PRG 2660

User Manual

Ref : UM-PRG 2660-V1.3-EN

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FOREWORD

The purpose of this manual

This technical manual describes the programming of BDG tags.
It completes the PRG 2660 interface manual and general presentation sheet.

Manual reference

The manual's generic reference is :

UM - <name of equipment> - Vx.y - L where

UM means user manual

x designates the equipment's version number

y designates the document issue/revision number.

L is the language used.

Update

Version	Revision/Issue No.	Date	Nature of the modification
1	0		Not used
1	1	31/07/07	Creation based on documentation M-PRG_2660-1.1-F.
1	2	09/10/08	Flyleaf modification
1	3	10/06/14	Annexe modification

Note

The information contained in this manual are subject to being changed without notice.
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TABLE OF CONTENTS

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1 DESCRIPTION

1.1 PRG 2660 PROGRAMMER

The PRG 2660 tag programmer is composed of :

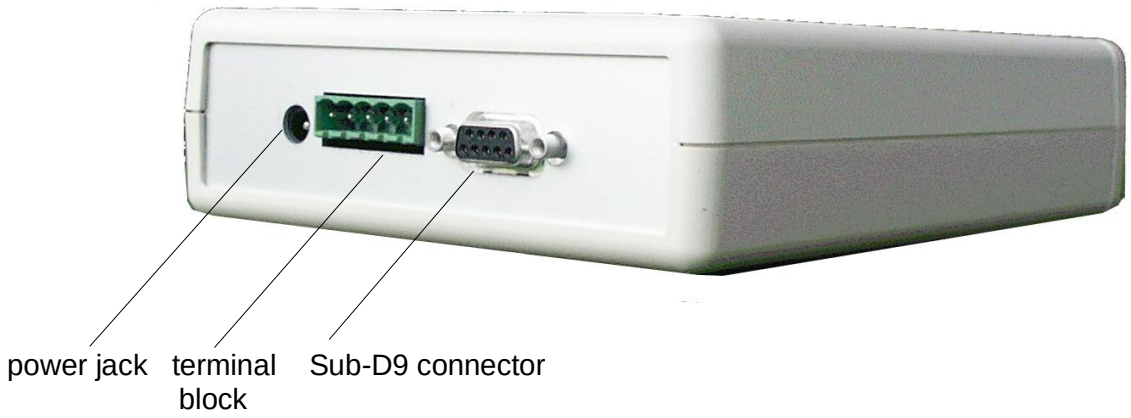
- a PC application (Windows) supplied on CD-ROM,
- a programming box in ABS for placing on a table,
- a power supply,
- a 3-wire RS-232 cable (without pin 2/3 reverser).

The programmer casing is a JBus ® peripheral capable of encoding a tag by contact.

The front elevation contains a slot for the insertion of a flat tag (BDG 1020 or mechanical adaptation tag for BDG 1090) and a power-on indicator light :

The box is supplied with 12 Vdc (8…15 Vdc) via a 2.1mm jack on the rear elevation, via the power supply.

It communicates with the PC in point-to-point via a Sub-D9 connector and in multipoint via a 5-pin teminal block :



If the programming box is the only peripheral connected to the PC's serial port, communication is in point-to-point ; this is the assumption made, in what follows, for configuring the port in terms of programming only.

Also, the box is configured by default in RS-232 (and with a speed of 19,200 bauds).

For programming with verification by a Hyper X reader, communication is in multipoint.

1.2 INSTALLATION AND CONNECTIONS

Install the PRGWIN 32 software on the PC from the installation CD-ROM.

Connect the power supply and the PC (Sub-D9 connector) to the programming box as indicated in the photograph above.

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2 PROGRAMMING

2.1 CONFIGURATION

2.1.1 CONFIGURING THE PC'S SERIAL PORT

Launch the PRGWIN32 software.

① Select the button "**Setup Port**" :

- Select the serial port.
- Select the transmission speed (default 19,200 bauds).

N.B: the addresses of the programming box and the reader are ineffective in point-to-point (programming without verification).

If the application's buttons remain dimmed, check the configuration of the programming box.

2.1.2 CONFIGURATION OF THE PRGWIN32 APPLICATION

Supply the programming box with power.

The diagram on the following page summarizes the successive operation of the configuration phase:

② Select the button "**Enable Issuer**" and enter the password (4 characters) with which Balogh has provided you.

Confirm (OK) : the text zone ③ displays the code and the name of the integrator.

④ Select the button "**Load Format**" to specify the code format and the mode of the tags to be programmed.

Confirm (OK) : the text zone "Programming Box Status" in ③ displays the tag code format and the tag mode.

N.B : the Wiegand 26 format includes a site code ('Facility Code') which is displayed in zone ③bis and may be modified (between 0 and 255).

⑤ Select via the radio buttons one of the three code supply possibilities :

- extraction from a Microsoft database, with an .mdb ('Data base') extension,
- extraction from a codes text file ('file'),
- entering it via the keyboard ('keyboard').

⑥ Check the option boxes if necessary:

- 'serial number' (enter the tag serial number as well as its code),
- 'show last code' (displays the previous code).

This option gives access to an self-incrementing sub-option ('code incremented') : the application offers as a code the code of the previous tag, increased by 1.

At the same time, a prefix and/or suffix, as well as the hexadecimal format, can be specified.

N.B : if the three boxes are checked, the serial n° (S/N) is also automatically incremented upon each programming.

Automatic incrementation accelerates and increases the reliability (fewer data-entry errors) of the programming of tags belonging to the same batch (same format, same mode, codes and, possibly serial n^{os}, which follow on from each other).

