

HC06 Database Editor

User Guide

To re-order quote part number:	HD0583
Revision:	1.5.0
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ACKNOWLEDGEMENTS

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Revision History

Revision No	Software Version	Date	Description of Change
1.0.0	1.1.0	Feb 2014	First release
1.1.0		June 2014	Sections 7.1 and 7.2, Mix log quick view added to Chapter 3
1.2.0	1.3.0	July 2015	Max Mix Log configuration added
1.3.0	1.4.0	October 2015	Multi Measurement mode added. User accounts added. Water Flow Graph added. Delete all Mix Log data facility added.
1.4.0	1.5.0	August 2016	Added support for displaying the calibration mix. Mix Log save to TSV Format added. Converting a database to legacy instructions added
1.5.0	1.7.0	October 2019	Address and software update

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1 Hydro-Control VI Database Editor

The Hydro-Control Database Editor is a customer utility designed to facilitate the interrogation, editing and restoring of Hydro-Control VI databases.

This software will only work with Hydro-control VI (HC06) databases and is not designed for use with previous versions of the Hydro-Control. Some features of this software detailed in this user guide will not be available with legacy versions of the Hydro-Control VI software.

This software permits the user to:

- View and configure the system parameters
- View Mix Traces and display as a graph
- View, edit, delete and create user accounts
- View and edit recipes
- Restore a Hydro-Control VI database to default factory settings

Databases displayed using this software will be automatically upgraded to the latest version. However, the latest version of the database is not compatible with pre v2.9.0.0 versions of the Hydro-Control VI; it is recommended that the Hydro-Control software is upgraded to the latest version before a database is restored.

If the Hydro-Control software cannot be upgraded the database must be downgraded to a legacy version using this software, see page 16 for details.

Software Updates are available at the Hydronix web site, www.hydronix.com. See the Hydro-Control VI installation guide HD0455 for guidance on updating the software.

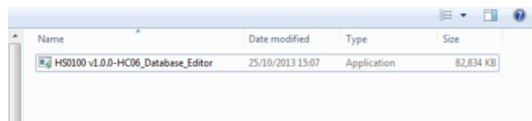
The number of Mix Logs stored in the database will be limited to 100; all Mix Logs above this limit will be deleted. A copy of the original database should be kept for future reference.

1 For Windows XP, Windows 7 and windows 10 Operating Systems

Note: The Hydro-Control Database Editor will not run on the Windows Vista operating system.

The Hydro-Control Database Editor can be downloaded from the Hydronix web site www.hydronix.com

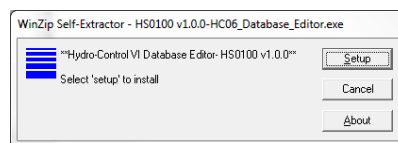
After down-loading the software select the application (This process may start automatically).



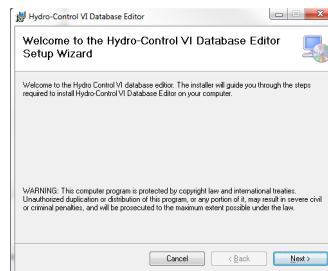
Select 'Yes', if prompted, to allow the program to make changes to the computer.

Depending upon the software on the computer the installation may request the permission to install additional software, select agree/ yes if prompted.

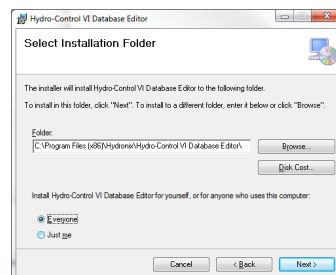
Select '**Setup**' to initiate the installation



The setup wizard will now start the installation, select '**next**'.



The setup wizard will install the program in the folder shown, to change this location select browse. Select '**next**' and again on the confirm installation screen.



The software will now be installed.

Depending upon the computers current system set-up this process may take several minutes to complete.

Hydro-Control VI Database editor is separated into several tabs making it easy to interrogate and update the database.

All data in the Hydro-Control database is read only unless the user is logged in. See page 23 for log-in details.

