LogMaster
Data capture utility
The Company

We are an established world force in the design and manufacture of instrumentation for industrial process control, flow measurement, gas and liquid analysis and environmental applications.

As a part of ABB, a world leader in process automation technology, we offer customers application expertise, service and support worldwide.

We are committed to teamwork, high quality manufacturing, advanced technology and unrivalled service and support.

The quality, accuracy and performance of the Company’s products result from over 100 years experience, combined with a continuous program of innovative design and development to incorporate the latest technology.
LogMaster is a data capture utility for retrieving log data and device information from ABB AquaMaster water meters. It currently supports direct connection to the AquaMaster and remote connections via modem (GSM enabled AquaMasters only) or Vodafone Paknet Radiopad (Paknet AquaMaster installations only).

Log data from the AquaMaster can be saved in comma-separated variable (CSV) format for importing into other applications. For example, spreadsheets for graphing purposes.

When requesting log data, LogMaster can be configured to:

- reset the flow/pressure loggers,
- reset the flow/pressure loggers with a new logging interval,
- synchronize the AquaMaster’s time and date with that of the PC.

LogMaster is compatible with Microsoft Windows XP, Windows 7 32bit and Windows 7 64bit.
2.1 Installing the LogMaster Software
Insert the CD and use the Windows software installation facility to load the LogMaster program. Follow the on-screen instructions.

2.2 Connecting a Computer to a Transmitter – Fig. 2.1
Refer to Fig. 2.1 for direct connection to the AquaMaster Transmitter. For remote connections, connect a PC comm port to the connection hardware (modem, GSM terminal, radiopad etc).

2.2.1 Configuring the PC Comms Ports
1) From Comms drop-down menu (see Section 3.2.1) set the Remote Connection Port comm port setting to which the modem or radiopad is connected.
2) Set Direct & Terminal Mode Port to the port number to be used for direct connections or in terminal mode.

Fig. 2.1 Connecting PC to Transmitter
3.1 Starting LogMaster
Select LogMaster from the program menu and the Main Menu is displayed. Windows commands and conventions apply. To ensure that all the data can be seen, maximize the window.

3.2 The Menus – Overview
The main menu is structured as illustrated below. The Tool Bar, Dialog Bar and Status Bar may be hidden or displayed using switches in the View menu.

3.2.1 The Drop-Down Menus
These contain all of the functions. For convenience, commonly required functions are presented as ‘buttons’ on the Tool Bar – see section 3.2.3 for a description of each button.
3.2.1 The Drop-Down Menus

Note. Terminal Mode Baud Rate should be set to 4800 for direct connections.

3.2.2 Changing Logger Access Passwords

Note. The password is used to access the AquaMaster logger. Needed for logger data or header requests.
3.2.3 The Tool Bar Buttons

The function of each active button is displayed when the pointer rests over it and are further expanded on the Status Bar. 'Tool Tips' also pop up by the buttons if the mouse pointer rests over the button for one second.

The function of each relevant button on the Tool Bar is defined below.

- **Press to activate terminal mode.** This locks open a channel to an allocated comms port. Connection timer also starts. There is now direct access to the AquaMaster menu handling system if connected directly. For modem or radiopad communication, manually dial (using AT commands for modem connections) or press dial button if the target site is displayed in the Site window.

- **Press to cut connection** (hang up). This can be done at any time except during a request.

- **Press to dial and connect to displayed site.** Option only available for modem or radiopad sites. See section 3.3.1.

- **Press to get and display current system AquaMaster version.**

- **Press to get logger data.** Time span or Record Serial number (RSN) range is achieved by setting parameters in the displayed dialog – see 3.4. Requires AquaMaster logger access password else request will fail.

- **Press to get and display DIB = Device Information Block.**

- **Press to get logger data.** Time span or Record Serial number (RSN) range is achieved by setting parameters in the displayed dialog – see 3.4. Requires AquaMaster logger access password else request will fail.

- **Press to display stored data from previous use of Logger button.**

- **Press to display stored DIB from previous use of DIB button.**

- **Press to stop current request.**

- **Press to display stored DIB from previous use of DIB button.**

- **Press for Totaliser (if data has been retrieved from logger 3).**

- **Display LogMaster information.**
3.3 Using the Address Book

1. Press for Locations Editor (see 2 below).
2. Press to select from drop-down list of sites.
3. Press to remove an existing site address.

