

UR110-TW 125kHz RFID Reader

RS232 ,Wiegand and ABA TK2 OUTPUT with Remote I/O

INTRODUCTION

The UR110 brings the concept of " Your Reader" which is a stylish, reliable proximity RFID reader with piano finish housing which really shows seamless integration to an intelligent building. For those high end projects, UR110 fulfils its requirement in both excellent performance and flexible appearance, such as changeable housing with customized logo, LED colors or even the buzzer sound which are all configurable to meet wide range of applications in Access control area or Home automation area. With waterproof design, it also serves as a great outdoor reader in all environment.



UR115-TW



UR110-TW

FEATURES

- EM Card 125KHz Read only
- Interface Output is Wiegand34.
- Weather resistant
- Available installed on metal surface
- Reading distance: up to 9 cm
- New stylish housing to match modern construction for customer design
- 2ch Digital output can direct to drive Door Lock and Alarm .
- 2ch Digital input for LED Color and Buzzer with optical coupler to improve noise immunity

SPECIFICATIONS

OPERATING

Transmit Frequency	125KHz standard
Transponder	H4001 / H4002 / EM4100/4102 EM Card Read only
Reading distance	Up to 9 cm with EM card.
Interface	Wiegand

ELECTRICAL

Power Input	7.5 to 12 VDC. Linear supply recommended.
Current Requirements	90 mA @12VDC
Digital Output	Strike Max. Voltage : DC 50 VDC Strike Max. Current : 4.0A (Drain 2.0A Current-Continuous) Strike Time : 3 - 254 seconds (Toggle Mode) Strike Mode : Toggle/Latch (Open Drain)
Digital Input	Optical Coupler isolation Input Voltage : DC 7.5~12 VDC

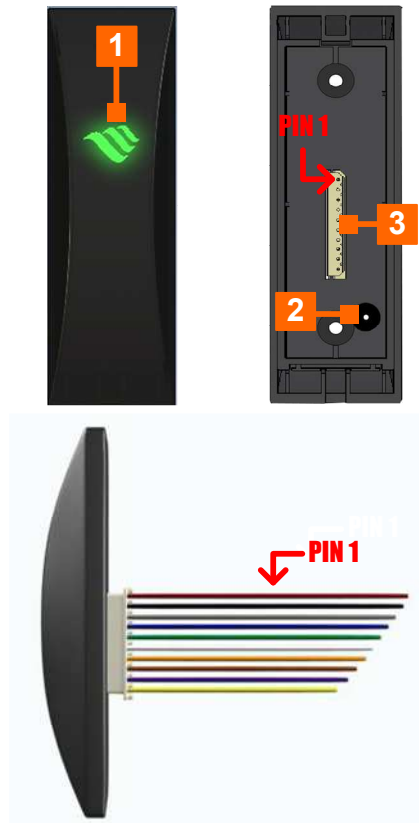
MECHANICAL

Dimensions	Length : 100 mm / Width : 32 mm / Height : 16.5 mm for UR110 Series Length : 87 mm / Width : 32 mm / Height : 16.5 mm for UR115 Series
Weight	50 gm (Without Cable)
Cable Length	15 cm +/- 1cm

ENVIRONMENTAL

Temperature	Operating : 0 °C to 55 °C Storage : -10 °C to 65 °C
Humidity	Operating : 10 % to 90 % noncondensing Storage : Up to 100% noncondensing

■ TERMINAL / INDICATOR DESCRIPTIONS



1 LED Indicator

Green	Red	Description
On	Off	Standby
Blink	Off	Read OK
Off	On	ISP Mode
Other		Software Control

