

# 20365/6/8/9 PIN Interface Units

## Operation and Installation Instructions

17018 Ver 1.4 January 2003

### 1. Introduction

The PIN Interface unit provides a means of adding extra security to installations using PAC door controllers. As well as a keyholder having to use their key (or other ID device) to gain access through a door, a 4-digit Personal Identification Number (PIN) must also be entered.

The PIN is derived from the code stored in the key and cannot be changed. The use of a PIN may be optionally controlled by a time profile, i.e. at certain times/days the key only need be used, outside those hours the PIN must also be entered.

Two versions of the PAC PIN Interface unit are available:

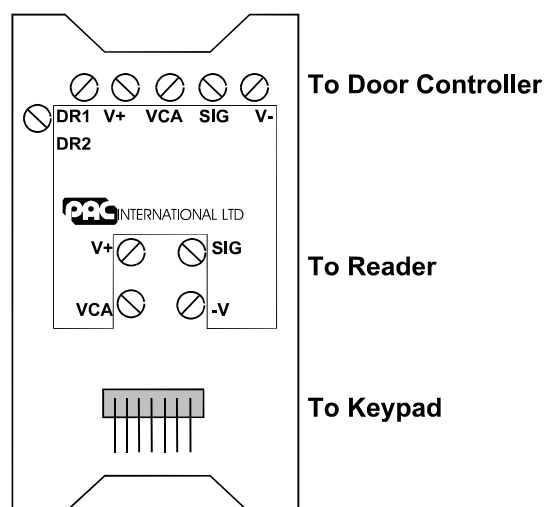
- **20365 PIN Interface Unit with Keypad**
- **20366 PIN Interface Unit without Keypad.** This unit has a flying lead for connection to a suitable third party keypad.
- **20368 PIN Interface Unit with Black Keypad (Surface Mount)**
- **20369 PIN Interface Unit with Black Keypad (Flush Mount)**

Both versions of the PIN Interface unit include connections to the door controller and to a reader.

Any type of reader with a PAC format output can be used, including Magstripe reader and Wiegand Interface unit.

A third set of connectors on the PIN interface unit without keypad are provided for connection to the third party keypad.

Power for the interface is derived from the door controller; no additional power supplies are required.



**Figure 1 PIN Interface Unit**

### Specification

- **Keypad:** 10-digit rigid membrane keypad (not 20366).
- **Supply voltage:** 12-18V dc (supplied from controller).
- **Built in sounder:** to acknowledge key presses.

## 2. Operation

To gain access through a door the keyholder must first present a valid key to the reader. Once the key has been read, the LED on the reader will momentarily illuminate.

The keyholder must then enter their 4-digit PIN via the keypad. The LED will blink and the built-in sounder will beep as each key is pressed. Once the PIN has been entered, if the PIN is correct then the LED will become illuminated to indicate the door is unlocked.

If the PIN is incorrectly entered, four further attempts can be made to gain access (by re-presenting the key and re-entering the PIN) before the key becomes locked-out.

### Note

Each PIN is derived from the code in the key and cannot be changed.

A duress facility is available which may be activated by the keyholder adding 1 to the last digit of their PIN, i.e. PINs of 1234 and 6789 will have duress codes of 1235 and 6780 respectively.

The use of a PIN number is optional and may be controlled by a time profile, i.e. at certain times only a key may be required to gain access, at other times a key and PIN must be used.

Information regarding the use of time profiles for PIN readers is contained in the documentation supplied with the administration system being used.

## 3. Installation

### CAUTION

Static discharge from an external keypad must be prevented. Metalised keypads must be earthed by connecting the front covers to an earthed backbox.

### 3.1 Cables

- **Reader:** 4-way minimum multi-stranded, unscreened standard signal/alarm cable (4 terminals, 6-way or 8-way flying lead).
- **Controller:** 4-way or 6-way multi-stranded, unscreened standard signal/alarm cable.

The cross sectional area determines the cable length up to a maximum of 750 metres:

200m @ 0.22 mm<sup>2</sup>  
 500m @ 0.5 mm<sup>2</sup>  
 750m @ 1.0 mm<sup>2</sup>

### Note

The total overall distance from the controller to the unit must not exceed 750 metres.

### 3.2 Door Controller Connections

Six terminals are provided to connect the PIN interface unit to a door controller. Four of these connections are essential: **V-**, **V+**, **SIG** and **VCA/LED**. The other two connections (**DR1** and **DR2**) may be used if a **Request to Exit** switch and/or door contact are being used, see Figure 2 and Figure 3.