1 Launch Screen

The launch screen is displayed when the software is first loaded (Figure 1). The open database button is displayed enabling the user to load a suitable database. The delete all Mix Log data facility is also available. See Chapter 4 for more information about creating the database files required.

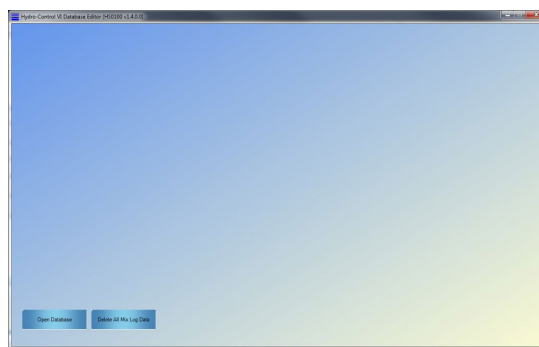


Figure 1: Launch Screen

2 Main Screen

Once the database has been loaded, the main screen will display the System parameters, Mix Log, Users, Recipes and Log in tabs (Figure 2). This gives access to all of the Hydro-Control database settings.

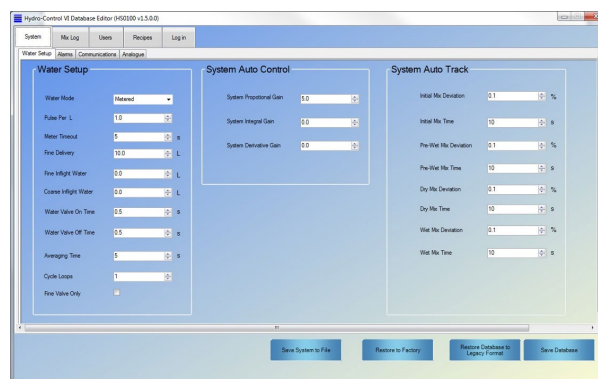
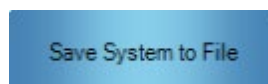


Figure 2: Main Screen

2.1 Save System Settings to File

The system setting can be converted to a text file. This is achieved by clicking the **'Save System to File'** button.



2.2 Restore to Factory

The Restore to Factory button will restore the Hydro-Control database to its factory defaults.

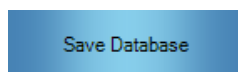


Warning:

The system settings will revert back to the factory defaults. In addition all user accounts, Mix Logs and Recipes will be deleted. A default recipe will be created.

2.3 Save Database Changes

To save any changes to the database click the ‘Save Database button’. This process can take several minutes to complete for larger databases.



2.4 Restore Database to Legacy Format

If a database from a Hydro-Control, running software Pre v2.9.0.0, is viewed using the database editor, it will be upgraded to the latest version. The latest version is not compatible with pre v2.9.0.0 Hydro-Control software. If the Hydro-Control software cannot be upgraded the database can be downgraded using the Restore Database to Legacy Format facility. A new version will be created in the same file location as the original. The file name will be appended with: ”_Legacy.sdf”.

To restore the legacy database to a Hydro-Control the file name must be renamed as: “HC06Database.sdf”.



3 System Tab

The system tab is divided into 4 screens providing access to the Water Setup, Alarms, Communications and Analogue settings. These are the main system settings for the Hydro-Control (Figure 3). They are arranged in a manner to match the Hydro-Control system set up screens.