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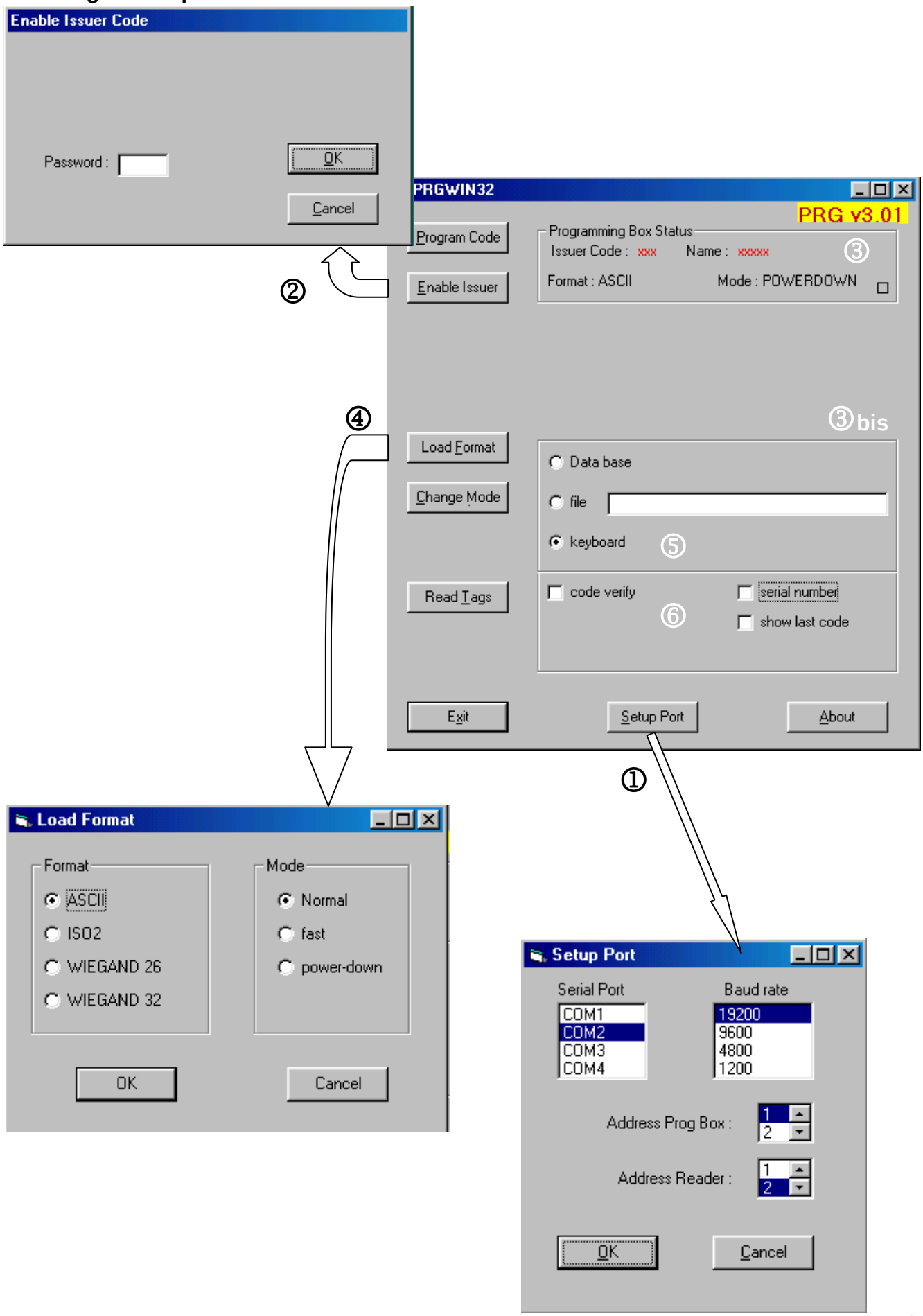
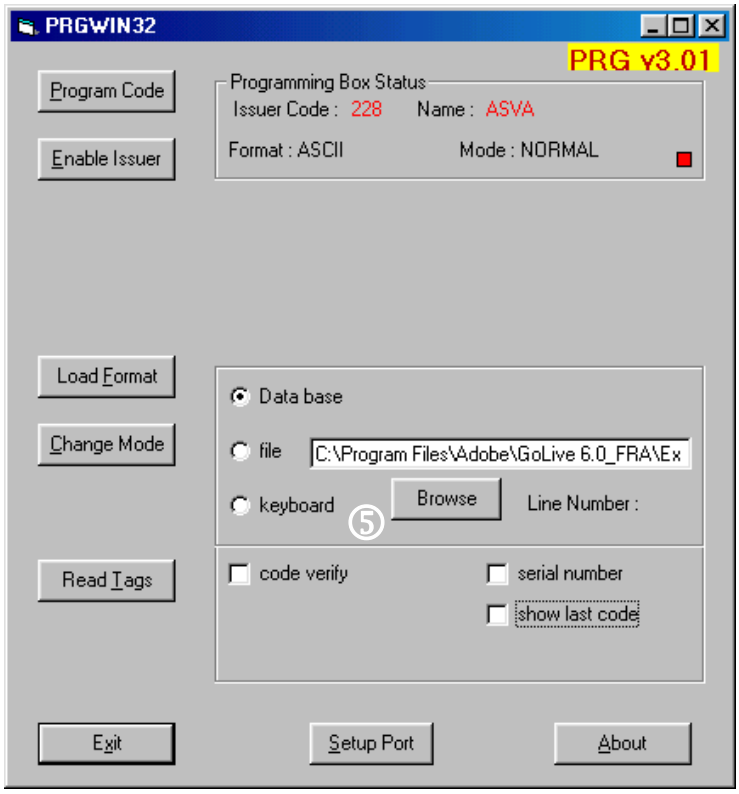
Configuration phase :



Modifying the configuration: ⑤ selection of the database or the file is done via the “Browse” button ; the current path (an the line n° for a database) is displayed :



To change the prefix, the suffix or the decimal/hex format, uncheck and re-check the ‘show last code’ and ‘code incremented’ boxes.

When you exit the application, (“**Exit**” button), the configuration is saved and automatically remembered at the next session.

