Essex Electronics

1-800-Keyless www.keyless.com

IRX-1S, IRX-2S, IRXP-1S, IRXP-2S, IRX-1B, IRXP-1B, IRX-2B, IRXP-2B

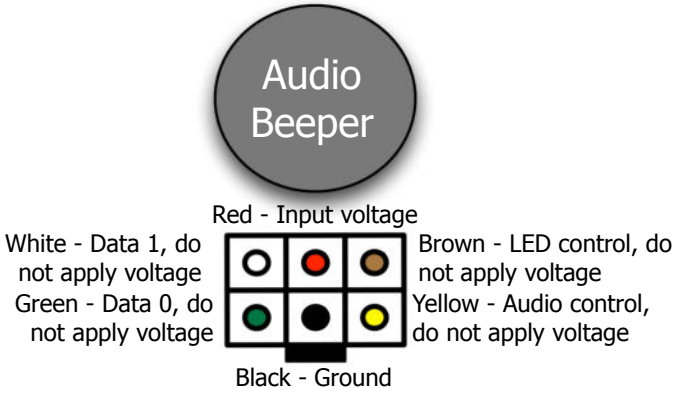
Part Number(s): IRX-1S, IRX-2S, IRXP-1S, IRXP-2S, IRX-1B, IRXP-1B, IRX-2B, IRXP-2B
Output: 26 Bit Wiegand or 37 Bit Wiegand Open Format
Voltage(s): 12 VDC, +/- 3.0V 20mA
Temperature: -40º C to +70º C (-40º F to +160º F)
DATA 1 and DATA 0 signals are open collector outputs with 2.2K pull-ups to the internal +5V. The data is sent at 1 msec per bit with a pulse duration of 50 usec. An annunciator beeps with each card read. When the LED control input is pulled low, the GREEN LED will be on and the BLUE LED will be off. When the input goes high the BLUE LED is on and the GREEN LED is off. The LED that is illuminated will blink off with every card read. The LED control input is pulled to the internal +5V with a 2.2K resistor.

The following WIEGAND output is sent each time a card is read:
P S S S S S S S S N N N N N N N N N N N N N N P
BIT 1 2 9 10 25 26
BIT 1 is an even parity for the following 12 bits. The sum of bits 1-13 is even.
BITS 2-9 are the SITE CODE, part of the card data.
BITS 10-25 This is the card number read.
Leading 0's are added as required. Bit 10 is most significant.
BIT 26 is an odd parity over the previous 12 bits. The sum of bits 14-26 is odd.
Example: Site Code of 004 and a card number of 123 read 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 1 1 1

The following card formats are supported;
iClass
iClass SE/SR
iClass Seos
Mifare Classic 1K/4K & SE
Mifare Mini
Mifare Ultra Light
Mifare Desfire
FeliCa
CEPAS