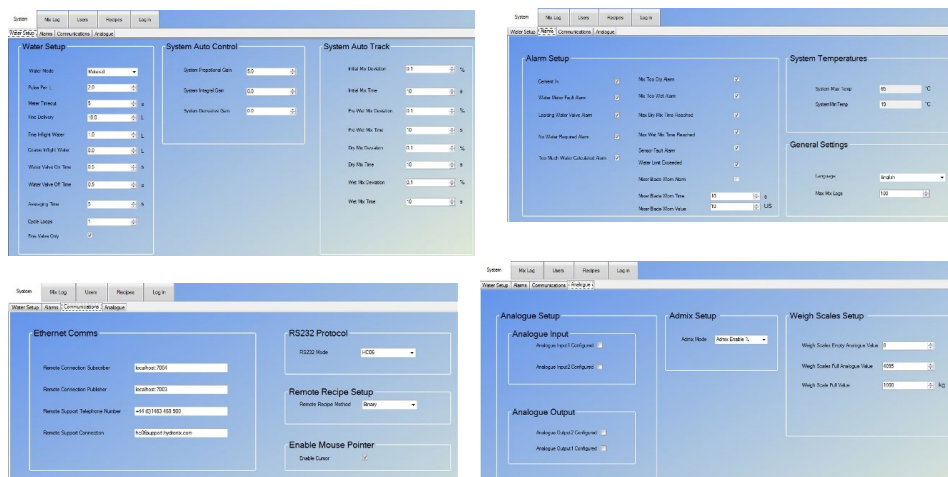


Figure 3: System Tab Screens

4 Mix Log Tab

The Mix Log tab contains all of the Mix Logs from the Hydro-Control.

Figure 4: Mix Log Tab

All calibration Mix Logs are displayed in green.

4.1 Save Mix Logs to File

The Mix Logs in the database can be converted to a Text, CSV (Comma Delimited) or TSV (Tab Delimited) file type.

To save the Mix Logs to file select **'Save to File'**

In the pop up window select the required file format (Figure 5).

Figure 5: Save Mix Logs to File Type Selector

4.2 Delete All Mix Logs and Traces

If the Mix Log and Mix Trace data is no longer required the information can be deleted, this can help to decrease the start-up time of the Hydro-Control.

To delete the data Select **'Delete All Mix Logs and Traces'**

If the database is to be restored to a Hydro-Control it is recommended to save any Mix Logs used to calibrate the recipes in the database for future reference. In the pop up window select if the calibration mixes are to be deleted (Figure 6).

Figure 6: Delete All Mix Logs

5 Users Tab

The Users tab contains a list of all of the users accounts set up on the Hydro-Control and provides the facility to add and remove accounts (see Section 5.1).

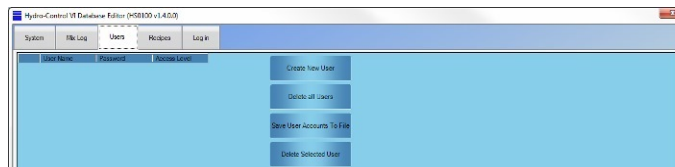


Figure 7: User Accounts Tab

5.1 Create/Delete User Accounts

To create a user account select: 'Create New User'



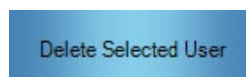
The Create New User section will now be available (Figure 8).

Note: if no accounts exist the first added account must be given an access level of Administrator. The access level will be set to administrator automatically.



Figure 8: Create New User Account

To delete a user account, select it in the list and press 'Delete Selected User'.



5.2 Save User Accounts to File

All User Account in the database can be converted to a .TXT file for reference. Click the 'Save User accounts to File' button to create the file.



6 Recipes Tab

The Recipes Tab contains a list of all of the recipes that are in the Hydro-Control database.

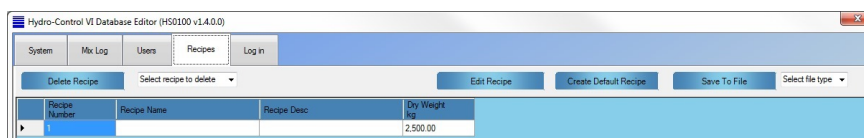


Figure 9: Recipes Tab

6.1 Save Recipes to File

The recipe database can be converted to a Text, CSV (Commas Delimited File) or TSV (Tab Delimited File) file type.

To convert the recipe database select **'Save to File'**.



In the pop up window select the required file format (Figure 10).

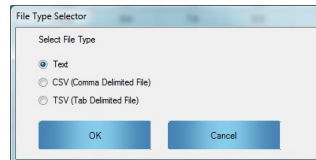


Figure 10: Select Recipe File Type

6.2 Edit Recipe

To edit a recipe double click the required row or select the recipe in the list and press **'Edit Recipe'**.