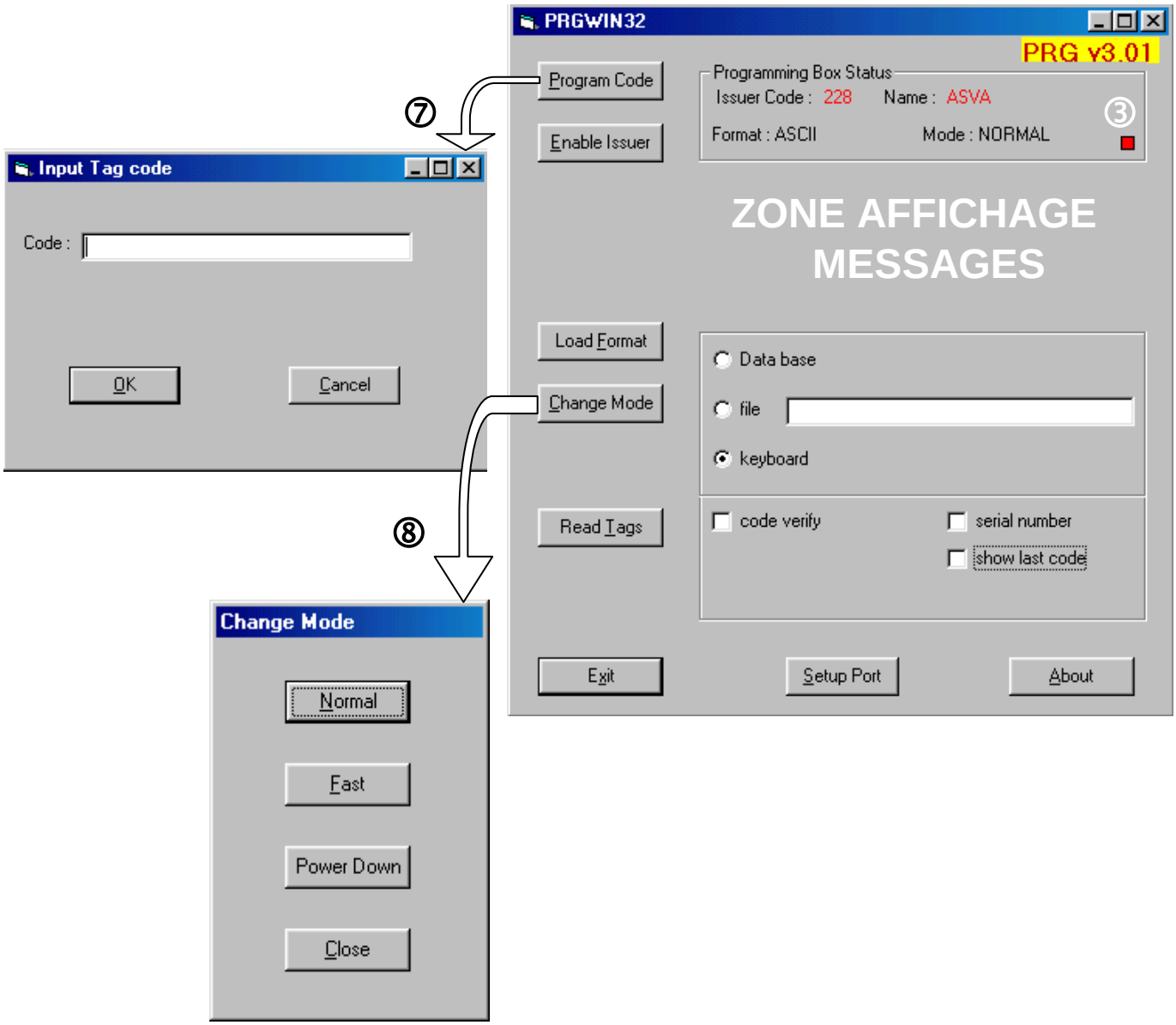
N.B : the prefixes and/or suffixes are not saved.

2.2 IMPLEMENTATION

Insert the flat tag (BDG 1020 or adaptation tag for BDG 1090 : see annexe 2), with the golden connector at the top, into the slot on the programming box until it makes contact : the “Programming Box Status” ③ text zone square becomes red.

