Bank Note Validator mFlash4.x configuration and Programming software guide (Service centre version).

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Requirements

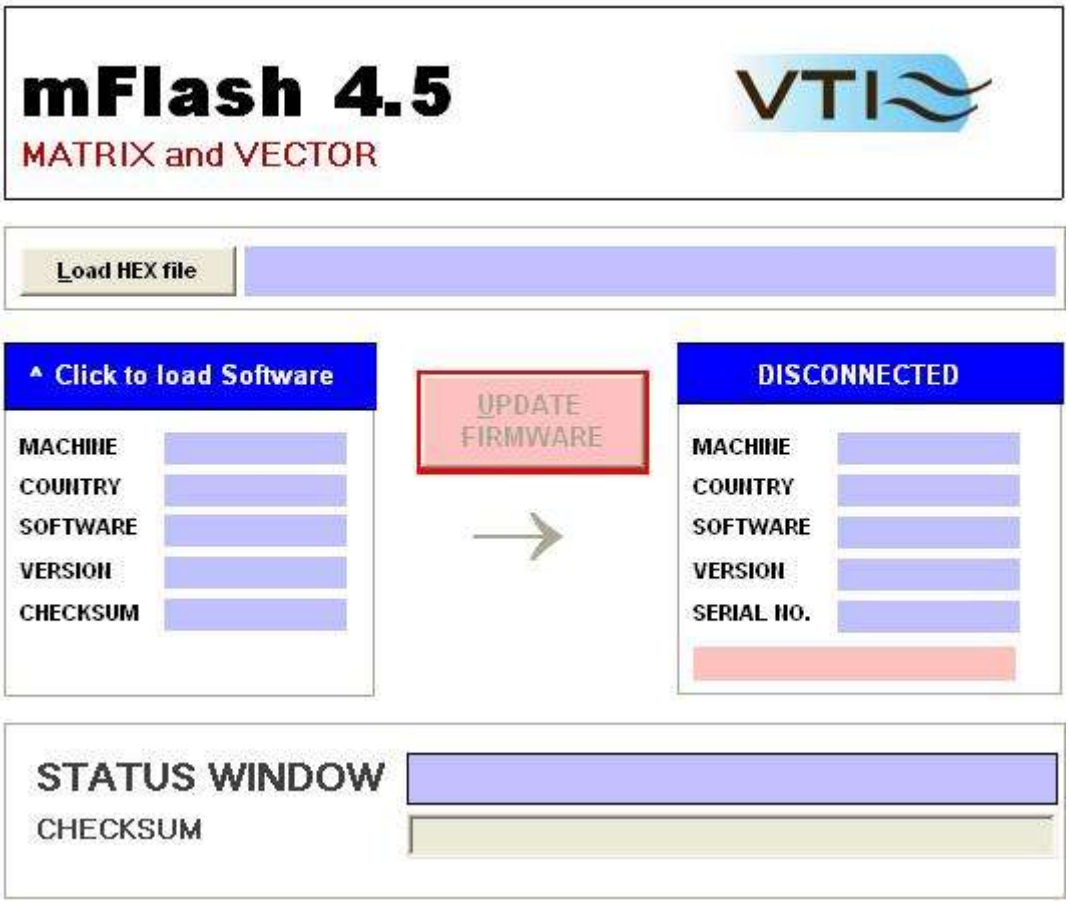
Standalone PC running Windows 98 and higher, serial port or USB to serial converter and 12Volt power source.

Setup.

Attach the serial cable to the PC. If the PC has multiple Serial ports or a USB serial converter, note down the serial port number, in the case of the converter, it may be necessary to refer to the documentation that accompanies it. Next, run the mFlash installer and follow the on screen instructions. Once complete the mFlash program will run, communications will default to Com 1, in most cases this will be correct and will need no adjustment. If necessary go to the Communication drop down and select the correct port from the list.