The edit recipe form will now open (Figure 11).

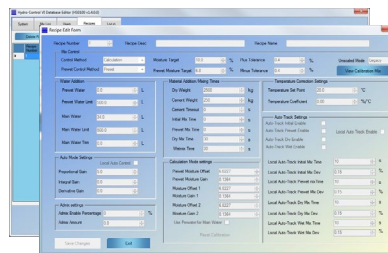


Figure 11: Recipe Edit Screen

To save any changes to the recipe click **'Save Changes'** to update the database.

6.3 Delete Recipe

To delete a recipe select the recipe number using the drop down menu and press the **'Delete Recipe'** button.

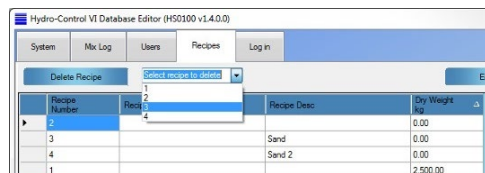
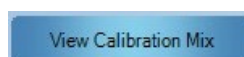


Figure 12: Delete Recipe

6.4 View Calibration Mix

If the recipe has been previously calibrated the Calibration Mix Log can be viewed by clicking the **'View Calibration Mix'** button. For non-calibrated recipes this button is not displayed.



7 Mix Trace Screen

The Mix Trace Screen is accessed through the Mix Log tab and displays a graphical representation of a selected Mix Trace to facilitate the analysis of the mix (Figure 13).

7.1 Display a Mix Trace Graph

To open the graph, double click on the required Mix Log. The graph can display the Mix Trace in Unscaled or Moisture% values. Each available sensor Measurement Mode is displayed on the graph (only available with compatible sensors). Up to two Mix Traces can be view at any time.



Figure 13: Mix Graph

The current mix action is displayed on the graph by selecting ‘Display Action Changes’. Additionally the Moisture/Unscaled target value can also be displayed by selecting ‘Display Target’, shown as a red line (Figure 14).

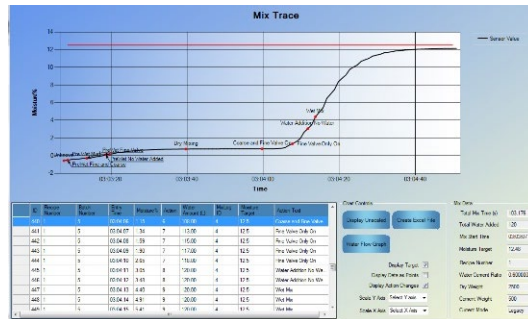


Figure 14: Current Action and Target

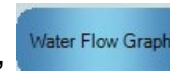
To display the current action for an individual data point single click on the data point in the data grid. The value will be displayed on the graph in green. To remove from the graph double click the point in the data grid (Figure 15).



Figure 15: Selected Current Action

7.2 Water Flow Graph

The Water Flow Graph displays the water added during the mix. It will indicate which valve was used and when in the mix cycle the water was added. The graph will also display any non-controlled water addition, this can help to identify a leaking water valve or if a secondary system is controlling the water addition.



To access the Water Flow Graph select 'Water Flow Graph'

If the button is not available the version of the Hydro-Control software in use does not support this facility.

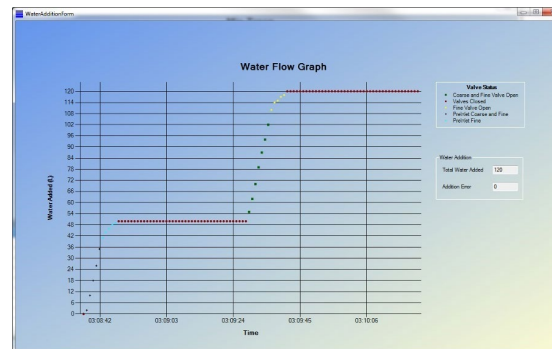


Figure 16: Water Flow Graph

Clicking on any point on the chart will display the water valve status.



