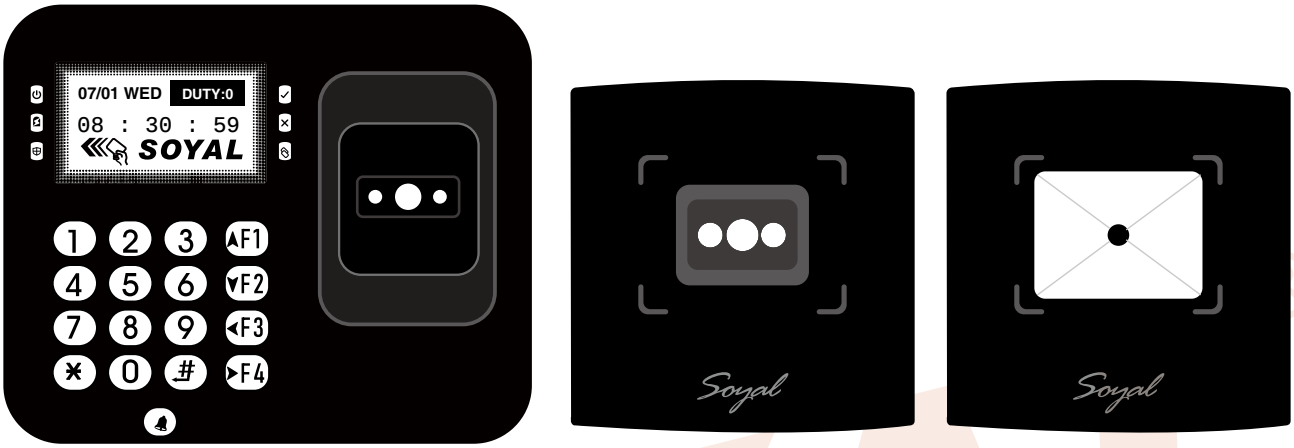


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AR-837-EL/AR-888-UL QRCode Function Setting Steps

01. Firmware Update Notes

With the growing popularity of QR Code applications, their content is becoming increasingly rich. In response to customer needs, SOYAL has added more features. To accommodate the larger amount of information in QR Codes, starting in October 2024, SOYAL will increase the transmission speed of QR Codes, allowing the system to respond to feature requests more quickly. QR Code devices produced from October 2024 onward will adopt the "Ultra High Speed Transmission Mode."

- For firmware produced after October 2024 used on older devices, the card reader must be set to "Ultra High Speed Transmission Mode."
- For firmware produced before October 2024, the card reader's reading speed must be adjusted back to "Normal Speed Transmission Mode."

Preparation

1.	**Update the controller firmware program**			UdpUpdater	Download link
2.	**Controller firmware**	 **AR-837-EL**	**Ultra High Speed**	APS837E____V0405_XXXXXX QRHS afm .STM	Download link
			Normal Speed	APS837E____V0405_ XXXXXX CN11_ QRCode_BLE.STM	Download link
		 (Long-range version)  (Short-range version) **AR-888-UL**	**Ultra High Speed**	888ULS_7V3 XXXXXX QR_Code_HS LEDG_NOFLASH 24年版新硬體.ISP	Download link
			Normal Speed	888ULS_7V3 XXXXXX QR_Code LEDG_ NOFLASH 24年版新硬體.ISP	Request from SOYAL

02. Setup Steps

Product			
	AR-837-EL	**AR-888-UL**(Long-range version)	**AR-888-UL**(Short-range version)
Configuration Method	Reference (1) Long-Range Version Configuration Method	Reference (1) Long-Range Version Configuration Method	Reference (2) Short-Range Version Configuration Method

1. Long-Range Version Configuration Method :

- **1-1 : Update firmware**
  - The AR-837-EL firmware can be updated using the UdpUpdater in Soyal Device Tools. For detailed steps, refer to the → UdpUpdater Manual.
  - The AR-888-UL firmware can be updated using the ISP Tool in Soyal Device Tools. For detailed steps, refer to the → ISP Tool Manual.

1-2 : Set Transmission Speed





Ultra High Speed	Normal Speed
STEP 1 : Activate Configuration Mode	
STEP 2 Set Baud rate 57600	**STEP 2** Set Baud rate 9600
STEP 3 : Exit the settings mode (※ This step must be completed for the speed adjustment to take effect)	

1-3 : Set Scanning Line Enable / Disable




Enable Red Scanning Line	Disable Red Scanning Line (※ Factory default setting)
When scanning QR Codes, activating the scan line helps align the scan position, improving scan accuracy.	
STEP 1 : Activate Configuration Mode	
STEP 2 Enable	**STEP 2** Disable
STEP 3 : Exit the settings mode	



1-4 : Set Fill Light Activation/Deactivation

Enable White Fill Light	Disable White Fill Light (※ Factory default setting)

- For paper QR codes, if the ambient light is insufficient, the white auxiliary light can be enabled to assist with recognition.
- For mobile phone QR codes, simply increasing the screen brightness will allow for normal scanning in low-light conditions.

STEP 1: Activate Configuration Mode

STEP 2
Enable

STEP 2
Disable

STEP 3 : Exit the settings mode

2. Short-Range Version Configuration Method :



- **2-1 : Firmware Update** (Detailed steps can be found in → This Manual,1-1 Firmware Update)
- **2-2 : Set Transmission Speed**

Ultra High Speed	Normal Speed
STEP 1 Activate Configuration Mode	
STEP 2 Set Baud rate 57600	**STEP 2** Set Baud rate 9600
STEP 3 : Exit the settings mode (※ This step must be completed for the speed adjustment to take effect)	



- **2-3 : Set Fill Light Activation/Deactivation**

Enable White Fill Light	Disable White Fill Light (※ Factory default setting)
● For paper QR codes, if the ambient light is insufficient, the white auxiliary light can be enabled to assist with recognition. ● For mobile phone QR codes, simply increasing the screen brightness will allow for normal scanning in low-light conditions.	
STEP 1 Activate Configuration Mode	
STEP 2 Enable	**STEP 2** Disable
STEP 3 Exit the settings mode	