Next attached a powered up Matrix. You will see the screen change from disconnected (picture P1) to connected (picture P2)

P1



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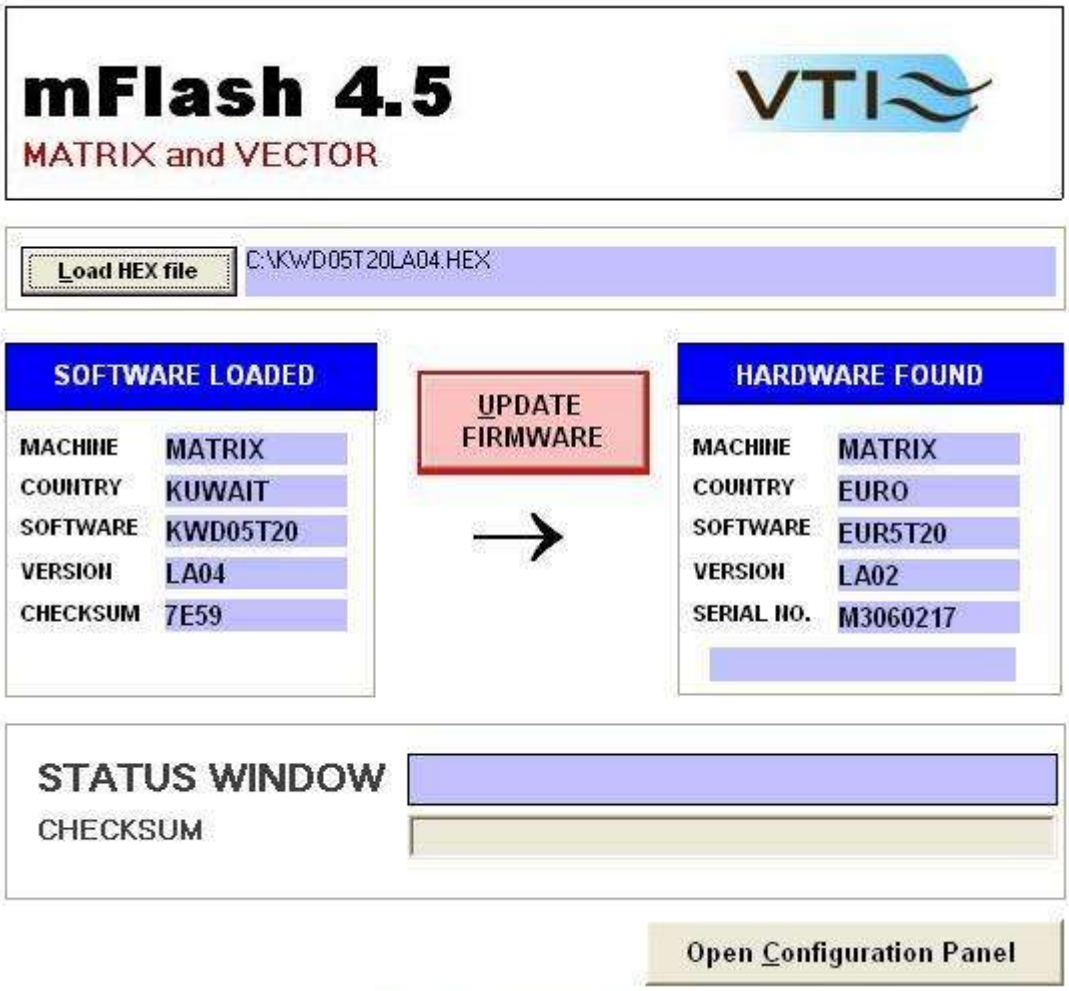
P2



The Hardware Found pane shows;

1. Machine = Validator type
2. Country
3. Validation software and denomination range
4. Version = Firmware version (first 2 digits) Validation code (digits 3 and 4)
5. Serial number of the connected unit.

Programming

1. Click on Load HEX file and browse to the location of the software file you wish to program into the validator.
2. When loaded the Software loaded pane will show the Country etc.
3. Click update firmware
4. Status window will show the progress of the programming procedure and will confirm completion.
5. If any errors occur, check power and diagnostic cables and retry.

