

For more information please contact support@innovative-technology.co.uk

BV100 firmware 4.07 released

BV100 firmware is now at version 4.07. Firmware is contained within the currency dataset files and is available to download from our website within the Technical Support / Currency Download section.

New Features include:

- Detection for twisted notes
- New option added to disable escrow reject detection. When set, if a second note is inserted when a note is in escrow, the escrow note will not be rejected

Improvements:

- Sensor calibration improvements
- USB communication improvements
- Improved stacking/reject routines to ensure rejected notes are returned to the bezel.
- Added interface specific cashbox removed events



SMART Hopper firmware 6.16 released

SMART Hopper firmware is now at version 6.16. Firmware is contained within the coin dataset files and is available to download from our website within the Technical Support / Currency Download section.

New Functionality:

- CC2 interface now supports multi-currency datasets and has SMART Empty functionality.
- SSP commands that do not require encryption can now be sent unencrypted before a key exchange is performed.
- New SSP commands added: Set Baud Rate, Set Encryption Key, Reset Encryption Key.
- Added a mode to move any coins which are detected in the Hopper but have a level set to 0, to the cashbox during a payout operation.
- Support added for an eSSP coin mechanism

Improvements:

- Minimum payout recalculated after sending the Set Payout Options command
- Various improvements to coin mechanism communication
- Internal firmware optimisations
- Improved Poll with ACK



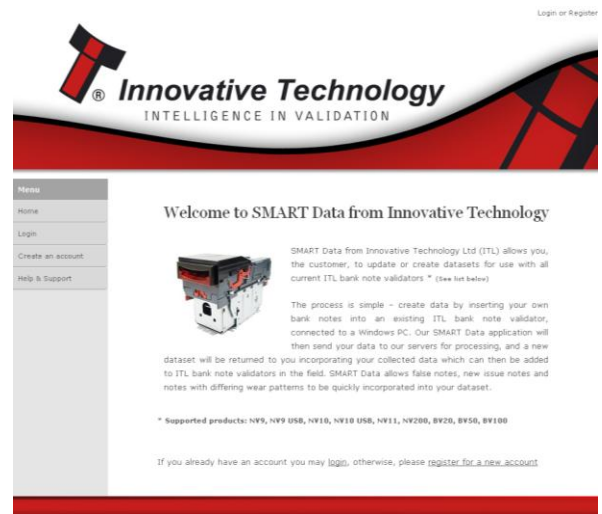
SMART Data

SMART Data is a free software programme from Innovative Technology Ltd (ITL) that allows you, the customer, to update or create your own datasets to use with all current ITL bank note validators.* SMART Data allows false notes, new issue notes and notes with differing wear patterns to be quickly incorporated into your dataset where ever you are in the world.

- Create data by inserting your own bank notes into an existing ITL bank note validator, connected to a Windows PC.
- The SMART Data application sends your data to the ITL servers for processing, and a new dataset will be returned to you incorporating your collected data which can then be added to ITL bank note validators in the field.

*** Supported products: NV9, NV9 USB, NV10, NV10 USB, NV11, NV200, BV20, BV50, BV100**

For more details or to register online visit
www.innovative-technology.co.uk/smartdata



Newly released datasets – August 2012

| Country | Code | Reason | Validator |
|-----------------|-------------|---------------------|------------|
| Brazil | BRL03/05 | Improved acceptance | BV20 |
| Brazil | BRL02/05 | Improved acceptance | BV100 |
| Euro/USA/Turkey | U0003 | New dataset | NV200 |
| Euro / Denmark | E0075 | New dataset | NV10 / USB |
| Turkey | TRY05 | New dataset | NV9 USB |
| Ukraine | UAH01/02/03 | Improved acceptance | NV200 |

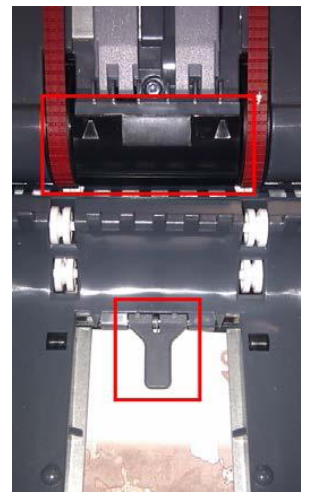
Secure By Design

The complete range of Innovative Technology bank note validators have security features built into them by design. These features are incorporated into a number of different areas including: Mechanical; Sensing; Computational & Communication and can be both visible and hidden features.

These security features all work together to ensure currency is validated accurately, stored securely and that interfaces with the host machine cannot be interfered with. Validators across the range have different mechanisms to achieve security and not all security features are present in all devices.

Mechanical Security

- The belts used in the validators to drive the note through the unit have a high kinetic friction. This helps ensure the notes are moved through the validator, but also stops them being pulled back through the note path.
- Mechanical anti-return gate which ensures nothing is following the note. If the note is pulled back, the gate will not allow the note to pass.
- This resolves many common fraud attempts, commonly referred to as stringing, strimming or fishing.



Sensing

- The optical sensors to sense the bank note use a variety of different light colours and directions to accurately record the features on both sides of the note.
- The sensor array is shown in the photo.
- A variety of optical and mechanical sensors are located along the note path to track the note position.



Computational

- The information from the note reading sensors are combined and processed with advanced mathematical pattern matching algorithms.
- The algorithms are designed in-house at Innovative Technology to provide optimum results for real note acceptance and counterfeit rejection.

Communication

- Smiley® Secure Protocol – SSP is a secure interface designed by Innovative Technology to address the problems experienced by cash handling systems and gaming machines.
- This addresses problems such as acceptor swapping, reprogramming acceptors and line tapping.
- The encryption used is Advanced Encryption Standard – AES. This standard has been adopted by the U.S. government and is now used worldwide where sensitive data needs to be transmitted.
- The key is 128 bits long and exchanged using the Diffie–Hellman key exchange method; this allows two devices to jointly establish a shared secret key over insecure communications channel.

Further information is available in the [Technical Manuals on the ITL website within Products](#) or from your local Technical Support Team.

