Scope

These instructions are for setting up DT1 desktop enrolment readers using the Keyboard Reader Configuration program only. DT2 readers are covered by separate instructions.

Introduction

The desktop enrolment reader allows cards and fobs to be read directly into a PC application such as Access Control Software, a database or a spreadsheet. It plugs into a USB port on the PC and, when a compatible card or fob is presented to the reader, the card number will be input to the application as if it were typed on the keyboard. The desktop reader can be pre-configured to match your specific card format and output requirements by using the setup software supplied on the disk. Once configured, the desktop reader will continue to operate to those parameters.

Setup Software

Before starting, it is recommended that you copy the desktop reader setup software 'KbsSetup.exe' from the disk onto your PC desktop.

Ensure that the reader is connected to a USB port on the PC and run the desktop reader setup software. The following screen is displayed:
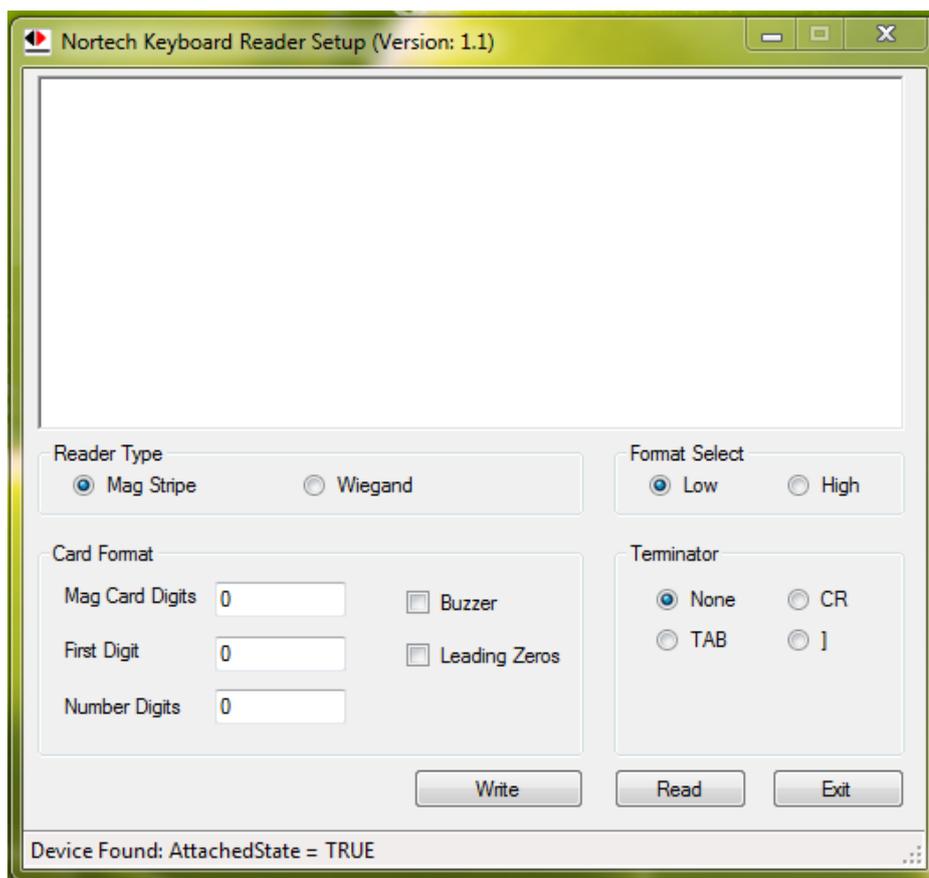
The software automatically searched for the reader device and indicates at the bottom of the screen that the device has been found.

To check the current settings, place the cursor in the response window at the top of the dialog box, and click 'Read'. A line of parameters will be displayed. The interpretation of this data is explained in 'Checking the Settings'.

Configuring the Reader

Each reader type can be set to read one of two format options. The options available depend on the reader technology (see below).

Reader Type	Set to 0V (Low)	Set to +V (High)
EM1, HT1	10-Digit Clock & Data	26-Bit Wiegand
DP1	26-Bit Wiegand	44-Bit Wiegand
ISO	10-Digit Clock & Data	32-Bit Wiegand
MIF, LEG	Dependent upon the customer specific version	

The desktop reader must be set to the same format as that set for the readers used on the system. Use 'Format Select' to do this.

Note: For the EM1 format reader, it is not necessary to set this option. Setting the Reader Type to either Clock & Data or Wiegand automatically sets the reader to the correct format.

Once the card format has been set, the output format can then be configured to match those set in the access control unit. First set the 'Reader Type' to either Clock & Data or Wiegand.

⚠ Take care to ensure that the 'Reader Type' selection is compatible with the 'Card Format' selection. Otherwise the reader will not provide an output.

The card number length and position on the card is dependant upon the exact card format. See the examples at the end of this document for the correct settings for the most common card formats.

There is an option to add a terminating character at the end of the card number, which may be required to move the cursor to the next field or next line as appropriate.

There is an option to add leading zeros to present all card numbers in the same format (same number of digits).

An internal buzzer can provide an audible confirmation signal when a card or fob has been read.

Once these parameters have been set, click the 'Write' button to write them to the card reader.

Checking the Settings

With the cursor active in the response window, click the 'Read' button to check that the correct format has been programmed. A row of data will be displayed similar to:

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rdr w 32 0 32 b z f1]
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Explanation

rdr w	The reader has been set to Wiegand. 'rdr m' indicates Clock & Data.
32	The total bits on the card (or total digits for Clock & Data).
0	Bit (or digit) start position for the data to be read from the card.
32	The number of bits (or digits) to be read from the card.
b	If displayed, indicates that the buzzer has been activated.
z	If displayed, indicates that leading zero's will be added.
f1	The format select has been set to 'High'. 'f0' indicates that it has been set to 'Low'.
]	The ']' terminating character has been set. If either CR or TAB is selected, the read response itself is terminated using that selection.

Once you are satisfied that all settings are stored in the reader, check that the cursor is in the response window and present a known card or fob to the reader. Check that the expected value is presented on the screen with the appropriate terminating character/action.

If nothing appears on the screen, check that the correct format has been selected for the card type.

If the number of bits on the card does not match that selected in 'Wiegand Bits' or the number of digits on the card does not match that set in 'Mag Card Digits', then a message indicating the correct number of bits/digits on the card is displayed. This may also occur if the 'Format Select' and 'Reader Type' settings are not compatible. Revise the settings to ensure that they are correct for the cards to be read and the application and then present the sample card again.

Once the response from the card is as expected, the reader is ready for use with the target software application. It is advisable that you carry out some final tests to ensure that the selected terminating character has the desired effect in the target software application.

Example Format Settings

10-Digit Clock & Data, using a site code plus 4-digit card number

Mag Card Digits set to:	10
First Digit set to:	6
Number Digits set to:	4

10-Digit Clock & Data, no site code, 8-digit card number

MAG Card Digits set to:	10
First Digit set to:	2
Number Digits set to:	8

32-bit Card Number, 26-bit Wiegand output, using a site code plus a 16-bit number

Wiegand Bits set to:	32
First Bit set to:	16
Number Bits set to:	16

32-bit Card Number, 26-bit Wiegand output, no site code, 24-bit whole number

Wiegand Bits set to:	32
First Bit set to:	8
Number Bits set to:	24

32-bit Card Number, 32-bit Wiegand output, no site code, 32-bit whole number

Wiegand Bits set to:	32
First Bit set to:	0
Number Bits set to:	32