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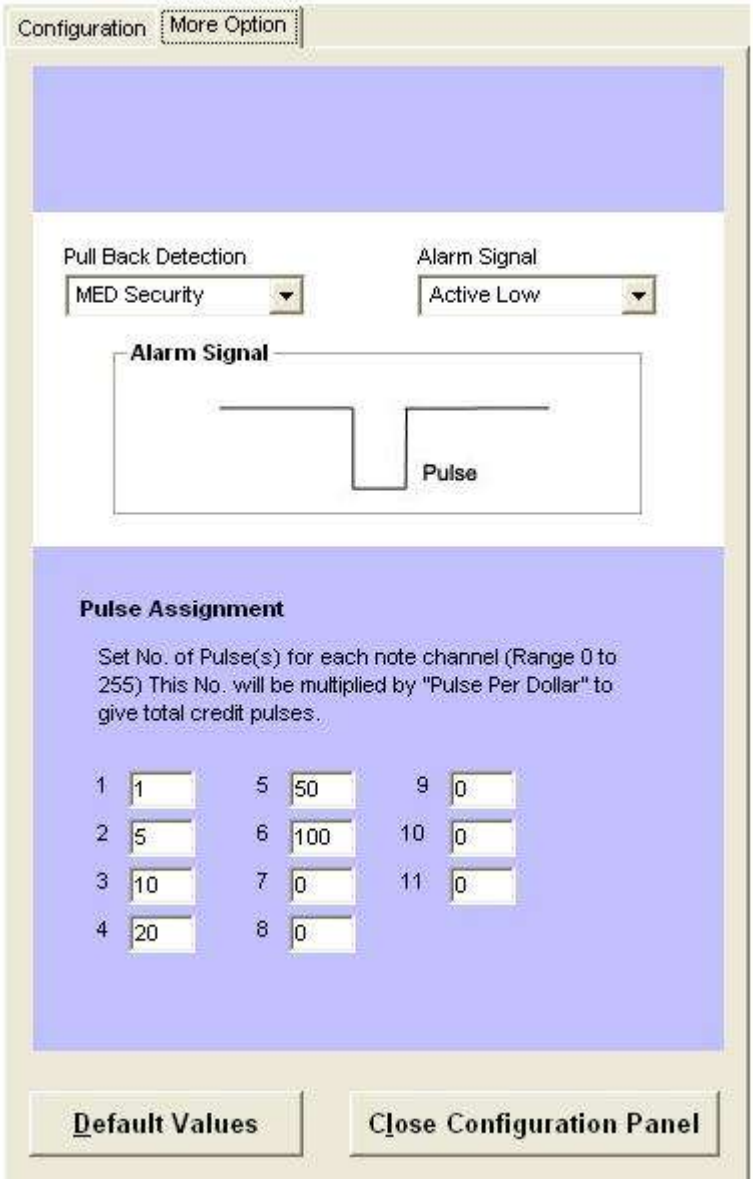
Configuration

When the open configuration panel button is clicked (see P2), extra options appear (P3 and P4)

P3



P4

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Configuration Tab

1. The first drop down allows the selection of Interface type, this selection will govern which drop downs appear directly below it.
2. If pulse is selected, drop downs available are enable logic (high, low or always enabled) pulse multiplier (pulses per dollar), and pulse speed (fast or slow)
3. For Parallel only output logic (high or low) is available
4. There are no further options on this section for the remaining interfaces.
5. Channel security allows the user to select high or low security modes for each denomination. Refer to VTI for channel listing if unsure.
6. Check boxes all the user to enable and disable each denomination. Refer to VTI for channel listing if unsure.
7. Default values loads default values into the drop downs and check boxes. This does not affect the connected validator unless apply to device is clicked.
8. Close config panel closes back down to programming interface only.

Configuration control menu

1. Apply to device uploads any changes made to the configuration panel options.
2. Retrieve from device loads the current validator settings.
3. Save Config to disk allows the user to save their standard configuration and retrieve it at a later date.
4. Load Config from Disk allows user to retrieve previously saved settings and load them into the configuration panel.
5. Tech ID allows input of code for enabling of Advanced options (more options in beta).

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Service center Advanced options

Click Tech id button and input code. Given separately to this manual.

Extra options will be available depending on the interface selected under the Advanced options tab (more options beta version)