Figure 17: Valve Status

7.3 Calibration Mix Comparison

When displaying a Mix Trace, if the recipe has been calibrated (Calculation/Auto mode), the Mix Trace can be compared to the original calibration mix. Discrepancies between the two Mix Traces can indicate changes to the process or mix design.

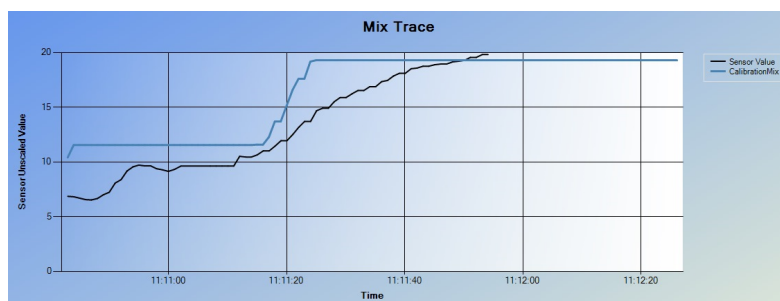


Figure 18: Calibration Mix Comparison Graph

To view the calibration Mix Trace, click the 'Display Calibration Mix Trace' Button.



The Calibration Mix Trace can only be displayed when Unscaled is selected.

7.4 Mix Trace Quick View

To open a quick view graph of a Mix Log, right click the Entry Time column.

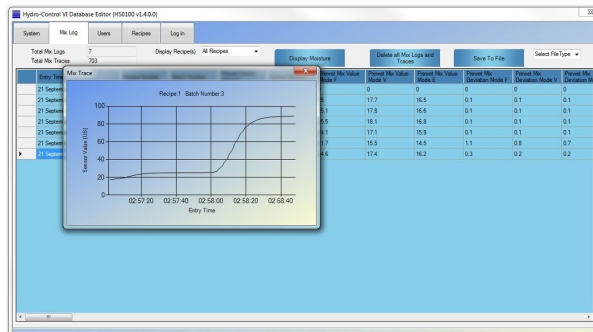


Figure 19: Quick View Mix Trace

7.5 Filter Displayed Recipes

Using the Display Recipes selection box it is possible to only display Mix Logs from a specific recipe. Select the required recipe from the drop down menu and all other recipes will be removed from the data table.

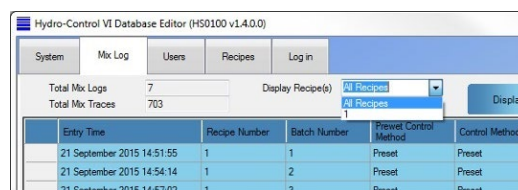


Figure 20: Display Recipe Selection Box

7.6 Trimming the Mix Log Database

If the Hydro-Control is slow to respond at Mix Complete or during boot-up it is recommended to reduce the size of the Mix Log database. This is achieved by using the Max Mix Log configuration option found in the Alarms tab of the System settings (Figure 21). If the Max Mix Logs value is changed and the database is saved all Mix Logs above the configured value will be deleted.



Figure 21: Max Mix Logs

If a database from a Hydro-Control running software without the Max Mix Logs option (Pre 2.6.0.0) is loaded into this software the database will be updated to the latest version with the Max Mix Logs set at 100. All Mix Logs above 100 will be removed. The database can then be configured to increase/decrease storage as necessary.

8 Log-In Screen

To enable editing and configuration changes the user must first log in using the Log In Tab. To log in select the Log In tab and enter the password **'0336'** and select **'Enter'**. All configuration and data can now be edited. To disable editing select **'Log Out'**.

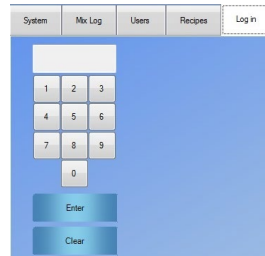


Figure 22: User Log In

1 Creating a Database Backup

To use the Database Editor a back-up of the Hydro-Control database has to be completed first.

1.1 Backing-Up the Database

To back up the Hydro-Control database install a USB memory stick into the side of the Hydro-Control.

