Presco™ PIM "Series 1"

## Presco™ Interface Module.
℃ N761

INTRODUCTION

The Presco™ Interface Module (PIM) can be used to convert commonly used data formats to either the Nidac Presco™ or 26 bit Wiegand format.

FEATURES

- Converts from Wiegand, Nidac Presco™, Clock & Data (Magnetic Card) or Dallas iButton™ (commonly referred to as Silicon Key) format.
- Converts to Nidac Presco™ or 26 bit Wiegand format (with site code 000 or 001, other site codes available).
- Compatible with new Nidac Presco™ PAC decoders.
- Replaces PRM module for Clock & Data readers on **all** Presco™ decoders.
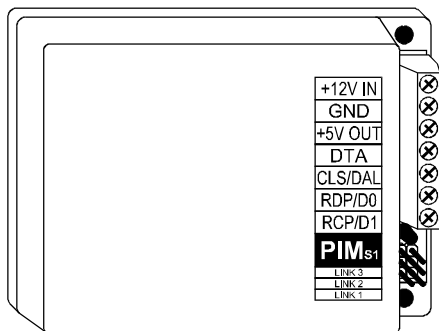
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WARRANTY

NIDAC SECURITY PTY. LTD. will repair or replace this product if proven to be faulty (excluding accidental or malicious damage) under the 36 month warranty offered from the date of purchase.

As NIDAC SECURITY PTY. LTD. or it's agents do not perform the final installation, inspection or training in the use of this product, they cannot be held liable for injury, loss or damage directly or consequentially arising from the use or misuse of this product.

Presco™ is a Trade Mark belonging to NIDAC SECURITY PTY. LTD. The Presco™ Keypad system is protected by patents granted in various countries including Australia.

The software design is protected internationally and remains the intellectual property of NIDAC SECURITY PTY. LTD.

Design improvement and specification are subject to change without notice. All designs are copyright NIDAC SECURITY PTY. LTD. 1992 to 2001.

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SPECIFICATIONS

Voltage:	10 to 15 Volts D.C.
Current:	25mA.
Dimensions:	88mm x 69mm x 25mm.
Weight:	115gms.
Wiegand: Pulse Width	50µs
Pulse Separation	2ms

TERMINAL DESCRIPTIONS

+12v The positive D.C. power input.

GND The Ground (or Negative) power input. This is also a common reference connection for all devices connected to the PIM. i.e. all devices connected to the PIM require their GNDs to be connected together.

+5V A 5 Volt D.C. power output for powering connected equipment (100mA. max.).

DTA Presco™ data input/output.

CLS/DAL The **C**ard **L**oaded **S**ignal (for Clock/Data readers) or Dallas iButton™ input.

RDP/D0 The **R**ead **D**ata **P**ulse input (for Clock/Data readers) or Wiegand Data 0 input/output.

RCP/D1 The **R**ead **C**lock **P**ulse input (for Clock/Data readers) or Wiegand Data 1 input/output.

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SETTINGS SUMMARY

Links	Input	Output
LINK 3 / LINK 2 / LINK 1	26 bit Wiegand	Presco™ (PAC compatible only)
LINK 3 / LINK 2 / LINK 1	Dallas iButton™	Presco™ (PAC compatible only)
LINK 3 / LINK 2 / LINK 1	Track 2 format Clock/Data	Presco™ (PAC compatible only)
LINK 3 / LINK 2 / LINK 1	Track 2 format Clock/Data	Presco™ (all models)
LINK 3 / LINK 2 / LINK 1	Presco™	26 bit Wiegand with site code 000
LINK 3 / LINK 2 / LINK 1	Dallas iButton™	26 bit Wiegand with site code 000
LINK 3 / LINK 2 / LINK 1	Dallas iButton™	26 bit Wiegand with site code 001
LINK 3 / LINK 2 / LINK 1	Presco™	26 bit Wiegand with site code 001

IMPORTANT NOTE: The required operational mode of the PIM (as set by the links above) **MUST** be set **BEFORE** applying power to the unit.

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Converting from WIEGAND to PRESCO™ PAC

LINK 3
LINK 2   All links OFF
LINK 1

Note: This conversion can only be used when a Presco™ PAC decoder is being used.

In this mode the PIM accepts standard 26 bit Wiegand data in on the RDP/D0 and RCP/D1 terminals. This data is then converted to Presco™ format and output on the DTA terminal. The actual Presco™ code output will be eight (8) digits long, with the first three (3) digits being the site code and the last five (5) digits being the user code.

Cabling requirements:

Wiegand Reader to PIM – Shielded cable – max 100m.

PIM to PAC decoder – Unshielded cable – max 1Km.

Converting from DALLAS iButton™ to PRESCO™ PAC

LINK 3
LINK 2   Link 3 ON only
LINK 1

Note: This conversion can only be used when a Presco™ PAC decoder is being used.

In this mode the PIM accepts Dallas iButton™ data in on the CLS/DAL terminal. The unique identifier from the Dallas iButton™ is read and the last 32 bits of this data is kept. These 32 bits are then converted to Presco™ format and output on the DTA terminal. The actual Presco™ code will be nine (9) base 12 digits.