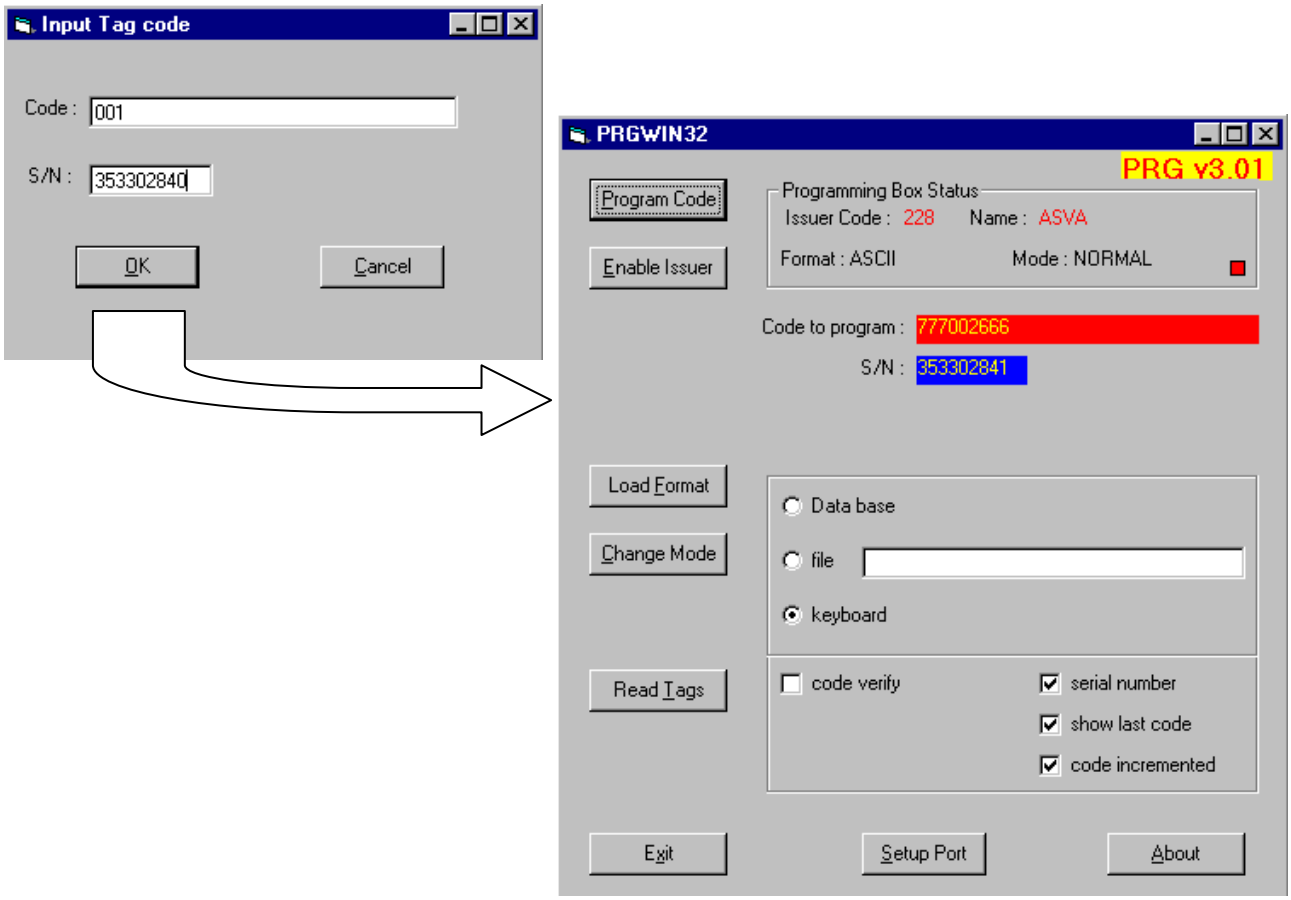
⑦ Select the “**Program Code**” button, enter the tag code and confirm.
If the ‘serial number’ box has been checked, the tag serial number is also requested.

⑧ Select the “**Change mode**” button to change only the mode of the tag connected.
This modifies the current mode displayed in ③.



Example : programming with all options ⑤ (prefix : 777, suffix : 666).

The tag with serial n° 353302840 is to be programmed with 001 : this data must be entered via ⑦ :



In the Display Messages zone the following appear :

- on a red background : the complete code proposed for the next tag (‘Code to program’),
- on a blue background : the serial n° proposed for the next tag (‘S/N’).

Confirm these values via ‘Program Code’ (‘Exit’ the last time).

At the end of the programming session, select the “**Exit**” button: the application creates in the application’s repertory a renamable text file (.txt), which keeps track of the operations performed.

Example :

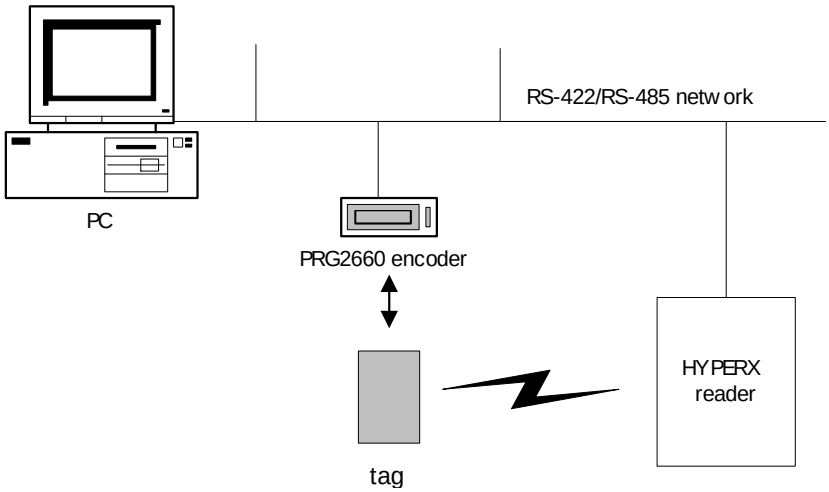
```
Date     :    06/05/04          16:52:05
-------------------------------------------------------
PRGWIN32 version : 1.2.16
M (Mode)   : N = NORMAL, F = FAST, P =POWER-DOWN
F (Format) : A = ALPHANUM, W = WIEGAND, T = TEST
IC         : Issuer Code
PRG2660 version : 3.01
-------------------------------------------------------
F    M      IC      Check  S/N              Tag Code
A    N      228     xx     353302840        777001666
A    N      228     xx     353302841        777002666
```

3 PROGRAMMING WITH CODE CHECKING

3.1 PRINCIPLE

To be absolutely sure that the coding is correct, the code programmed must be read by a Hyper X reader.

The programming software allows programming and checking to be linked subject to the interconnection of the Hyper X reader with the PC and the PRG 2660 in a RS-422 or RS-485 network:



The reader, usually a LPR 3011 reduced to a 0.5 m range, is interrogated repeatedly for 5 s after the coding.

The PC sends a JBus command to the reader to repatriate the code and performs the check : any anomaly is flagged up.

N.B : in automatic incrementation mode (see paragraph 3.2.6), the incrementation takes place only if the reading result is identical to the code input.

3.2 CONFIGURATION

3.2.1 NECESSARY ACCESSORIES

- An RS-232/RS-485 converter for PC, e.g: IC-485S, Roline brand.
- Network cable (e.g: Y cable connected to the converter).
- Converter power supply (9 V for the IC-485S).
- LPR power connector unit (for the LPR 3011, e.g: Mascot 9886 type ending with a suitable connection unit).

