

1. AR-737H/U₁₂₅ INTRODUCTION

The AR-737H/U₁₂₅ is a proximity reader which allows performing as an auxiliary WG reader (AR-737U₁₂₅) or networking reader (AR-737H₁₂₅)

1.1 Contents

- User Guide *1
- AR-737H/U₁₂₅ Device *1
- Hexagonal Wrench *1
- Hexagonal Screw *2



1.2 Specification

Frequency	125KHz
Power Requirement	9-24 VDC
Power Consumption	<1.5W
Communication Interface	RS-485(737H only), Wiegand (737U only) and OMRON
Baud Rate	9600 bps / 19200 bps(N,8,1)
Environment	-20°C~+75°C
Indicator	A bi-color LED and a beeper
Read / Write	Read only
Proximity Reading Range	12-20cm
Supported Tags	EM4001/EM4012 compliant
Waterproof	Yes(Optional)
Color	Dark Gray
Dimension(mm)	113(L)x71(W)x36(H)
Weight(g)	80
Housing Material	ABS

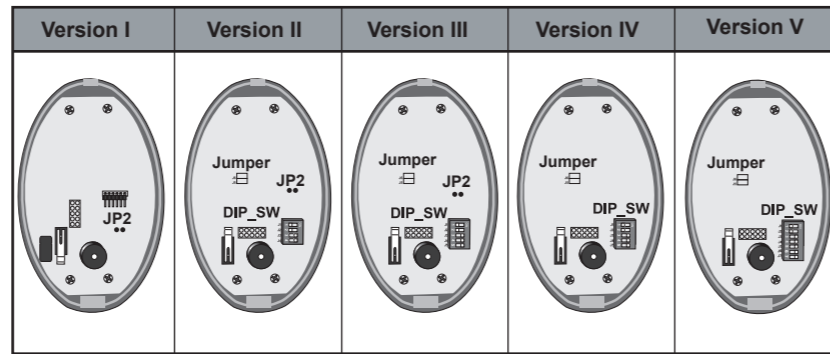
1.3 Difference in Versions

Mode / Version	AR-737U	AR-737H
I	JP2 Open	JP2 Close
II	JP2 Open	JP2 Close
	4-PIN Jumper select "WG"	4-PIN Jumper select "OUTPUT"
III	JP2 Open	JP2 Close
	5-PIN Jumper select "WG"	5-PIN Jumper select "OUTPUT"
IV	6-PIN Jumper select "WG"	6-PIN Jumper select "OUTPUT"
	8-PIN Jumper select "WG"	8-PIN Jumper select "OUTPUT"
V	8-PIN Jumper select "WG"	8-PIN Jumper select "OUTPUT"
	8-PIN Jumper select "WG"	8-PIN Jumper select "OUTPUT"

Warranty

SOYAL warrants that the product(s) shall be free from manufacturing defects in materials and workmanship for a period of fifteen(15) months from the date of delivery provided that the product was properly installed and used.

Note: Do not tear a pasteur that AR-737HXXXXXX 0506-123456 on the PCB board, because it is SOYAL warranty.



1.4 Mode Setting

Unit	Mode	Version I, II, III JP2	Version IV DIP_SW6	Version V DIP_SW6,7,8
737U125(WG)		Open(Off)	Open(Off)	J6.Open(Off) J7.Close(On) J8.Close(On)
737H125(RS-485)		Close(On)	Close(On)	J6.Close(On) J7.Open(Off) J8.Open(Off)

1.5 Wiegand Format Setting

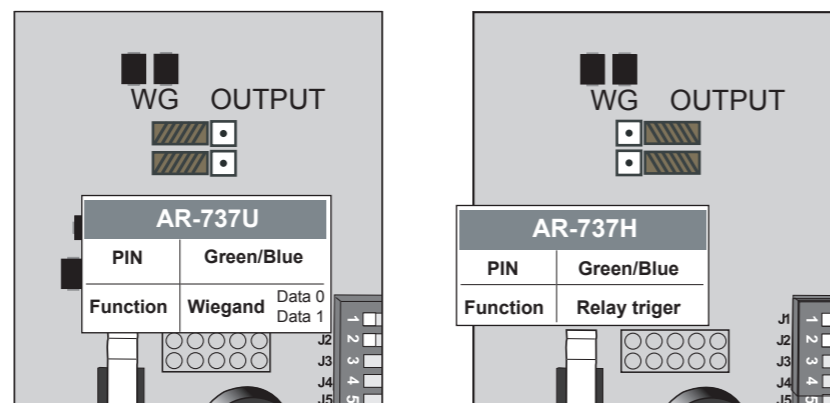
Output format	J1 (DIP_SW1)	J2 (DIP_SW2)
ABA_II / OMRON	Close (On)	Close (On)
WG-38	Open (Off)	Close (On)
WG-34	Close (On)	Open (Off)
WG-26	Open (Off)	Open (Off)

1.6 Indicator Displaying Way While Card Flashin

Indicator while card present	J3 (DIP_SW3)	J4 (DIP_SW4)
Red LED On	Close (On)	Close (On)
Green LED On	Open (Off)	Close (On)
Red LED & Beep On	Close (On)	Open (Off)
No LED or Beep sound	Open (Off)	Open (Off)