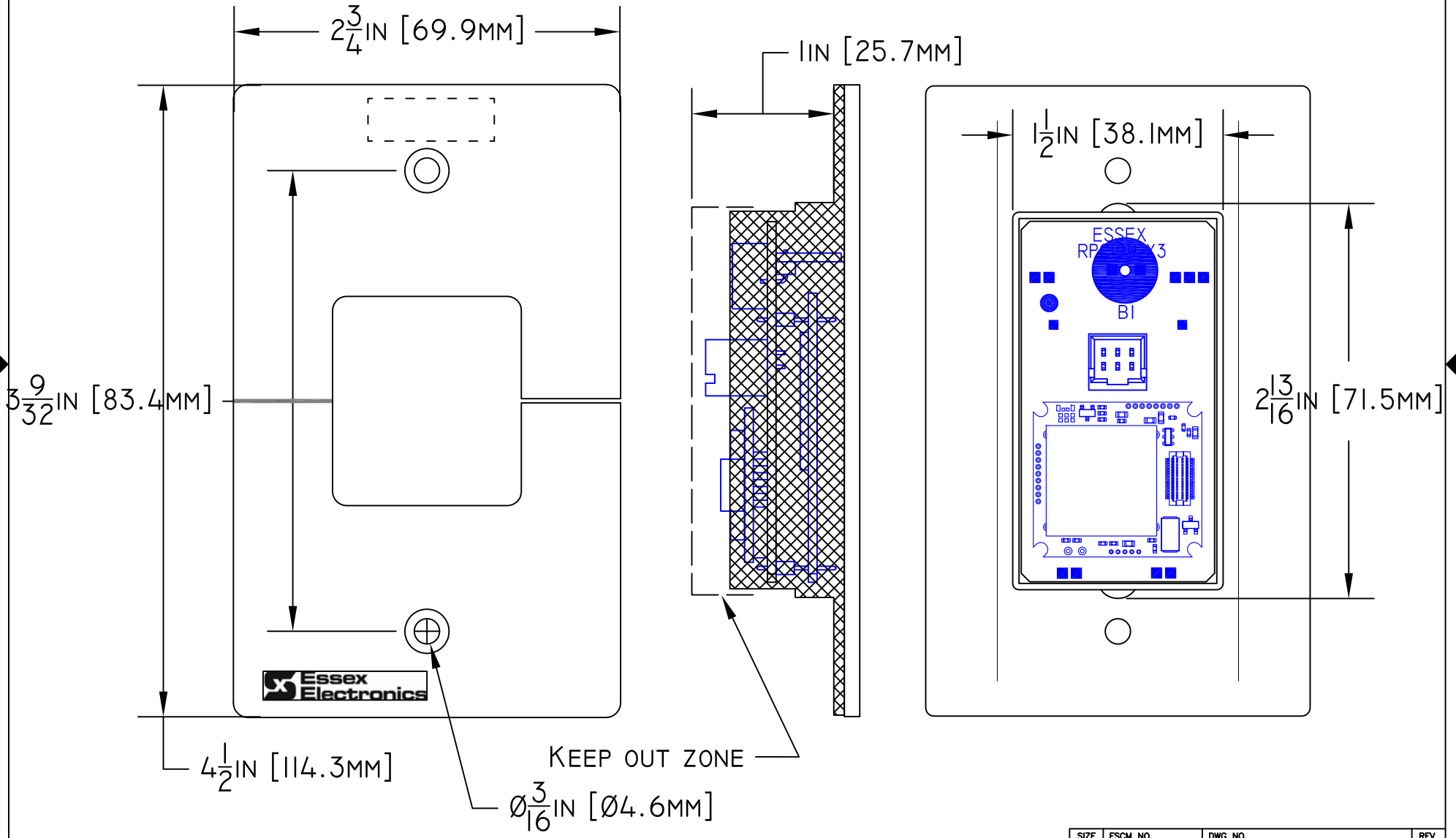
Plus a number of other formats, contact Essex Electronics for details

For IRXP models, the following Prox technologies are supported;
HID Prox
Indala Prox
EM4100
EM4102
EM4200
EM4305
EM4450
FDX-B
T5557
T5567
AWID Prox



iRox Wiring:

Red	+12V DC
Black	DC Ground
White	Data 1
Green	Data 0
Brown	LED Control, floating = BLUE, grounded = GREEN
Yellow	Audio Control, floating = off, grounded = beep