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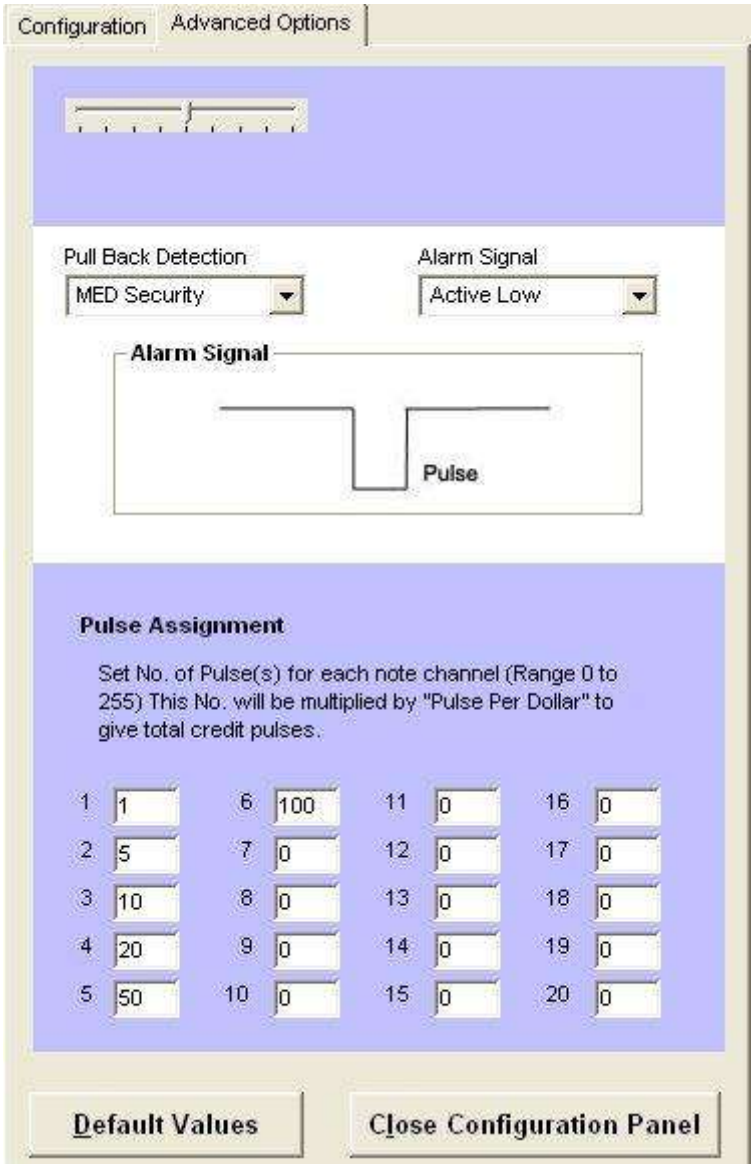
Pulse Interface options

P5



1. Pull back detection allows the user to change the security level of the on board Antistringing device. (default is Medium in Matrix and High in Vector)
2. Alarm signal setting allows the user to change the output logic for the alarm (high or low)
3. Pulse assignment allows the user to assign custom pulse values to the validator. As standard this would be set to the Highest value that all denominations are divisible by. i.e. For Euro this is 5 so the values would €5 = 1 Pulse, €10 = 2 Pulses, €20 = 4 Pulses etc.

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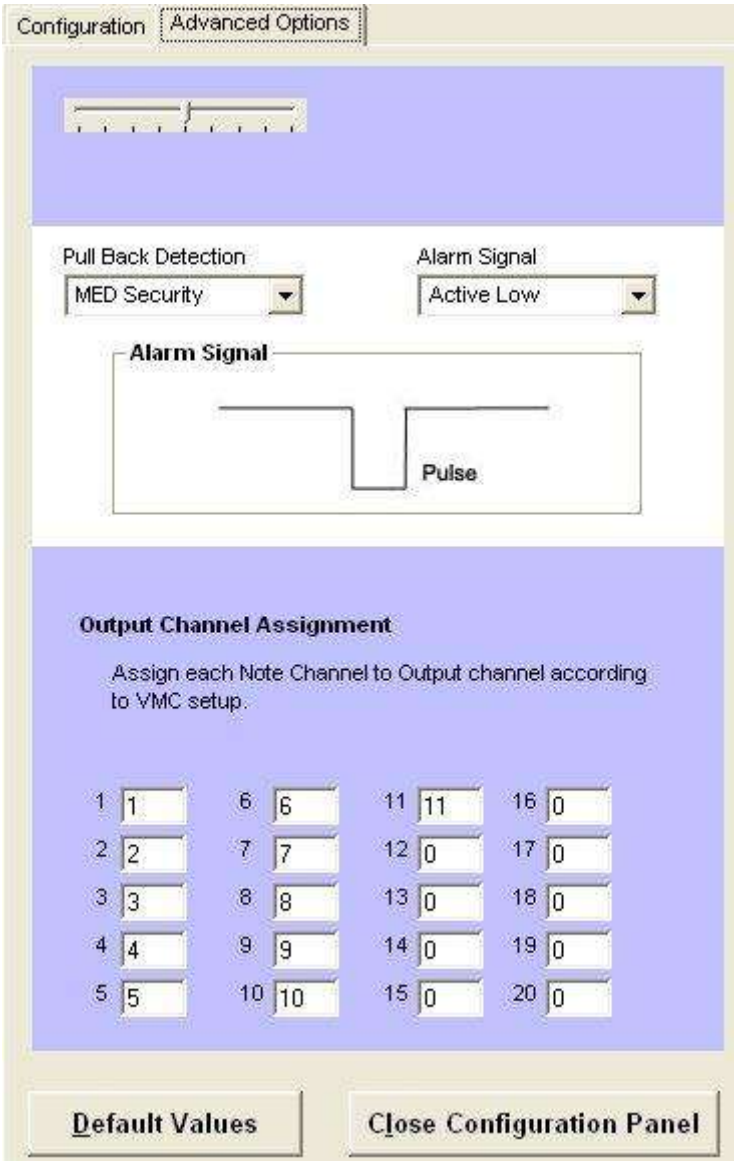
Parallel and Parallel binary options

