





Record of Amendments

Keep this record in the front of the User Manual. When the document has been amended write the amendment number, the date, the paragraph numbers affected by the amendment and your initials in the table below.

Amendment Number	Amendment Date	Reason for Re-Issue (Paragraph Number (s) Amended)	Amended by
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Introduction

This manual is intended as a summary guide to using the Pressure Transient Logger produced by Radcom Technologies Ltd.

This guide will show how the user can set up a recording and download the resulting data.

The Pressure Transient logger has been designed to capture rapidly changing pressure conditions, such as water hammer cause by opening valves or starting pumps.

The main features of the logger include :

115200 baud communications link for fast data transfer. Data compression for increased storage capacity Cyclic mode for continuous logging

The kit comprises

- 1 x Multilog Pressure Transient Logger
- 1 x Pressure Transducer (calibrated to logger)
- 1 x PC to Logger communication cable
- 1 x CD with Radwin Software
- 1 x User Guide



Getting Started – Start the logger recording



Radcom View is running











Step 6		
Configure Logger Wizard		
Configuration Summary	Configuration Option:	
Logger Type: Multilog Pressure Tr	Logger Identity	Click the Select button inside the Location Identity box.
Connection Type: Direct (RS232) Baud Rate: 115200 Support Support Su	The Zone is the first part of the logger identity, and is used for grouping loggers within the software. The Location is the second part of the logger identity, and identifies a Zone Identity Identity Name Location Identity Identity Name	
	<< Previous Canc	el
Step 7		
Select Database Zone Type: Zones Select the require	d Zone, followed by the required Location from the list. To E	A list of Zones held in your database will be listed.
Zones Zones	m, select the 'I ools' button, or right click the mouse on an it	Double click the required Zone.
	Automatically Generated Zone thames	ancel
Step 8		
Select Database Location		A list of Locations held in your
Type: Zones/Locations - Select To Edit, Delete, or Create	the required Zone, followed by the required Location from th a new item, select the 'Tools' button, or right click the mouse	database will be listed.
Zones10 : Automatically G	ienerated Zone	Double click the required Location.
世田安 ■ 二 7 10 10 10 12 29 112 113 116 117 117 117 116 117 117 116 117 116 117 116 117 117	BR6 7BZ 86 Ladycroft Way Orpington BR6 7BZ 86 Ladycroft Way Orpington 64 Merlin Grove DA16 3DF 22 Elmfield Ct Wickham St DA16 2BH "The Lodge Danson Lane" DA17 5BW 39 Kentish Road Belvedere DA6 8EN 4 Brunswick Road Bexleyheath DA6 8HG 22 Sydney Road Bexleyheath SE25 6EJ Flat 1 Bromfield Ct 10 Oliver Gr SE16 5EG "Flat 5 406-438 Rotherhithe Stree SE16 7LA "48 Aland Ct Finland St"	at" v





Connection Type:	Direct (RS232)	
Baud Hate: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	115200 ***********************************	Enable the channel if required and set the logging mode for digital channels. Select the required transducer type and select Configure to update it. SMS WARNING:
Docation:	001 : Direct (RS232) 115200 Analogue (Pressure)	Count Standard
		Transducer Analogue (Pressure) Configure
E	>	Sensor Type: Pressure Transducer Name: Calibration: 0.100000 Offset: 0.000000
		<< Previous (Next >>) Cancel



Step 11 Set the Sample Rate Click Next

Step 12 Set the Data Hysteresis to the required level. Click Next

Step 13

Set the Start Time.

If a set time interval is required (i.e. the recording is between two set times) set the Stop Time and check the Enable Stop option.

If the recording should be continuous until the data is downloaded then uncheck the Enable Stop option.

If the recording should stop when the memory is full select Block Memory.

If the data should carry on being stored after the memory is full select the Cyclic Memory option. Note that this may mean data from the start of the recording is lost. Click Next

Step 14 To upload the parameters Click Next



Downloading the recorded data

Step 1 Select Options > Download Data Wizard from the main menu Change Logger Type to Multilog Pressure Transient Click Next

Step 2 Check that the Connection Type is Direct (RS232) and the Baud Rate is 115200 Click Next

Step 3 Click Next to Download the logger parameters

Step 4 Select the correct Zone Identity and Location Identity Click Next

Step 5 Channel Configuration should be set to default (Analogue Pressure) Click Next

Step 6 Enter a Comment for the downloaded data Click Next to store the data



Operating Parameters

Sample Rates

Sample rates used by the pressure transient logger are:

5 Hz, 10 Hz, 15 Hz, 20 Hz, 25 Hz

Data Hysteresis

There is also a Data Hysteresis parameter. This is a "dead band" where if a reading is within X count of the previous reading then the reading is stored as the same as the previous reading. Using this greatly increases the memory capacity of the logger.

X is in units of 0.1m

e.g. if the Data Hysteresis is 5 and the readings are

45.2 45.7 45.4 45.8 45.6 50.3 50.7 51.3 60.0

The recorded readings are:

45.2 45.2 45.2 45.8 45.8 45.8 50.7 51.3 60.0

The net effect is that if the pressure is changing rapidly the data is accurate, whereas if the changes are small these fluctuations can be safely ignored.



Logger Memory

The data recorded in the logger memory is compressed. The actual compression ratio depends on the nature of the data. The maximum memory capacity is 8 000 000 readings.

Block memory

If the recording fills the entire memory before the stop time is reached the recording will stop and the stop time will be recorded

Cyclic memory

If cyclic memory is selected the recording will not stop when the memory is full. The earliest data is overwritten and recording continues until the stop time is reached or the data is downloaded.

Stop Time

If a recording stop time is not set the recording will continue until the logger memory is full (Block Memory mode) or a download occurs (Cyclic Memory mode)