Press for Insert New Location

Enter details in each of the fields as required.

Press to modify existing entry details

Selection of connection type: DIRECT, MDEM, RPAD.

Site’s phone number (modem connections) or NUA (radiopad connections). Disabled for direct connections.
3.4 Logger Access

Set up the parameters (see below) to suit.

Select the logger to: 1, 2 or 3
Loggers 1 and 2 are flow/pressure loggers. Logger 3 is the Totalizer log.

Select method of data collection.
This function is disabled if Last or All Data is selected below.

Set up date/time range.
Point to highlight date/time elements for changing.
If RSN* is selected, then these will be the start/end RSN.

If you want the previous hours only, ✔ this box and specify how many.
Disabled if All Data selected below.

✔ to retrieve all data in selected logger.

* RSN is the Record Serial Number which is unique to each log entry.

** Unavailable if logger 3 is selected.

Time synchronization with the PC.
Select: Before, After, None

Before means synchronize before download
After means synchronize after download
None means no time synchronization.

Press OK to retrieve the data. If a prompt for the AquaMaster password is displayed, enter the AquaMaster level 4 password – see also Section 3.2.2 to change passwords.
3.4.1 Display Data
Use the buttons on the Tool Bar (shown below) to display the logger data.

Press to display stored DIB from previous use of DIB button. Press to display stored data from previous use of Logger button. Press for Totaliser (if data has been retrieved from logger 3). Displays status information of last log retrieved. Press to stop current request. Display LogMaster information.

3.4.2 Change Flow Units
Press the down arrow on the Dialog Bar and select from the drop-down list.

3.5 The Status Bar

<table>
<thead>
<tr>
<th>Current activity</th>
<th>Site ID</th>
<th>Current port</th>
<th>Activity progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready</td>
<td>DM123456</td>
<td>MDEM</td>
<td>COM3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>05555123456</td>
</tr>
</tbody>
</table>

Communication method (DIRECT, MDEM or RPAD) If modem or radiopad site, phone number or NUA is displayed.
**Automation Systems**
For the following industries:
— Chemical & Pharmaceutical
— Food & Beverage
— Manufacturing
— Metals and Minerals
— Oil, Gas & Petrochemical
— Pulp and Paper

**Drives and Motors**
— AC and 6 Drives, AC and DC Machines, AC Motors to 1kV
— Drive Systems
— Force Measurement
— Servo Drives

**Controllers & Recorders**
— Single and Multi-loop Controllers
— Circular Chart and Strip Chart Recorders
— Paperless Recorders
— Process Indicators

**Flexible Automation**
— Industrial Robots and Robot Systems

**Flow Measurement**
— Electromagnetic Flowmeters
— Mass Flowmeters
— Turbine Flowmeters
— Wedge Flow Elements

**Marine Systems & Turbochargers**
— Electrical Systems
— Marine Equipment
— Offshore Retrofit and Refurbishment

**Process Analytics**
— Process Gas Analysis
— Systems Integration

**Transmitters**
— Pressure
— Temperature
— Level
— Interface Modules

**Valves, Actuators and Positioners**
— Control Valves
— Actuators
— Positioners

**Water, Gas & Industrial Analytics Instrumentation**
— pH, Conductivity and Dissolved Oxygen Transmitters and Sensors
— Ammonia, Nitrate, Phosphate, Silica, Sodium, Chloride, Fluoride, Dissolved Oxygen and Hydrazine Analyzers
— Zirconia Oxygen Analyzers, Katharometers, Hydrogen Purity and Purge-gas Monitors, Thermal Conductivity

**Customer support**
We provide a comprehensive after sales service via a Worldwide Service Organization. Contact one of the following offices for details on your nearest Service and Repair Centre.

**UK**
ABB Limited
Tel: +44 (0)1453 826661
Fax: +44 (0)1453 829671

**USA**
ABB Inc.
Tel: +1 215 674 6000
Fax: +1 215 674 7183

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**Client Warranty**
Prior to installation, the equipment referred to in this manual must be stored in a clean, dry environment, in accordance with the Company’s published specification.
Periodic checks must be made on the equipment’s condition. In the event of a failure under warranty, the following documentation must be provided as substantiation:
— A listing evidencing process operation and alarm logs at time of failure.
— Copies of all storage, installation, operating and maintenance records relating to the alleged faulty unit.