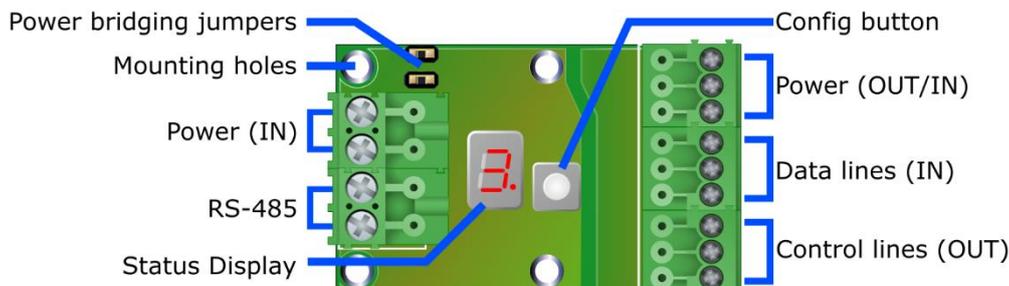# Advanced settings guide

Introduction
For basic installation and configuration of the Isolated Wiegand interface board, please refer to the Quickstart guide.

Figure 1
SSI-302-W with feature labels

The status display and the config button are used together to configure various settings on the device. Long-pressing mentioned below is pressing and holding the config button in until something happens.

RS-485 Address
The address is a fairly straightforward setting. By default the address of the unit will be shown on the Wiegand board. To change this:
1) Long-press the button (2 seconds) until the address starts flashing.
2) Now every time you single press the button the address will cycle between 0 and F (0-15).
   Addresses A-F represent the hexadecimal value for 10 to 15, so A=10, B=11, C=12 etc.
3) When you long-press the button (2 seconds) again, the new address setting will be saved and the reader will reboot and use the new setting. Leaving for 15 seconds cancels the change.

Figure 2
The LED display 'cycling' clockwise

How to change advanced settings
There are a few advanced settings that can be changed on the reader and these are a little more complicated to set. The basic steps are:
1) If you long-press the button, the LED display starts cycling clockwise, then after a while will start cycling ANTI-clockwise. This indicates that you are entering the advanced configuration section. Release the button.
2) When configuring the advanced settings the decimal point next to the number becomes important to pay attention to. The display toggles between setting index and value. When it is turned ON, then the number being shown is the index of the setting, when OFF, then the value of the setting is being shown.
3) Pressing the button will cycle through the various settings.
4) Long-pressing will start edit the current setting.
5) Pressing will now change the setting by cycling through the available values.
6) Long-pressing will save the changes to that setting.
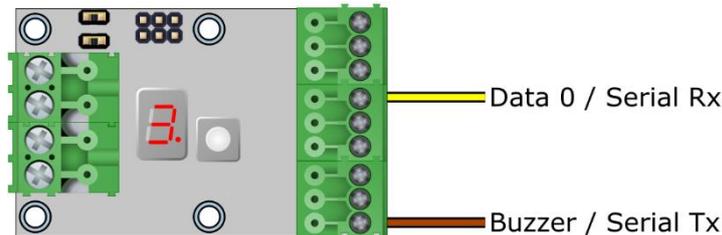7) When complete, long-press the button until it starts cycling again, then release.

Figure 3
The LED display 'cycling' anti-clockwise

Advanced settings

Setting index	Setting	Values	Description
0	Address	0-9: Addresses 0-9 A- F: Addresses 10-15	Device address on RS-485
1	Baudrate	0 1200 1 2400 2 4800 3 9600 4 19200 5 38400 6 57600 7 115200 8 125000 9 250000 A 500000	When used to connect to barcode readers or devices using the serial UART, this will set the speed at which it communicates.
2	Polarity	0: Normal 1: Inverted	For the RS-232
3	Reserved		

UART mode

As discussed in the settings this device can also use a UART system at RS-232 input levels. This means that it can translate input from devices like barcode scanners into OSDP or into the SACS system.

Figure 4
SSI-302-W wired to serial device

The device will automatically switch into UART mode if it receives serial communications at the correct Baudrate on the Wiegand Data 0 pin. From that point on until reboot the board will ignore the other Wiegand inputs.

When access is allowed or denied by the controller it will transmit the serial 'Beep' signal on the Wiegand buzzer output pin. Allowed will be 1 beep, denied will be 4 beeps.

Note: The serial Baudrate and Polarity must be correctly configured before the device will use the serial bus.