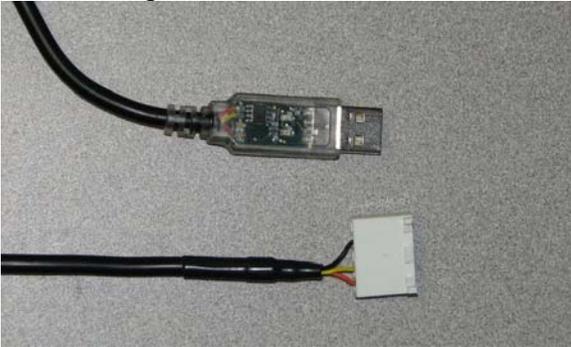


Clack Data Extraction

Extracting Data

See installation instructions below if not previously installed.

1. Open the Data Extraction Template Excel sheet.
2. The spreadsheet contains macros, which depending upon security levels may generate a warning message, select "Enable Macros".
 - a. If high security levels disable the macro, see the Excel Security instructions at the end.
3. The original data extraction template is password protected so that it will not be saved over. Select "Read Only", then re-save under a unique name for the unit being extracted.
4. Plug the USB end of the extraction cord into a USB port



5. Unplug the 5 pin Pod cable from the valves' main circuit board & connect the 5 pin header of the adapter cable.
 - a. Power does not need to be removed & this will not affect the operation of the unit.
6. Select the "History Download" button towards the upper right of the System sheet
 - a. An error message may display to notify the user to select a correct com port; select "OK".

The screenshot shows the Microsoft Excel interface with the spreadsheet 'Clack2HExtraction_215-Current_Rev22.xls' open. A 'History Download' dialog box is displayed in the foreground, containing the following text:

History Download

1. Connect extraction cable to display port of the valve board.
2. Select the current COM port.
3. Select Download.

Download

Communication Port: Status:

*In case of an error, please refer to the manual and any error messages that may appear.

The spreadsheet background shows the following sections:

- User Information, Manually Enter System Data:** Job: Use this template with 215.xx firmware, Unit: 1 of 7, Download Date: Monday, 1/11/2011, System Description: Enter System Description, Main Version: 2.15.06, System Version: 1.11
- Extracted Information, No Manual Entry Below This Point:** Unit Information (Capacity: 10000 GAL, Ver: 2.15.06, Day Override: 14 DAYS, Regen Time: 02:00AM), System Information (LIS FSI: LIS, Units in System: 1, Flow Adder Point: SERIES, Isolation Method: HSP, Piston), Sequence 1 (Backwash, Drain Down, Backwash, Rinse, Fill, End), Sequence 2 (Backwash, Drain Down, Backwash, Rinse, Fill, End), Relay 1 and 2 settings, Diagnostic History (Days, Volume, Regens), Reserve History (Days, Gallons, Total Resets), Usage History (Day, Volume)

7. Select the current COM port for the extraction cord under “Communication Port:” & then select “Download”
 - a. Red & green lights will flash on the adapter signifying communication & a status indicator in the Excel dialog box will show the current % of completion
 - i. To the right of the % completion is a number indicating an internal reference to the current information being extracted. Any errors should be reported with the % complete & the numeric indicator.
 - b. When the extraction reaches 100%, approximately 1:20, close the download dialog box.
8. The blue text at the top of the System tab can be filled out to describe the system. Especially important is the current date as this setting drives all of the dates in the history data.
9. To extract data from the next unit, save the sheet as another unique name & proceed to step 6

Installation / Setup

USB – 485 Adapter Driver Installation

1. Launch the CDMxxx.exe file to install drivers for the adapter.
 - a. Drivers for this FT232R device are also available from <http://www.ftdichip.com/Drivers/VCP.htm>
2. Download & install the driver for your format.
 - a. A DOS command window will appear while the drivers are being installed. (Approximately 5 seconds.)

Excel Sheet Driver Installation

This program places a couple of drivers which allow Excel to communicate through a COM port. Installation will require being signed on with administrative rights.

1. Run Setup.exe
2. “Setup Clack History Spreadsheet” window will appear, press next after following instructions.
3. Choose a directory to install the spreadsheet & select “Next”
4. Select the start menu folder & select “Next”
 - a. Default is Clack Corporation\History Download
5. Verify information & select “Install”
6. When the setup completes, approximately 5 seconds, select “Finish” to complete

Excel Security

High security levels will disable macros & not allow the extraction program to run. Use the following steps to allow macros.

1. Sign on to an administrative account and open Excel
 - a. Go to the Excel tools pull down & select options
 - b. In the Security tab select Macro Security
 - c. Select medium security, "OK" to exit & "OK" to exit the options dialog; close Excel
2. At this point log off & sign on to your normal account if needed.

The screenshot shows the Microsoft Excel interface with the Security dialog box open. The Security dialog box is set to Medium security level. The Options dialog box is also open, showing the Security tab. The background spreadsheet contains data related to system information, unit information, system information, sequences, relays, diagnostic history, reserve history, and usage history.

Day	Volume	Days	Volume	Resets
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	12	13	14	15
13	13	14	15	16
14	14	15	16	17
15	15	16	17	18
16	16	17	18	19
17	17	18	19	20
18	18	19	20	21
19	19	20	21	22
20	20	21	22	23
21	21	22	23	24
22	22	23	24	25
23	23	24	25	26
24	24	25	26	27
25	25	26	27	28
26	26	27	28	29
27	27	28	29	30
28	28	29	30	31
29	29	30	31	32
30	30	31	32	33
31	31	32	33	34
32	32	33	34	35
33	33	34	35	36
34	34	35	36	37
35	35	36	37	38
36	36	37	38	39
37	37	38	39	40
38	38	39	40	41
39	39	40	41	42
40	40	41	42	43
41	41	42	43	44
42	42	43	44	45
43	43	44	45	46
44	44	45	46	47
45	45	46	47	48
46	46	47	48	49
47	47	48	49	50
48	48	49	50	51
49	49	50	51	52
50	50	51	52	53
51	51	52	53	54
52	52	53	54	55
53	53	54	55	56
54	54	55	56	57
55	55	56	57	58
56	56	57	58	59
57	57	58	59	60