3.2.2 CONFIGURING THE READER (IN THE CASE OF THE LPR 3010)

- Place the reader without power supplied on a table.
- Unscrew the two screws holding the cover and remove the latter.
- Unscrew the screw next to the light which holds the lid and remove the latter.
- Position the micro switches in order to get the following configuration (refer to the sheet included or to interfacing manual ref.13053/104) :

  J1 (interface) in RS-422 or RS-485 as desired by the user ;

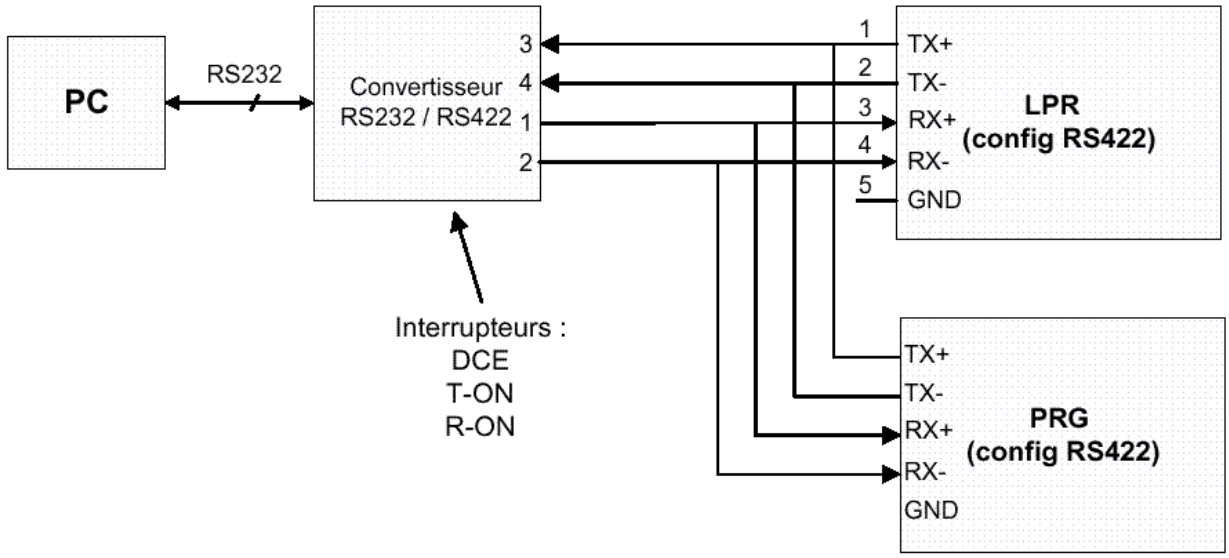
  J2 (adress) : choose a JBus address between 2 and 12 (by default, that of PRG 2660 is 1) ;

  J3 (mode) in polling and JBus.
- Connect the network cable to the reader (terminal block JP1); push it in until it locks.
- Connect the power to the reader (terminal block JP3) ; push it in until it locks.
- Replace the lid and re-tighten the screw.
- Replace the casing and tighten the two screws.

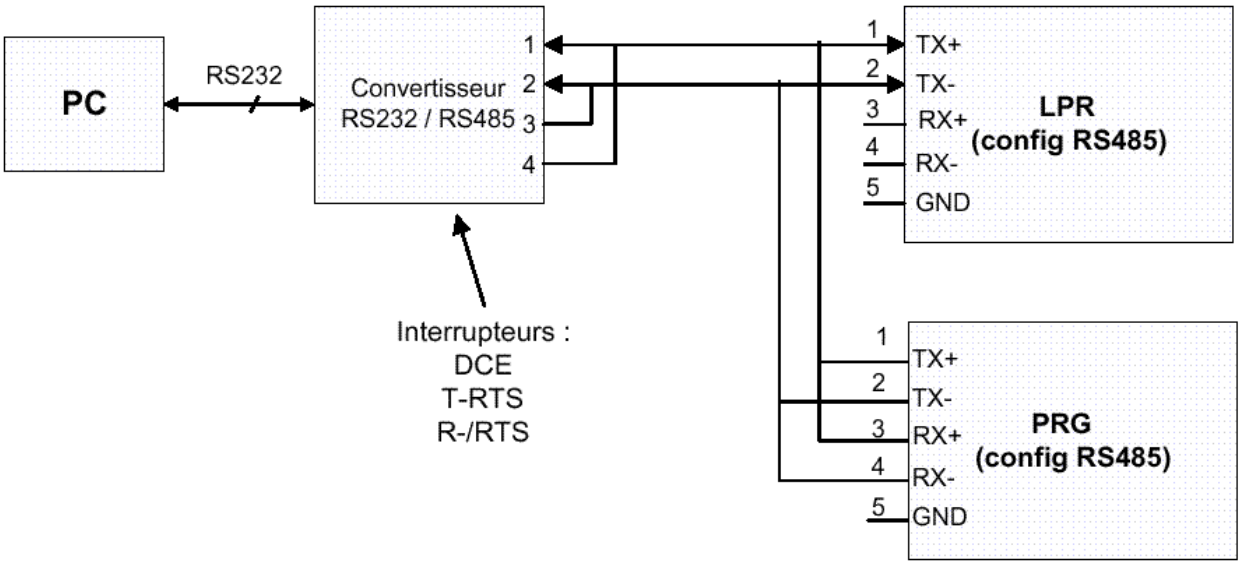
3.2.3 CONFIGURING THE CONVERTER

Configure the converter in data transmission interface (DCE).
The handshake signals depend on the type of network:

RS 422 :

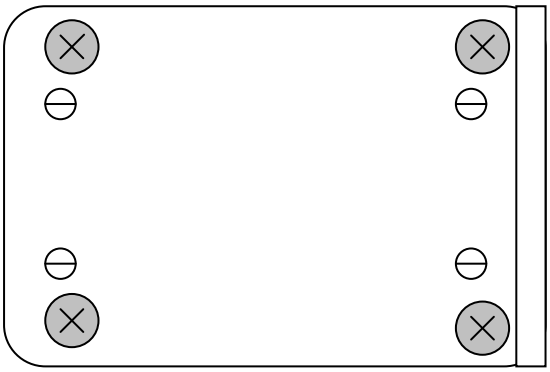


RS 485 :