SIZE	FSCM NO.	DWG NO.	REV
A		RTL26	B
SCALE 1:1	RTL26-B.DWG	SHEET 2 OF 2	

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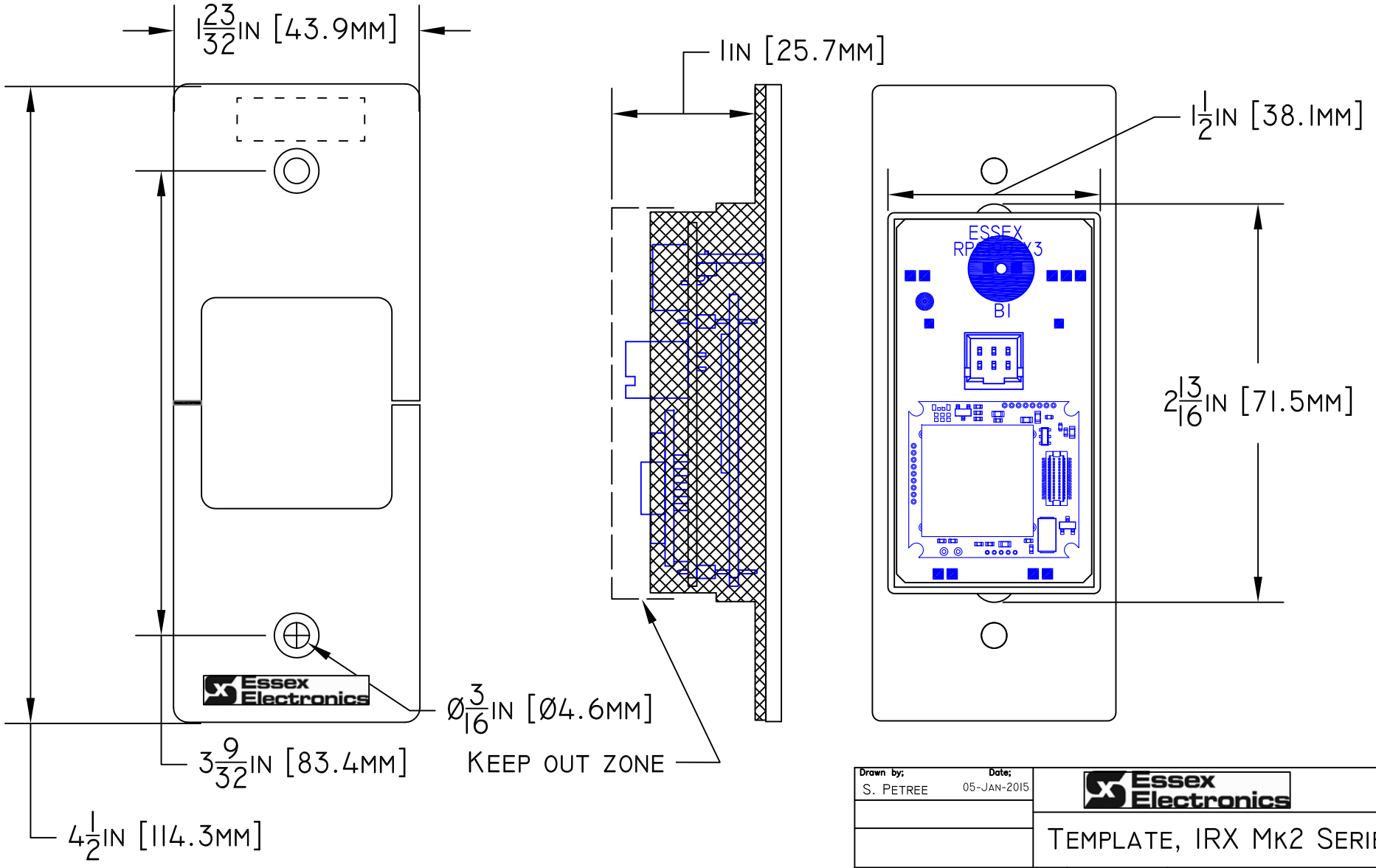
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	09-MAY-2018	SMP
	B	CHANGED FACE PLATES	25-MAY-2021	SMP



Drawn by; S. PETREE	Date; 05-JAN-2015	Essex Electronics	
		TEMPLATE, IRX MK2 SERIES	
		SIZE A / FSCM NO. / DWG NO. RTL26 / REV B	
IRX-IS, IRXP-2S, IRX-IB, IRXP-2B		SCALE 1:1	RTL26-B.DWG / SHEET 1 OF 2

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