Select '**Menu**' from the Hydro-Control overview screen.



Figure 23: Hydro-Control Overview Screen

Select '**System Parameters**'.



Figure 24: Hydro-Control Main Menu

On page one of the System Parameters, select '**Backup/Restore**'. A message box will be displayed, select Backup. The unit will now create an SDF file saved to the root of the memory stick.

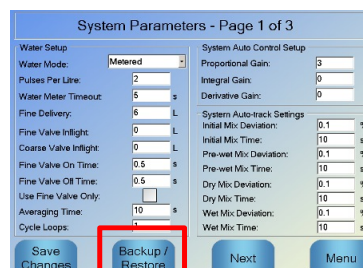


Figure 25: Hydro-Control System Parameters Screen

For details about the back-up process see the Hydro-Control VI installation guide HD0455 and the Hydro-Control VI user guide HD0456.

2 Loading the Database

Start the database editor software and the load screen will be displayed (Figure 26).

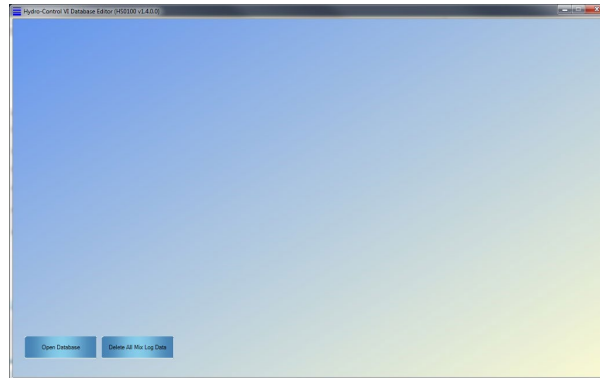


Figure 26: Load Database Screen

Click **'Open Database'** and the message box will ask for a file to open. Select the "HC06Database.SDF" file. The Database Editor will only open HC06Database.sdf files. The Database Editor will now check the database and populate the screens.

It is advisable to retain an additional copy of the Hydro-Control database before loading it into this software for future reference.

3 Delete All Mix Log Data without Opening the Database

If the amount of Mix Log data in the database is large this can cause the Hydro-Control and the Hydro-Control Database Editor to take a substantial amount of time to load up. If the Mix Log information is no longer required the data can be deleted.



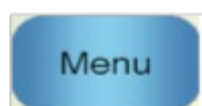
To delete the Mix Log data click the **'Delete All Mix Log Data'** Button and select the Database using the open file dialog window.

Using the delete all Mix Log data facility will reduce the time taken to delete the data substantially. Once the Mix Log data has been deleted the database can be opened normally using the Database editor or restored to the Hydro-Control.

4 Restore Database to the Hydro-Control

Note: Databases viewed using this software will be updated to the latest format and are not compatible with Hydro-Control software pre v2.9.0.0. If restoring a database to a Hydro-Control running software pre v2.9.0.0 please convert to a legacy format before attempting to restore, see page 16 for details.

To restore the Hydro-Control with the edited database switch on the Hydro-Control and insert the USB memory stick into the side of the unit.



Select **'Menu'** from the overview screen.

From main menu select '**System Parameters**'.

On page one of the System Parameters, select '**Backup/Restore**'. The Hydro-Control will ask if you want to backup or restore. Select '**Restore**' and the unit will re-boot.

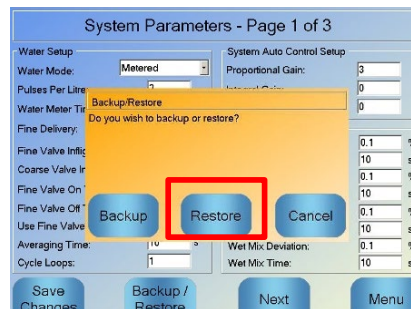


Figure 27: Backup/Restore Selector

1 Document Cross Reference

This section lists all of the other documents that are referred to in this User Guide. You may find it beneficial to have a copy available when reading to this guide.

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HD0455	HC06 Installation Guide
HD0456	HC06 Operators Guide

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