1.7 Adding for Version II & III & IV

The version II, III & IV add a 6-pin jumper for wiegand signal or relay output selection. Its setting should follow the rules as below:



Please visit WWW.SOYAL.COM to download the Soyal software, Manual, Catalog & User guide

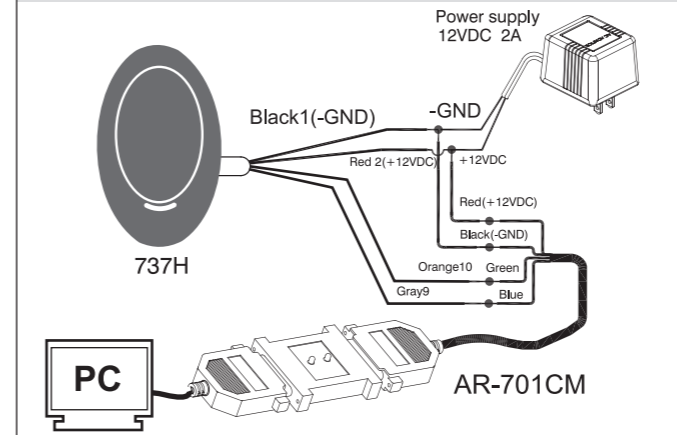
2. PIN DEFINE

2.1 Wiring of AR-737H/U₁₂₅ (Version I)

PIN	Description	Color	Function
1	DC Power Input	Black	GND
2	DC Power Input	Red	V12
3	Beeper Control Input (Active low)	Purple	BEEP
4	WG Data 0	Green	Output
5	Card Present Output (Active low)	White	Output
6	WG Data 1	Blue	Output
7	R-LED control input	Yellow	Input
8	G-LED control input	Brown	Input
9	RS-485 A+	Gray	Signal
10	RS-485 B-	Orange	Signal

3. INSTALLATION DIAGRAM

3.1.1 AR-737H125 connection to PC



3.1.2 Software setting from Soyal device tools

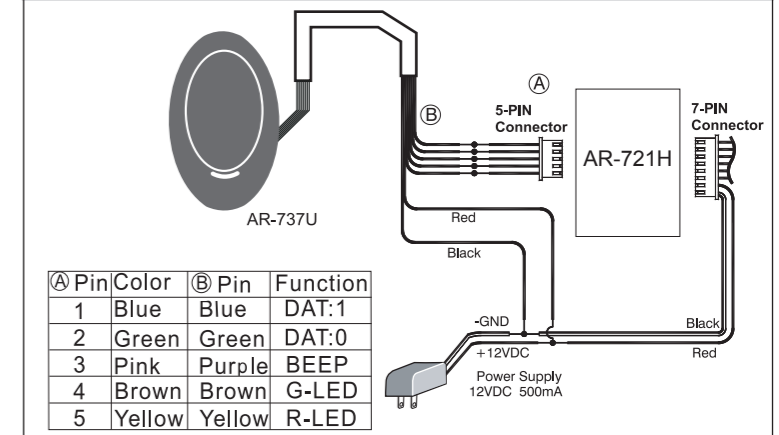


- Select communication port.
- Enter the target AR-737H's Node ID (To ignore Node ID, enter 255)
- Click "Read" to upload parameters from device to Node737 application.
- The screen will show current device parameter and its version, and then key-in the Node ID you want to change.
- Enable or disable the functions of AR-737H.
- Click "write" to download new setting to device.

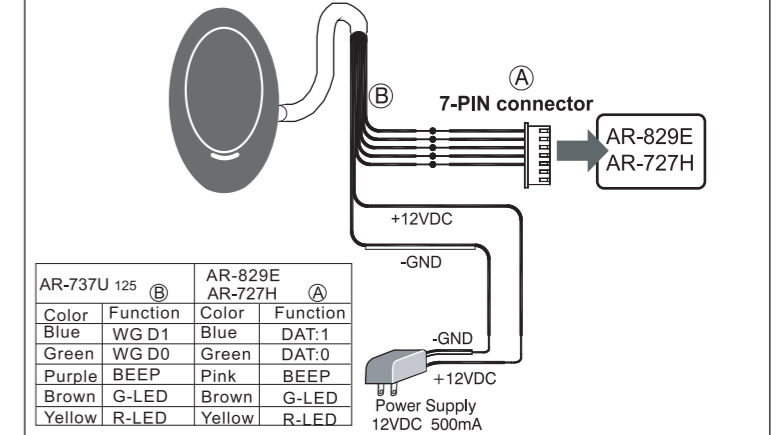
2.2 Wiring of AR-737H/U₁₂₅ (Version II & III & IV)

PIN	Description	Color	Function
1	DC Power Input	Black	GND
2	DC Power Input	Red	V12
3	Beeper Control Input (Active low)	Purple	BEEP
4	WG Data 0	Green	Output
5	Card Present Output (Active low)	White	Output
6	WG Data 1	Blue	Output
7	R-LED control input	Yellow	Input
8	G-LED control input	Brown	Input
9	RS-485 A+	Gray	Signal
10	RS-485 B-	Orange	Signal

3.2 AR-737U connect to AR-721H



3.3 AR-737U connect to AR-829E, AR-727H



3.4 AR-737H connect to EM lock & Exit Button with Relay board