2 Sound Indicator

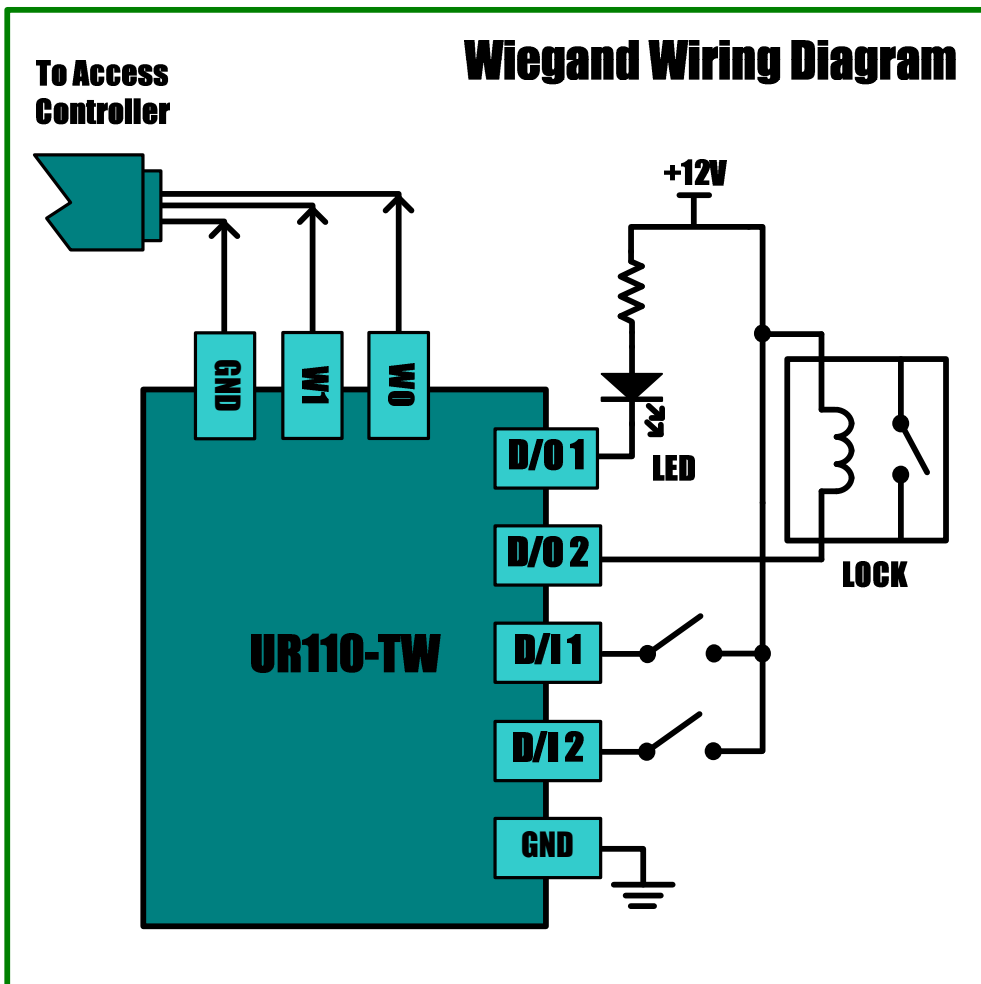
Buzzer	Description
Bi-	Read OK
Other	Software Control

3 9 Pin Terminal

Pin	Color	Signal	In/Out	Description
1	Red	VCC	P	Power 7.5-12 Volts
2	Black	GND	P	Power Ground
3	Gray	D/O 1	O	Digital output 1 (open drain)
4	Blue	D/O 2	O	Digital output 2 (open drain)
5	Green	W0	O	Wiegand Data 0
6	White	W1	O	Wiegand Data 1
7	Orange	NC	NC	None
8	Brown	D/I 1	I	Digital input 1 (active high) LED Control
9	Purple	D/I 2	I	Digital input 2 (active high) Buzzer Control
10	Yellow	SEL	I/O	Program In/out

Pin5,6,7 output with internal 2K pull up

■ CONNECTION



Data Structure for Wiegand /ABA TK2

Host to UR110-TW

UR110-TW sends the reading ID to the host through Wiegand interface. This is a signal direction communication protocol.

The D/O1 or D/O2 Digital Output ports, UR110-TW may send out a signal for external device control.

When D/I 1 active high, the LED color will be changed. When D/I 2 activate high, the buzzer will be on (this status can't read card).

OUTPUT FORMAT

Data Structure (Wiegand Format-34 Bit)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P	S	S	S	S	S	S	S	S	S	S	S	S	C	C	C	C
P	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
SUMMED FOR EVEN PARITY (E)																

18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	P
SUMMED FOR ODD PARITY (O)																

Note :

