molbloc - Load restore file to EEPROM using molTools software

History: molLoad is the old utility software used to write brs type restore files to a molbloc. molLoad will not work with a molbox1 with firmware greater than v5.20c, and it does not work with any molbox1+. It will only work with a molbox RFM that replies to a VER command with "DH Instruments..." and not "Fluke...". It will not install on a computer with a 64-bit operating system. molLoad can still be used to load brs files on 4k or 64k molblocs - but note that a 64k molbloc needs to be initialized in a special way to support a brs file.

molLoad has been replaced with molTools. molTools supports the older 4k EEPROMS (brs restore file format) and newer 64k EEPROMS (mdb file format except in special situations brs file format). molTools is available in two versions. The first is free and is a utility version that will only restore mdb files to molblocs. A licensed version is available and has a user license (is not free) and offers these additional features: verify and adjust existing molbloc calibrations, create brs or mdb restore files, add gas calibrations at a single pressure. The licensed version of molTools is included with the CalTool for molbloc extension for COMPASS for Flow and with GFS Tools (included with GFS).

molTools requires some of the components from COMPASS for Flow to work properly so if you do not already have COMPASS for Flow, download the demo version of COMPASS for Flow from our website and install it first. We will send you a link to download molTools.exe. The downloaded file molTools.exe is the file that runs. It is not an installer or setup file. If you have a 32-bit operating system, save it to the C:\Program Files\molTools folder. If you have a 64-bit operating system save it to the C:\Program Files (x86)\molTools folder. You will have to create the molTools folder. To run molTools, double click on the molTools.exe from the directory it is in. When you open molTools it will immediately prompt you with a message box that shows "This action will overwrite all current bloc data and restore the current molbloc. Want to continue?" Press [Yes] to continue.



molTools will then open the Select Restore File window and you will select the .mdb restore file and press [Open].

| P | Select Restore File | × |
|--|--|----------------------|
| (→ ↑ ↓ This PC → OSDisk (C:) → Temp | > V C Search Temp | م |
| Organize 🔻 New folder | | ☷ ▾ 🗖 🔞 |
| Videos OSDisk (C:) SMSTaskSequence Brother CDSynch dhi gsslogs kix95 PerfLogs PressCal PressCal Program Files Program Files (x86) Software Temp brother | Name brother 2727L.mdb RestoreTemp.mdb 3495L.mdb Select | t a file to preview. |
| File <u>n</u> ame: | ✓ Restore File (| *.mdb) 🗸 🗸 |
| | <u>O</u> pen | Cancel |

The Set Communication window will appear for you to set or verify the communications settings.

| I/0 | Set Communication | × |
|-----|------------------------------------|---|
| | Communication Type RS232 | |
| | Port 1 | |
| | Settings 9600,N,8,1 | |
| | Do not detect ports | |
| [| <u>Ok</u> Remote IO <u>C</u> ancel | |

If you want to check the communication settings press the [Remote IO] button and the Direct Remote Communication tool will open. Set the communication settings, enter the command *IDN? and press the [Send] button. You should get a reply like below. If communications are working then close this window by pressing the red X at the top right. If communications are not working, then troubleshoot the remote communications until it works.

| 89 | Direct Remot | e Cor | nmunication | | | x |
|---|---|-------|---|---|--------------|-----|
| Interface Command Terminator Response Terminator Time-Out (ms) Send Only Append CR/LF to reply disp Automatically re-send comm Poll Interface Command | RS232 <cr><lf> <cr><lf>/<cr>/<lf> 5000 lay and</lf></cr></lf></cr></lf></cr> | | RS: RS232 Port RS232 Settings Handshaking Do Not Detect Ports Binary Commands Reply Display | 232 Settings COM1 9600,N,8,1 NONE Character | |] |
| MDN? | 400 100000 Marc 005 and a | | | • | <u>S</u> end | |
| FLUKE, MOIDOX1+, 2285-130 | 460-130888, Verb.UUD-ogmg | m | | | | < > |
| < | | | | | | > |

In the Set Communication window press the [OK] button and the restore process will begin.

| Set Communication | × |
|-------------------------------------|---|
| Communication Type RS232 | |
| Port 1 Settings 9600,N,8,1 | |
| Do not detect ports | |
| <u>D</u> k Remote ID <u>C</u> ancel | |

If molTools cannot communicate with the molbox and the molbloc then a message "RS232 COM port initialization failure. Invalid port number" will appear.



Press [OK] and the Set Communication window will appear (see above).

If the COM settings are still incorrect or there is a communications problem the same error window will appear. Press the [OK] button and another error window will appear. Press [OK] to close molTools and then troubleshoot the communications problem using the Remote Communications Tool in COMPASS for Flow.

| Restore Result | × |
|---|---|
| Restore failed. Can not setup communication with molbloc. | |
| ОК | |

If the communication settings are correct, Status messages will appear at the bottom of the window during the process and a Confirm window will appear asking if you want to continue. Press the [Yes] button to continue.

| P | Moltools 3.06 | × |
|------------------|--|---|
| | Restore Bloc × | |
| - | Most possiblely this is a new bloc. Do you want to continue? | |
| | Yes No | |
| | Gailbration | |
| Checking bloc lo | ck status | |

This is the window if the EEPROM / PRT assembly is new.

This is the window if the assembly has been initialized.

| Þ | Moltools 3.06 | x |
|--------------|--|---|
| F | Confirm × Vou are restoring molbloc-L 100 from the restore record for molbloc-L 2727. Want to continue? | |
| | | |
| Reading bloc | | |

Status messages continue to appear until done.

| P | Moltools 3.06 | | | |
|--------------|---------------|--|--|--|
| | IUKE ® | | | |
| Nriting bloc | Calibration | | | |

Then a Restore Result window appears. When you press the [OK] button molTools closes.

| P | Moltools 3.06 | × |
|--------------|---|---|
| FL | Restore Result × Successfully restored the bloc. | |
| | Jansraugh | |
| ock the bloc | | |

Cycle power on the molbox and test operation of the molbox/molbloc system. Verify that the PRT calibration values are correct with the MOLBLOC command. Details in the molbox1+ Operation and Maintenance Manual.