P6



1. First 2 options as per Pulse interface
2. Output channel assignment allows the end user to customise the output channel of each denomination. Please refer to VTI for denomination listing before changing these values.

Serial 600 Baud and RS232/USB options

Serial 600 baud and RS232/USB are as per Parallel without the alarm logic option.

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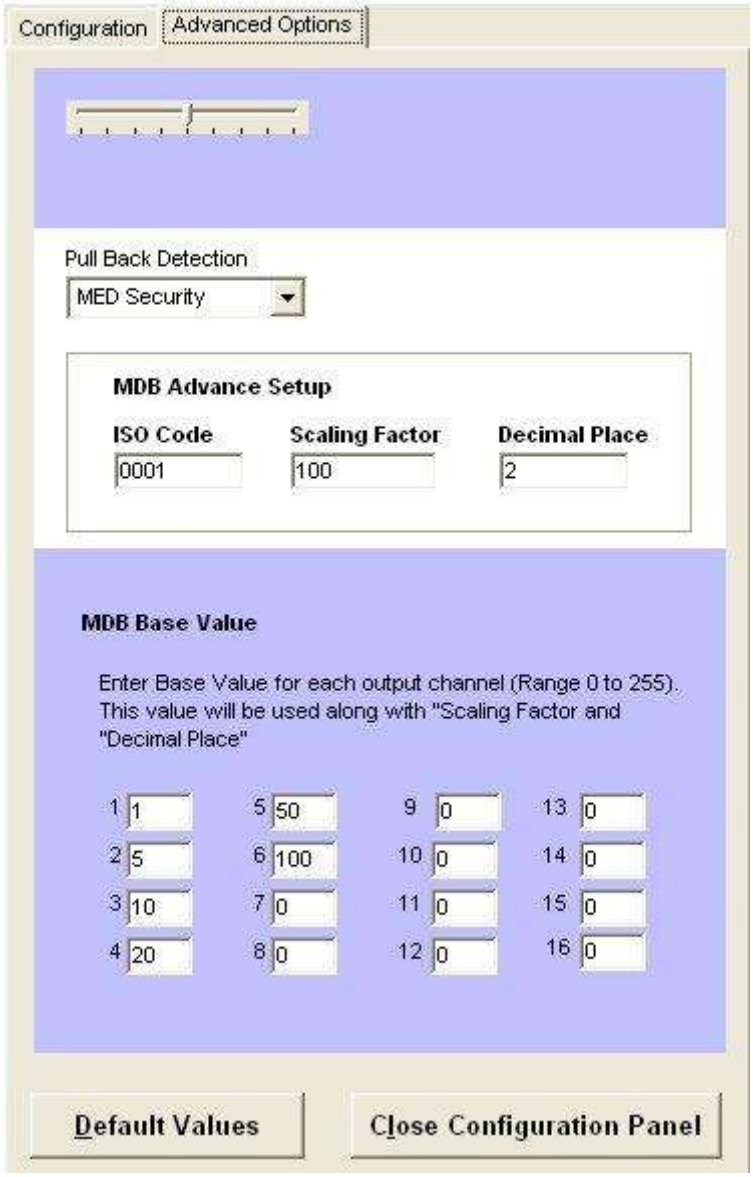
MDB/NAMA options

