

## INSTALLATION AND OPERATING INSTRUCTIONS



The **WaterGraph Data Shuttle (900-DS)** is a device that downloads collected data from either 900M or 950R series WATERMARK Monitors and stores the data on a multimedia card (MMC). The card can be removed from the **Data Shuttle**, inserted in to a reading device connected to a PC, then read by **WaterGraph** software for analysis of the recorded data.

### Operation

The Monitor should be asleep with no information on the display before proceeding. If necessary, wait 30 seconds for the unit to return to sleep mode.

Downloading from the Monitor will not delete data from the Monitor by default. If deleting data is desired, an option can be set on the device. Refer to the software instructions on page 4 for information on setting this parameter.



To collect data from a Monitor:

1. Connect the supplied cable from the **Data Shuttle** to the shuttle port on the Monitor.
2. Press the green button on the **Data Shuttle**. The green LED should light, and begin flashing as the data is downloaded.
3. When the download is complete the LED will go out, followed by an audible beep.
4. Disconnect the cable. The **Data Shuttle** is now ready to download other Monitors.
5. When all downloading is complete, use **WaterGraph** software to import collected data.

The **Data Shuttle** is supplied with a multimedia card (MMC) and reading device. To install the reading device, simply plug it in to an open USB port on your PC. The PC will automatically detect and install the device. Once installed, cards installed in the reader will be accessible as drives in "Computer" or "My Computer" in your

operating system. Refer to the software instructions below for information on using **WaterGraph** software to retrieve data from the card.

## **Maintenance**

The **Data Shuttle** enclosure is not designed to protect the device from moisture or excessive dust. Keep the **Data Shuttle** in the supplied storage pouch or a clean and dry environment to ensure long life.

When battery replacement is necessary, remove the snap cover from the back of the **Data Shuttle** by firmly pressing in and down. Remove the old battery and replace with a new 9V battery.

## **Troubleshooting:**

### **Immediate audible beep and red LED when pressing the green button:**

This indicates a problem with the card. Check to see if the card is inserted or inserted upside down.

### **Long green LED followed by red LED and audible beep:**

This indicates a failure to connect to the Monitor. Check the cable connection between the **Data Shuttle** and Monitor. Verify that the Monitor is functioning by pressing the green button and viewing the display.

### **Orange LED:**

Battery is low and should be replaced.

### **LED always red:**

Battery is too low to operate and should be replaced.

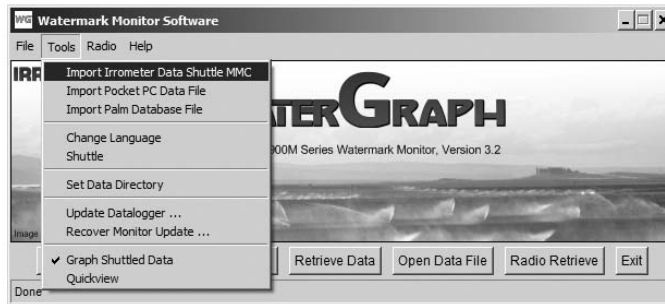
## **Software Instructions**

**WaterGraph** versions 3.2 (for 900M) or 4.1 (for 950R) are required for importing **Data Shuttle** data. The installation programs for both are included on the multimedia card (MMC) supplied with your **Data Shuttle**. To install the program, browse to the drive assigned to the card and launch the Setup\_3.2.exe or Setup\_4.1.exe file.

## **Importing Data**

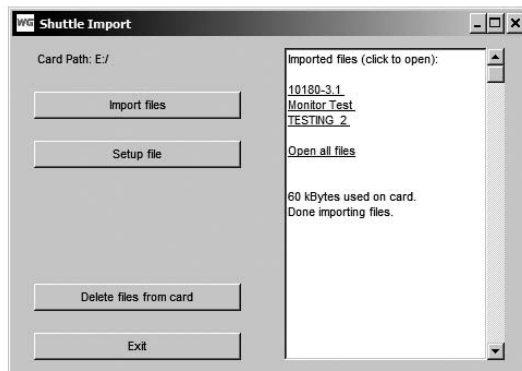
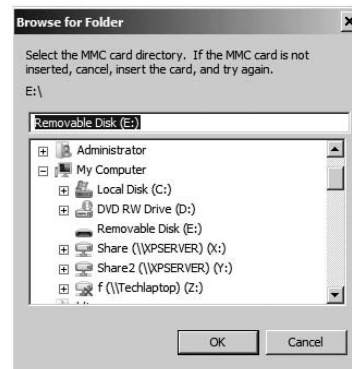
Remove the card from the **Data Shuttle** and insert it in to the PC card reader. The PC should recognize the card and prompt the user. Note the drive letter assigned to the card by the PC and cancel out of the prompt.

Open **WaterGraph** software. From the tools menu, select “Import IRROMETER Data Shuttle MMC”.



Point the browse window to the drive letter assigned to the card, and then select the “Import files” button to read data off of the card.

**WaterGraph** will read all of the files, convert them in to CSV files, and list each logger imported. Files will be saved in the default data directory, which can be changed by selecting Tools/Set Data Directory.



Clicking on a blue link will open the graph for the selected file, or files can be accessed at a later time by selecting “Open Data File” from the main **WaterGraph** screen. An “Open all files” option at the bottom of the file list will open all available files.

Once data has been successfully imported, selecting the “Delete files from card” button will remove downloaded data from the card. This is optional but will save time and prevent eventually using all of the card’s memory capacity.

## Setup

The **Data Shuttle** can be configured to delete data off of the Monitor at the completion of a download. By default, no data is deleted. To configure the **Data Shuttle** to delete data, select the “Setup file” option and choose the “Delete data” check box. The “Send setup to card” button will write the settings to the card. The settings are stored on the card as a file. If a new card is used, the setup must be applied again.



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