Collecting Data

a. On the **File** menu, click **Collect Data**.

b. On the **Options** menu, click **Load**.

c. Select the **default.ini** file. Click **Open**.

d. On the **Options** menu, click **Edit Data Options**. On the **ADCP Setup** tab click **Use File** and select a default ADCP Command File to load (use the **Browse** button). The following is a brief description of each file.

File Name	Description
OS38BBDEF	Default setup for an OS 38kHz ADCP in the highest precision (broad bandwidth) but reduced range profiling mode.
OS38NBDEF	Default setup for an OS 38kHz ADCP in the lowest precision (narrow bandwidth) but extended range profiling mode.
OS75BBDEF	Default setup for an OS 75kHz ADCP in the highest precision (broad bandwidth) but reduced range profiling mode.
OS75NBDEF	Default setup for an OS 75kHz ADCP in the lowest precision (narrow bandwidth) but extended range profiling mode.
OS150BBDEF	Default setup for an OS 150kHz ADCP in the highest precision (broad bandwidth) but reduced range profiling mode.
OS150NBDEF	Default setup for an OS 150kHz ADCP in the lowest precision (narrow bandwidth) but extended range profiling mode.
BB75DEF	Default setup for a BB 75kHz ADCP to provide the most range with the optimal precision.
BB150DEF	Default setup for a BB 150kHz ADCP to provide the most range with the optimal precision.
BB300DEF	Default setup for a BB 300kHz ADCP to provide the most range with the optimal precision.
BB600DEF	Default setup for a BB 600kHz ADCP to provide the most range with the optimal precision.
WH300DEF	Default setup for a Workhorse 300kHz ADCP to provide the most range with the optimal precision.
WH600DEF	Default setup for a Workhorse 600kHz ADCP to provide the most range with the optimal precision.
WH1200DEF	Default setup for a Workhorse 1200kHz ADCP to provide the most range with the optimal precision.

> **NOTE.** These files have been setup for shipboard use. They can also be used for stationary systems (such as Oil Rig platforms) but you must first open the file (right click on file and select open) and modify the EZ command from EZ1020001 to EZ1111111. This new setting will enable the use of the internal heading, pitch, and roll sensors.

e. As a minimum, set the options for **Communications** (ADCP and NMEA Com Port), and **Transforms** (Heading Source). Press **OK**.

f. On the **Options** menu, click **Save As**. Save the VmDas setting to your own *.ini file.

g. On the **Control** menu, click **GO** to begin collecting data.

Reprocessing Data

a. On the **File** menu, click **Reprocess Data**.

b. On the Reprocessing Tool Bar, click the **View/Edit** processing settings button.

c. Select the desired options for reprocessing the data.

d. Click the **Reprocess Data** button on the tool bar to start reprocessing the data file.

Playback Data

a. On the **File** menu, click **Playback Data**.

b. Select the data file to view. VmDas will automatically search for *.enr, *.enx, *.sta, and *.lta files. You may also enter *.* to search for all files, or enter any filename as long as the file contains valid ADCP data in the proper format. See File Naming Conventions for details of what each file extension means.

c. On the Playback Tool Bar, click **Play**.

File Naming Conventions

Data files produced by VmDas during **data collect** mode has the following filename format:

DeployName000_000000.Ext,

Where:

DeployName	is a user-entered name for the deployment (up to 128 characters),
000	is the deployment number (changes with each stop/restart),
000000	is the file sequence number, which is incremented when the specified maximum file size is reached, and
Ext	is the file extension, and reflects the type of data in the file

Reprocessed files have a similar format: DeployName000_000_000000.Ext,

Where:

000	represents the reprocessing number, and gets incremented each time the same raw data is reprocessed. The other fields are the same as for the data collect mode format, and identify the raw data source that was reprocessed.

The file extensions have the following meaning:

.ENR	Raw ADCP data file (see your ADCP Technical Manual for the output data format).
.LTA	ADCP (plus Navigation Data) data that has been averaged using the long time period specified in the **Options**, **Edit Data Options**, **Averaging** tab.
.STA	ADCP (plus Navigation Data) data that has been averaged using the short time period specified in the **Options**, **Edit Data Options**, **Averaging** tab.
.ENS	ADCP data after having been screened for RSSI and correlation by *VmDas*, or adjusted by the customer via a User Exit. Also has Navigation Data records merged into the ensembles from the .NMS file.
.ENX	ADCP single-ping data (plus Navigation Data) after having been bin-mapped, transformed to Earth coordinates, and screened for error velocity, vertical velocity, and false targets. This data is ready for averaging.
.N1R, .N2R	Raw NMEA data files - text files; includes ADCP time stamps with the following format: $PADCP,eeeee,yyyymmdd,hhmmss,-nnnnn.nn<CR><LF>

Where:
eeeee = ADCP ensemble number
yyyymmdd = Year, Month, Day (date of ADCP ping)
hhmmss.ss = Hour, minute, seconds.hundredths (Time of ADCP ping)
-nnnnn.nn = (signed) PC clock offset from UTC in seconds; includes time zone difference).

The .N1R extension is used for single-port NMEA data collection, or for GPS position data (Nav) in dual-port collection mode. The .N2R extension is used for Roll/Pitch/Heading (RPH) data collection when using two serial ports for NMEA data collection.

.NMS	Binary format Navigation data file after having been screened and pre-averaged.
.VMO	The option settings used for collecting the data (text file).
.VMP	The option settings used for reprocessing the data (text file).
.ENJ	ADCP raw data after adjustment by a user-exit application.
.N1J, .N2J	Raw NMEA data after being adjusted by a user-exit application.
.LOG	ASCII file containing any errors found in NEA, ASCII Ensemble Output, or ADCP communications.