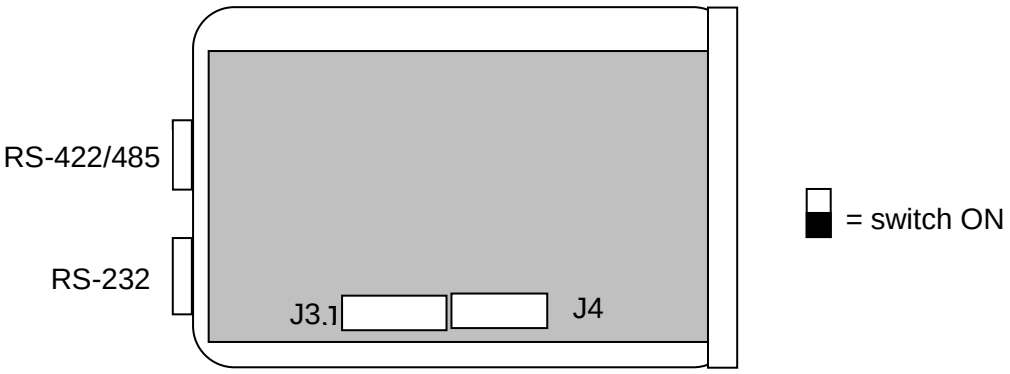


3.2.4 CONFIGURING THE PROGRAMMING BOX

- Turn the programming box with no power supplied over on a table.
- Unscrew the four Pozidriv® crosshead screws that hold the cover and remove the latter:



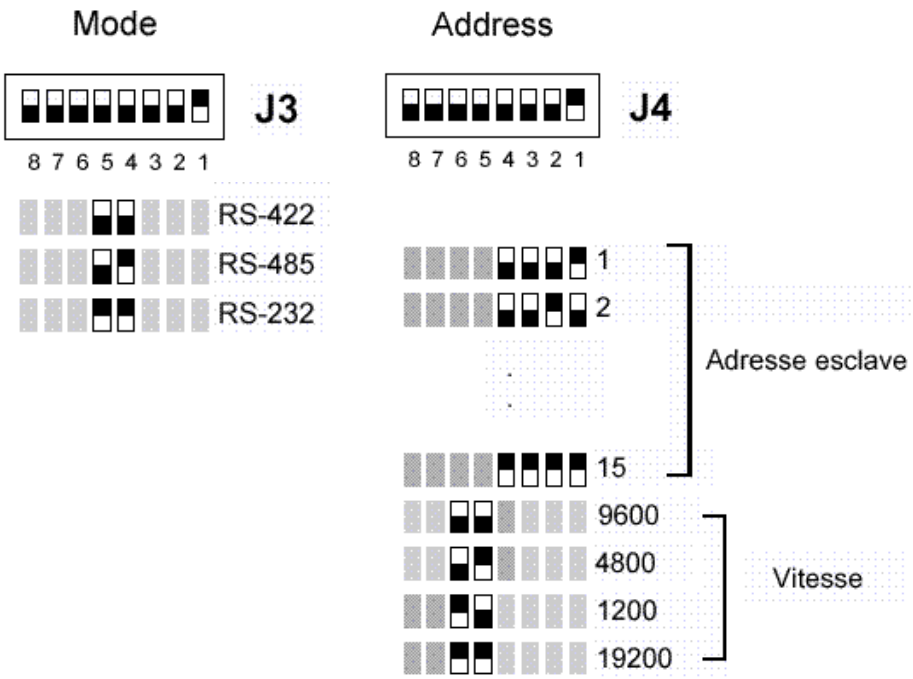
- Put the programming box back in its place.
- Position micro-switches J3 and J4



so that you have the following configuration :

J3 (mode) in RS-422 or RS-485 depending on which has been chosen.

J4 (address) between 1 and 15 (different from that of the reader), transmission speed identical to that of LPR 3010.



- Re-tighten the cover.

N.B : the role of the other micro-switches is given in annexe. B.

3.2.5 CONFIGURING THE SERIAL PORT OF THE PC AND THE NETWORK

Launch the PRGWIN32 software.

① Select the "**Setup Port**" button:

- Select the serial port.
- Select the transmission speed previously set.
- Enter the address of the two JBus slaves (programming box and reader) and confirm.

If the buttons in the application remain dimmed, check the configuration of the programming box.

3.2.6 CONFIGURING THE PRGWIN32 APPLICATION

Confirm : the "Programming Box Status" text zone displays the code and the name of the integrator, as well as the tag code format and tag mode last used.

In order to modify/specify these parameters:

Power up the converter and the programming box.

② Select the button "**Enable Issuer**" and enter the password (4 characters) with which Balogh has provided you.

Confirm (OK) : the text zone ③ displays the code and the name of the integrator.

④ Select the "**Load Format**" button to specify the code format and the mode of the tags to be programmed.

Confirm (OK) : the "Programming Box Status" text zone in ③ displays the tag code format and the tag mode.

N.B : the Wiegand 26 format includes a site code ('Facility Code') which is displayed in the zone ③bis and which can be modified (between 0 and 255).

⑤ Choose via the radio buttons one of the three code supply possibilities :

- extraction from a Microsoft database, with an .mdb extension ('Database'),
- extraction from a codes text file ('file'),
- entering it via the keyboard ('keyboard').

⑥ Check the option boxes if necessary :

- 'serial number' (enter the tag serial number as well as its code),
- 'show last code' (displays the previous code).
  This option gives access to a self-incrementation sub-option ('code incremented') : the application proposes as a tag code that of the previous tag, increased by 1.

  At the same time, a prefix and/or suffix as well as the hexadecimal format can be specified.

  N.B : if all three boxes are checked, the serial n° (S/N) is also incremented automatically upon each programming.

Automatic incrementation accelerates and increases the reliability (fewer data-entry errors) of the programming of tags belonging to the same batch (same format, same mode, codes and, possibly serial n^{os}, which follow on from each other).