### Note

The terminals **DR1** and **DR2** are not connected to or used within the PIN interface unit itself; they are provided as a convenient means of joining the wires from the **Request to Exit** switch and/or door contact to the cable from the PIN interface unit to the door controller.

### 3.3 Reader Connections

Four terminals are provided for connection to a reader, Magstripe reader or Wiegand interface unit. Refer to the documentation supplied with the reader, Magstripe reader or Wiegand interface unit for connection information.

Figure 2 shows the connections for a PAC reader and Figure 3 shows the connections for a KeyPAC reader.

### 3.4 Keypad Connections

The PIN interface unit without keypad (20366) is supplied with an 8-way flying lead, 2 metres in length. These can be connected to a suitable third party keypad.

The keys of the keypad must be arranged into a 3-column by 4-row matrix. The keys themselves should have normally open contacts.

One end of the flying lead has the eight wires exposed. The other end is terminated in a 'Molex'-type socket, which connects to the seven pins on the interface itself. The keypad should be connected to the flying lead as shown in Figure 2 and Figure 3.

#### Notes

1. Ensure that the marking on the flying lead socket connects to pin 1 of the PIN interface unit.
2. The \* and # keys on the keypad are not used.
3. The brown wire in the in flying lead is not used.

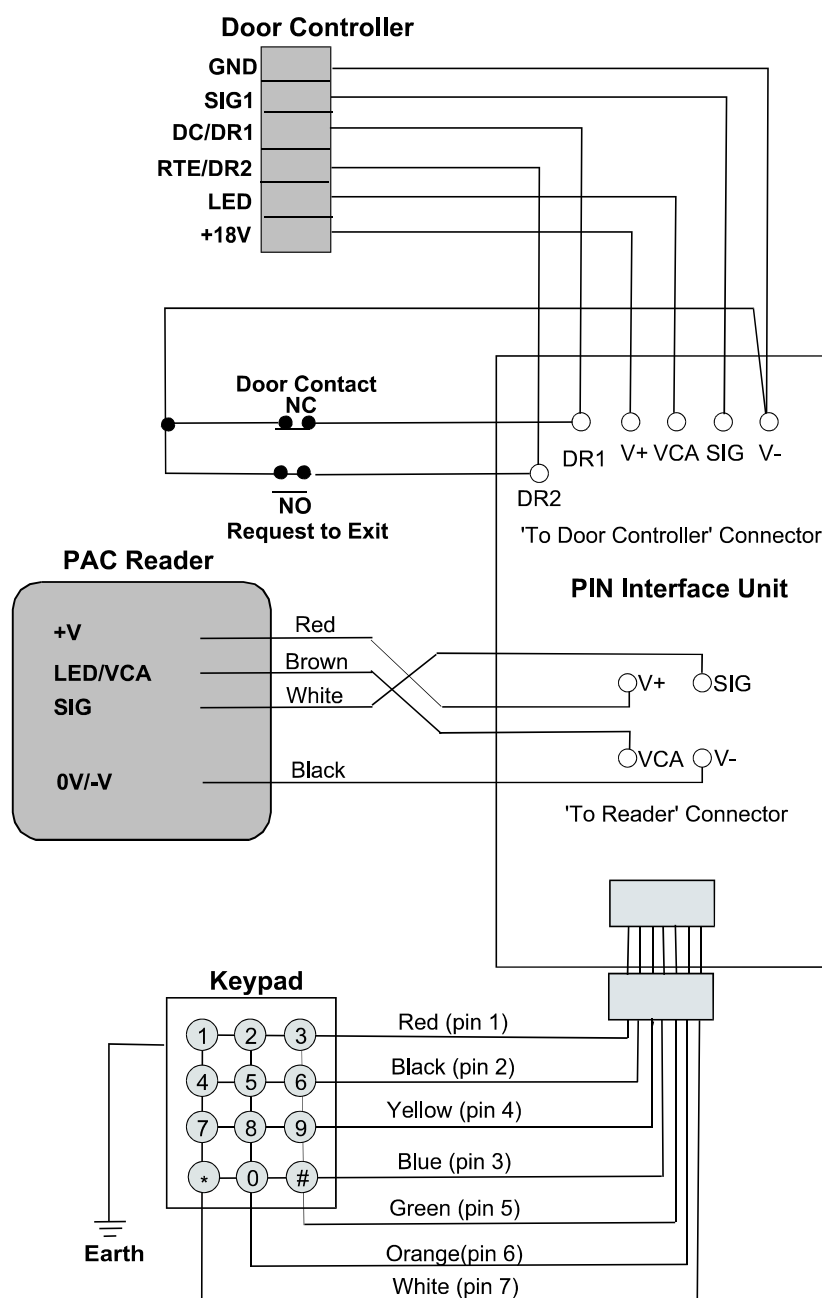


Figure 2 PAC Reader and Keypad Combination

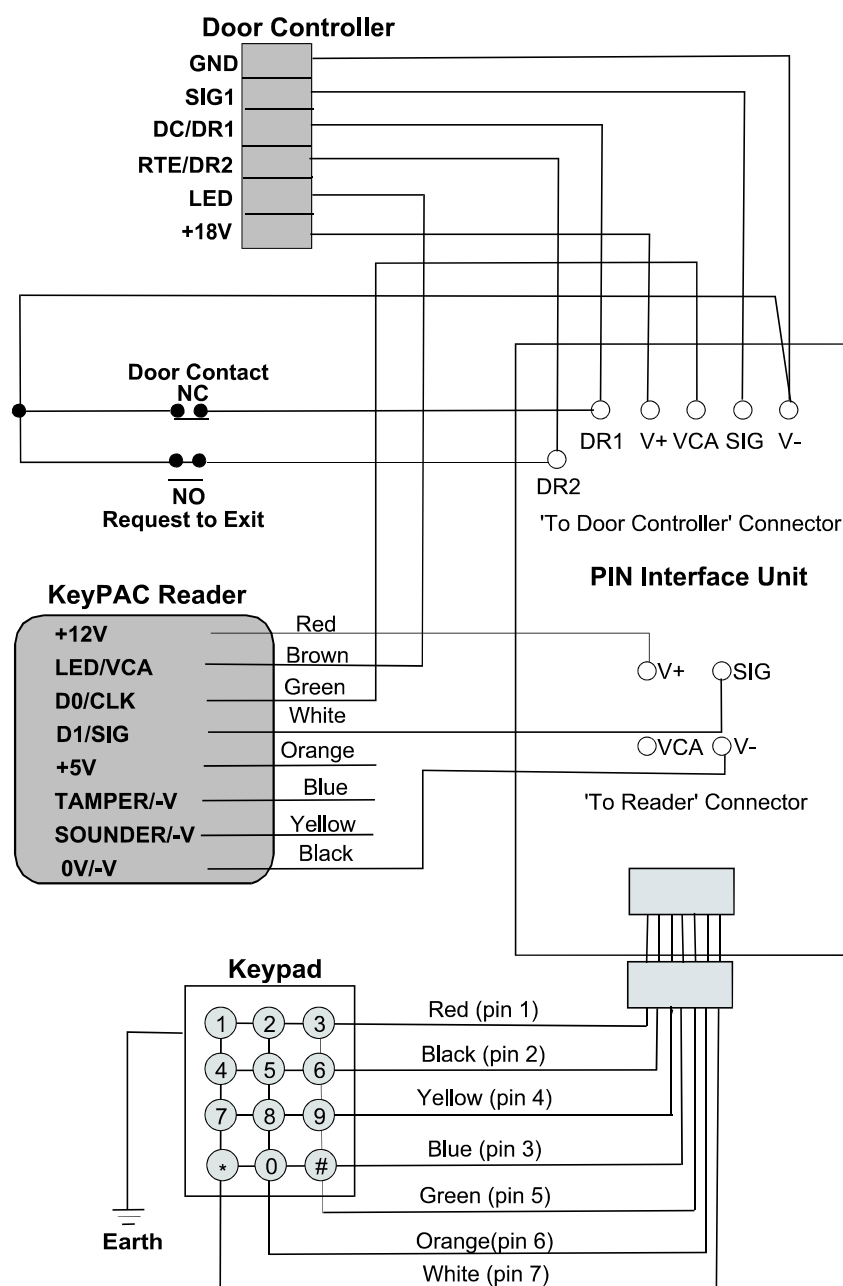



Figure 3 KeyPAC Reader and Keypad Combination

Declaration of Conformity	
Application of Council Directives	73/23/EEC
Standard(s) to which conformity is declared	EN55022-B, EN55082-1
Manufacturer's Name	PAC INTERNATIONAL LTD
Manufacturer's Address	1 Park Gate Close, Bredbury, Stockport, U.K. SK6 2SZ
Type of Equipment	Access control systems
Product Equipment	PIN interface units
I, the undersigned, hereby declare that the equipment specified above conforms to the above directive(s) and standard(s).	
Signed	
Full Name	Tim Gregory
Date	30th January 2003
Position	Managing Director