The method of calculating the Presco™ code generated by the PIM from a Dallas iButton™ is available upon request.

Cabling requirements:

iButton™ Reader to PIM – Telephone cable for up to 10m, CAT5 for up to 100m, must be unshielded twisted pair cable.

PIM to PAC decoder – Unshielded cable – max 1Km.

Converting from CLOCK/DATA to PRESCO™ PAC

LINK 3
LINK 2   Link 2 ON
LINK 1

In this mode the PIM accepts Track 2 format Clock/Data data on the CLS/DAL, RDP/D0 and RCP/D1 terminals. The CLS input *MUST* be used as the PIM will ignore all data on the RDP and RCP inputs until the CLS input is low. The CLS input must be taken high again after a read to enable the reading of the next data stream.

The PIM reads up to eight (8) digits from the data stream. The digits read are the ones directly before the first separator or end sentinel character. i.e. on a standard bank issue card the PIM will read the last eight (8) digits as embossed on the front of the card.

Cabling requirements:

Clock/Data Reader to PIM – Shielded cable – max 100m.

PIM to PAC decoder – Unshielded cable – max 1Km.

Converting from CLOCK/DATA to PRESCO™

LINK 3
LINK 2   Links 2 & 3 ON
LINK 1

In this mode the PIM accepts Track 2 format Clock/Data data on the CLS/DAL, RDP/D0 and RCP/D1 terminals. The CLS input *MUST* be used as the PIM will ignore all data on the RDP and RCP inputs until the CLS input is low. The CLS input must be taken high again after a read to enable the reading of the next data stream.

The PIM reads up to seven (7) digits from the data stream. The digits read are the ones directly before the first separator or end sentinel character. i.e. on a standard bank issue card the PIM will read the last seven (7) digits as embossed on the front of the card.

Cabling requirements:

Clock/Data Reader to PIM – Shielded cable – max 100m.

PIM to PAC decoder – Unshielded cable – max 1Km.

Converting from PRESCO™ to WIEGAND

LINK 3   LINK 3
LINK 2   Link 1 ON or   LINK 2   Links 1, 2 & 3 ON
LINK 1   LINK 1

In this mode the PIM accepts Presco™ data in on the DTA terminal. This data is then converted to 26 bit Wiegand data and output on the RDP/D0 and RCP/D1 terminals. The site code generated by the PIM will be either 000 (Link 1 ON only) or 001 (Links 1, 2 & 3 ON). The user code will be the number sent to the PIM from the Presco™ device.

Note: If the number generated by the Presco™ device (eg. a PRE keypad) is equal to 0 or greater than or equal to 65535 then the user code will always be 65535 and the Presco™ device will respond with a "Blarp" (error) sound.

Cabling requirements:

Presco™ keypad to PIM – Unshielded cable – max 1Km.

PIM to Wiegand Controller – Shielded cable – max 30m.

Converting from DALLAS iButton™ to WIEGAND

LINK 3   LINK 3
LINK 2   Links 1 & 3 ON or   LINK 2   Links 1 & 2 ON
LINK 1   LINK 1

In this mode the PIM accepts Dallas iButton™ data in on the CLS/DAL terminal. The unique identifier from the Dallas iButton™ is read and the last 16 bits of this data is kept. The site code generated by the PIM will be either 000 (Links 1 & 3 ON) or 001 (Links 1 & 2 ON). The user code will be the last 16 bits of the Dallas iButton™'s unique identifier code.

Cabling requirements:

iButton™ Reader to PIM – Telephone cable for up to 10m, CAT5 for up to 100m, must be unshielded twisted pair cable.

PIM to Wiegand controller – Shielded cable – max 30m.

OTHER PRESCO™ MODELS AND ACCESSORIES

PAC1   Presco™ single door access decoder.
400 programmable user codes.
1 x 5 Amp. 30 Volt Electric Latch Control relay.
1 x 1 Amp. 30 Volt alarm relay.
12 to 24 Volt D.C. or 16 to 24 Volt A.C. operation.

PAC2   Presco™ dual door access decoder.
400 programmable user codes.
2 x 5 Amp. 30 Volt Electric Latch Control relay.
2 x 1 Amp. 30 Volt alarm relay.
12 to 24 Volt D.C. or 16 to 24 Volt A.C. operation.

PACDL Data logger to record events with time & date stamping from up to 4 PAC1 or PAC2 decoders.

KC2   2 x 1 Amp. 30 Volt SPDT relays.
Timed or toggled operation.
125 programmable user codes.
12 Volt D.C. operation.

KC6   Six (6) open collector logic outputs.
Timed or toggle operation.
125 programmable user codes.
12 Volt D.C. operation.

PKCDL Data logger to record events with time & date stamping from up to 4 KC6, KC2 or PDA decoders.

PRE   Keypad encoder for any Presco™ decoder.

PKG   Watertight gasket for PRE.

PSE-NI Metal, vandal and weather resistant keypad encoder for any Presco™ decoder. Suitable for outdoor usage.

PSE-IL Back lit, metal, vandal and weather resistant keypad encoder for any Presco™ decoder. Suitable for outdoor usage.

PRX   Proximity card reader for use with PAC1, PAC2 or 26 bit Wiegand input controller.