⑨ Check the 'code verify' box to enable automatic verification of the tag codes.

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3.3 IMPLEMENTATION

Insert the flat tag (BDG 1020 or adaptation tag for BDG 1090 : see annexe 2), with the golden connector, into the slot on the programming box until it makes contact : the “Programming Box Status” text zone square becomes red.

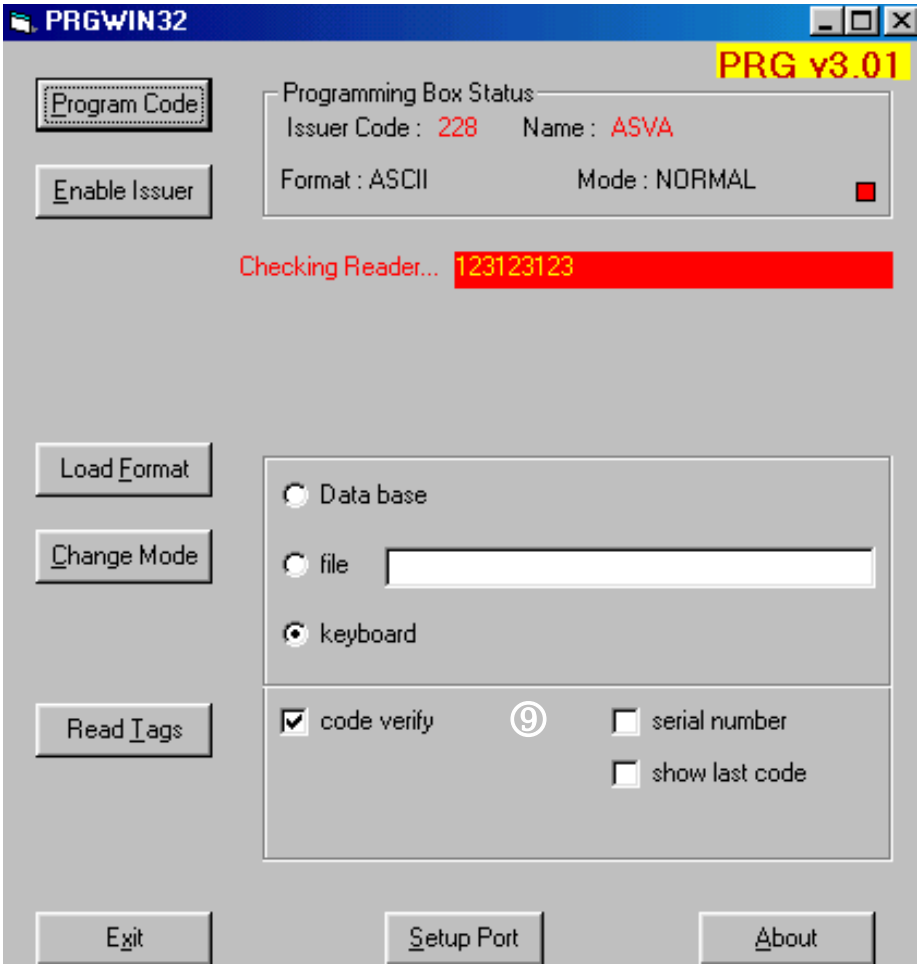
⑦ Select the “**Program Code**” button, enter the tag code and confirm.

The message ‘Checking Reader’ followed by the code is displayed in red in the Display Messages zone for as long as the tag is presented in front of the reader.

The pop-up message ‘Bad code’ indicates a programming fault.

⑧ Select the “**Change mode”** button to change only the mode of the tag connected.

This modifies the current mode displayed in ③ :



N.B :

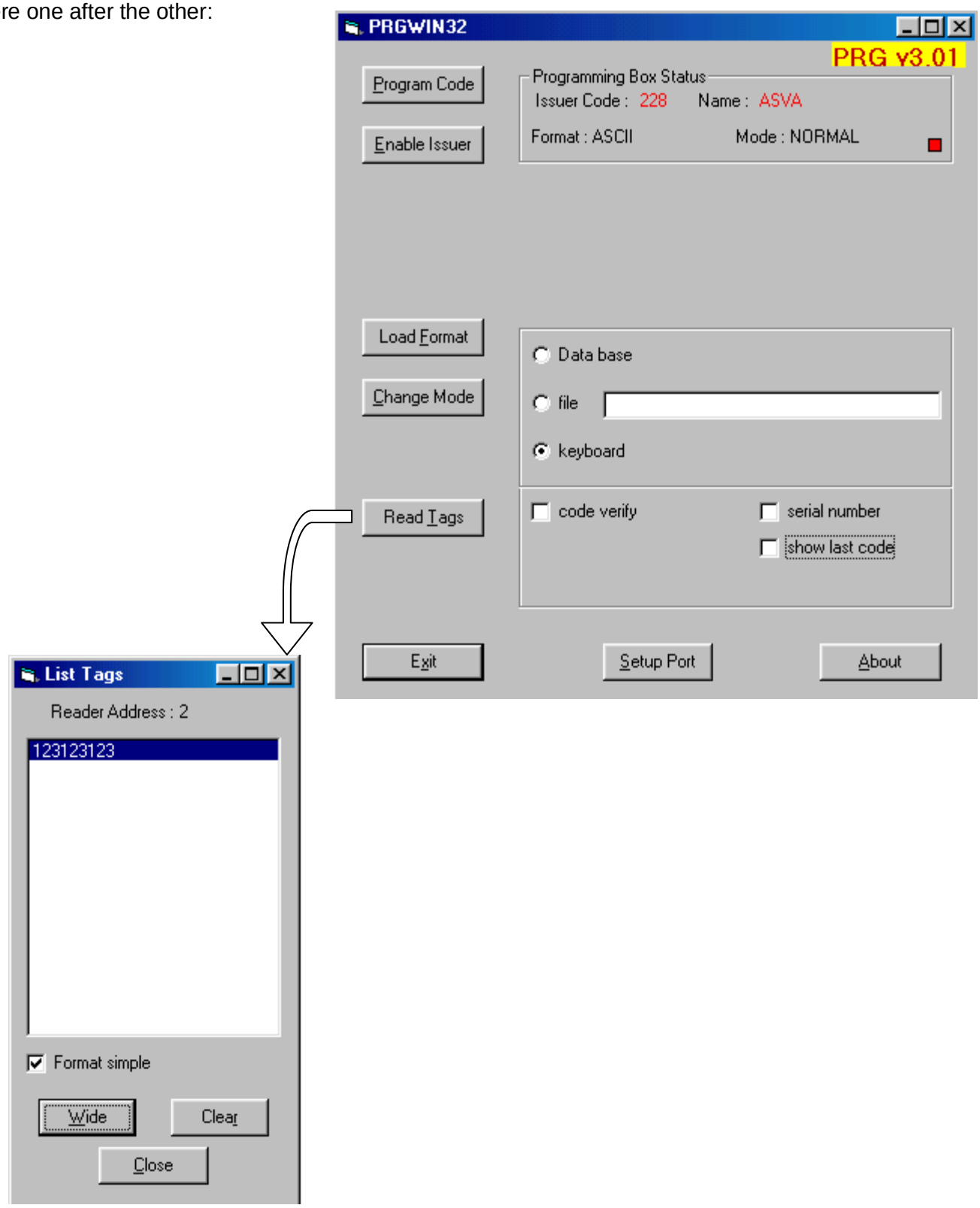
- refer to paragraph 2.2 for the example given there.