P : Parity (Even or Odd) Start Bit and Stop Bit

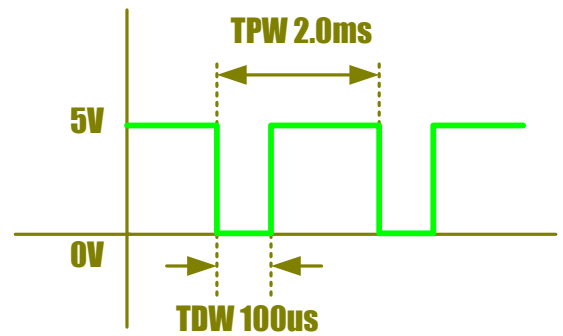
S : Site Bits from Card or Reader

C : Card Data

Wiegand Data Timing Specification

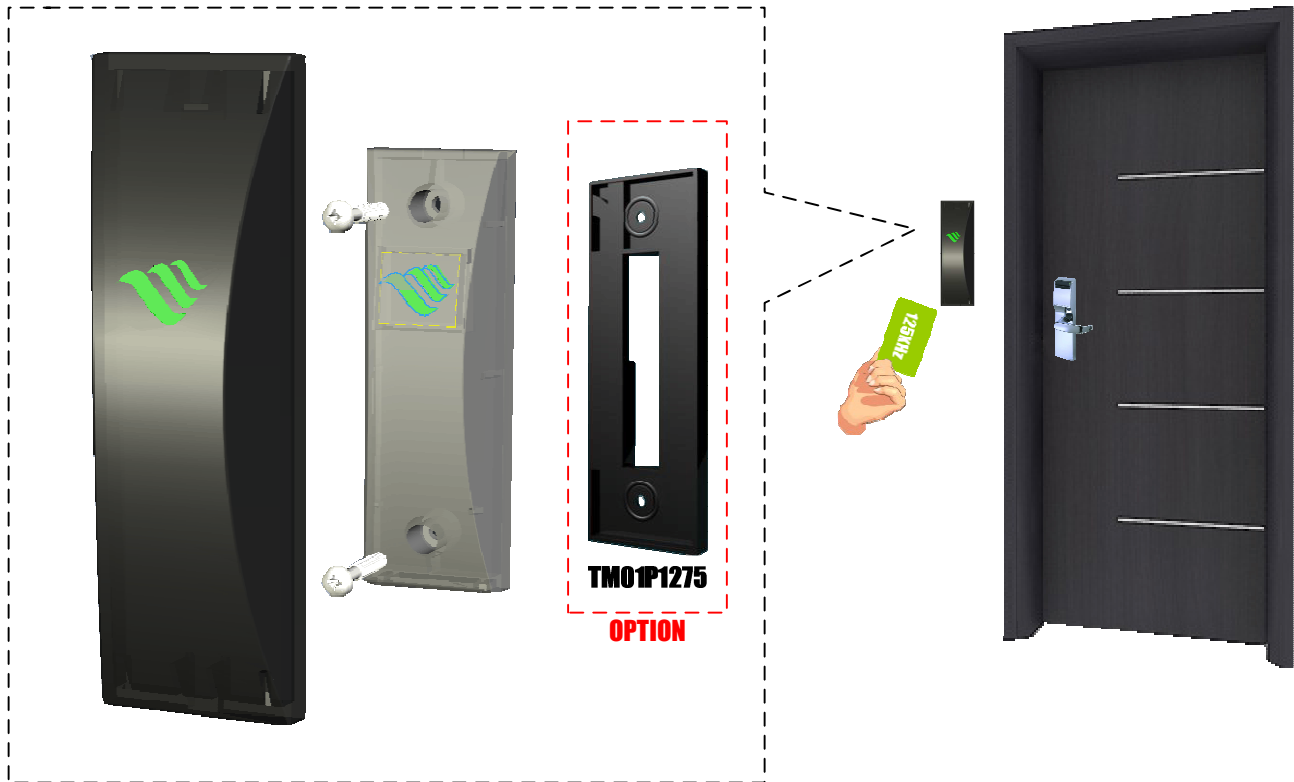
Pulse Interval (TPW)=2.0mS +/- 5%

Pulse Width (TDW)=100uS +/- 5%



Installation

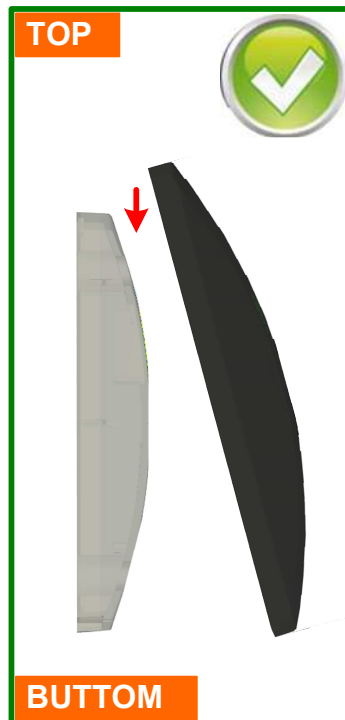
For the installation, the inner reader requires two screws to be fixed on the proper location next to the entrance. The outer black housing will apply on top of the reader.



Please pay special attention to the below instruction which demonstrates the proper direction that outer housing needs to be applied to inner reader.



Above picture shows the inside of the outer housing.



Above picture shows the correct direction (TOP) that outer housing needs to be applied.





CAUTION:

The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream.

To prevent possible harm to the environment or human health please separate this product from other waste streams to en-sure that it can be recycled in an environmentally sound manner.

For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

This information only applies to customers in the European Union.

For other countries, please contact your local government to investigate the possibility of recycling your product.