P7



1. Pull back detection allows the user to change the security level of the on board Antistringing device. (default is Medium)
2. ISO code Allows the end user to input the country's ISO code identifier or IDD code. For full details consult the MDB/NAMA specifications.
3. The scaling factor allows adjustment of the Base value multiplier (max 1000).
4. Decimal place allows the user to specify the number of decimal points to be displayed (0 or 2).
5. MDB base value is typically the denomination value. In some cases this is not possible due to the high denomination value, please refer to VTI if unsure of these settings.

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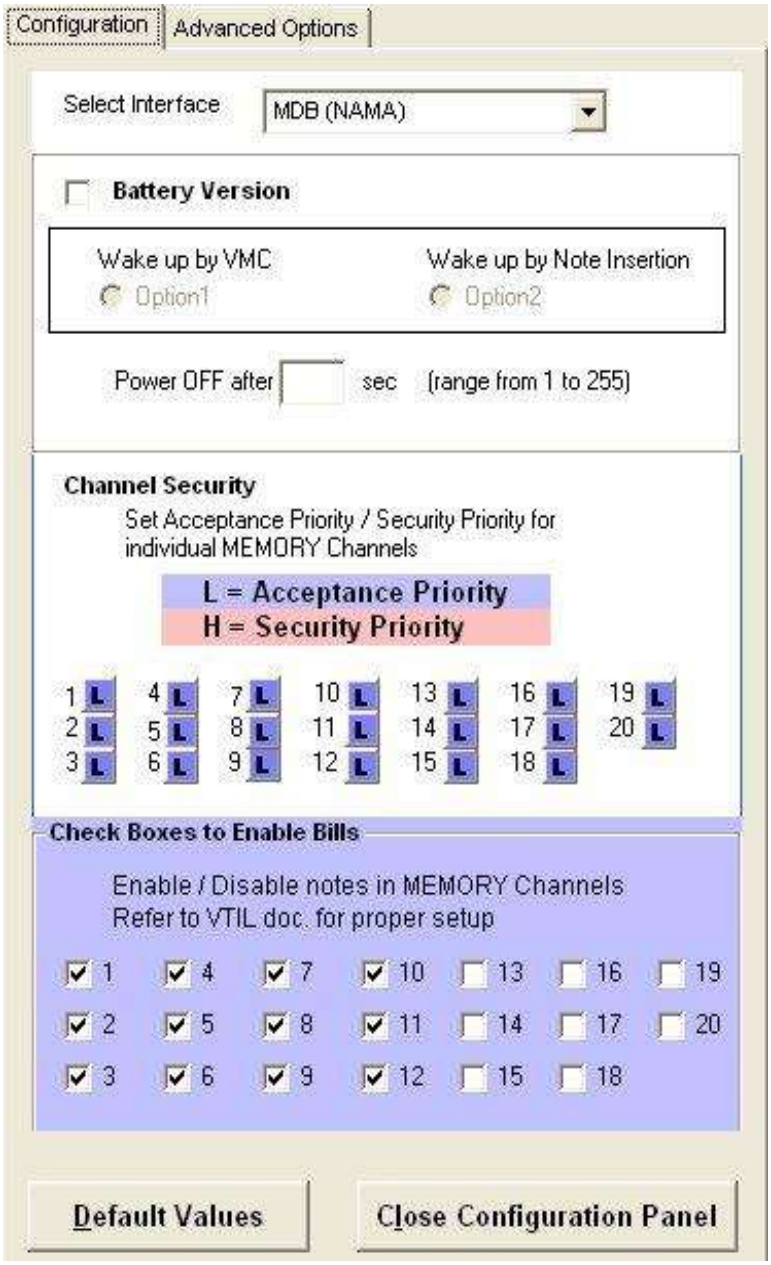
P8



Other Options available on the main page when set to MDB operation are the two battery modes.

Both require dedicated hardware, a module and harness in the case of the Wake up by VMC type and also a dedicated faceplate in the case of the Wake up by note insertion type. For further details please contact VTI.

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