- the text file records (verif. column) the results of the code read/instruction comparison.

3.4 SIMPLE READING

The “**Read Tags**” button allows the tag to be read independently of the programming box, the application serving only as a human-reader interface.

A ‘List Tags’ window appears ; the codes of tags successively presented to the reader are displayed there one after the other:



N.B : the checkbox ‘Format simple’ displays the code without a header ; the filtering of integration codes depends on the configuration of the reader.

4 ERROR MESSAGES

‘Connection failed’ : serial port occupied : check the applications which access the port.

‘Password invalid’ : check and re-enter the password used.

‘Code too long : check file’ : code is too long (it must not exceed 29 characters).

Specific limits : Alphanumeric, ISO 2 : 29 characters, Wiegand 26 : number < 65 536.

‘Invalid input’ : incorrect data entry.

‘Input out of bounds’ : data is outside the required format (authorized characters : figures, capital letters, punctuation symbols the ASCII code of which is between 20h and 5Fh, excluding *).

‘Insert tag’ : the tag must be connected/inserted to be able to use the ‘Change Mode’ button.

‘Reader not found’ : the LPR reader has not been detected : check its configuration.

‘No tag read’ : the tag has not been presented to the reader in time.

‘Bad code’ : programming fault : reprogram the tag.

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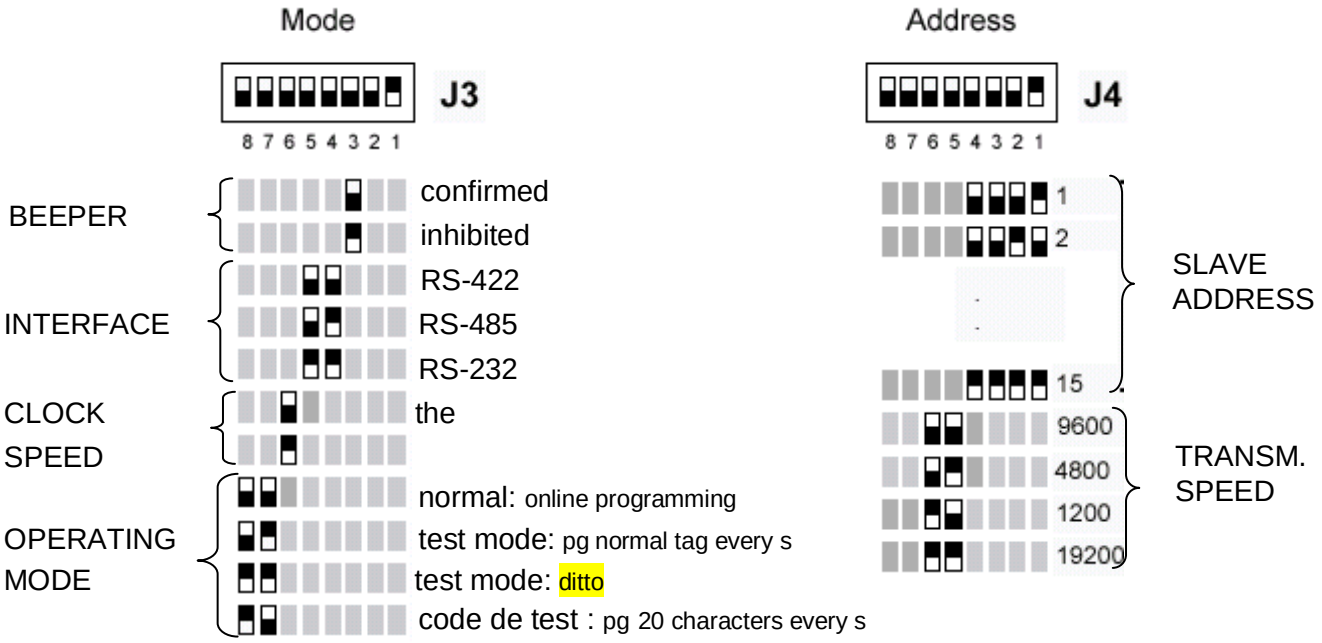
ANNEXE 1 : CONFIGURATION OF THE PROGRAMMING BOX



Default configuration : beeper confirmed, interface RS-232, normal speed, normal mode, address = 1.

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ANNEXE 2: BDG 1090 PROGRAMMING WITH ADAPTER

The jack is to be plugged into the BDG 1090 connector as indicated below :