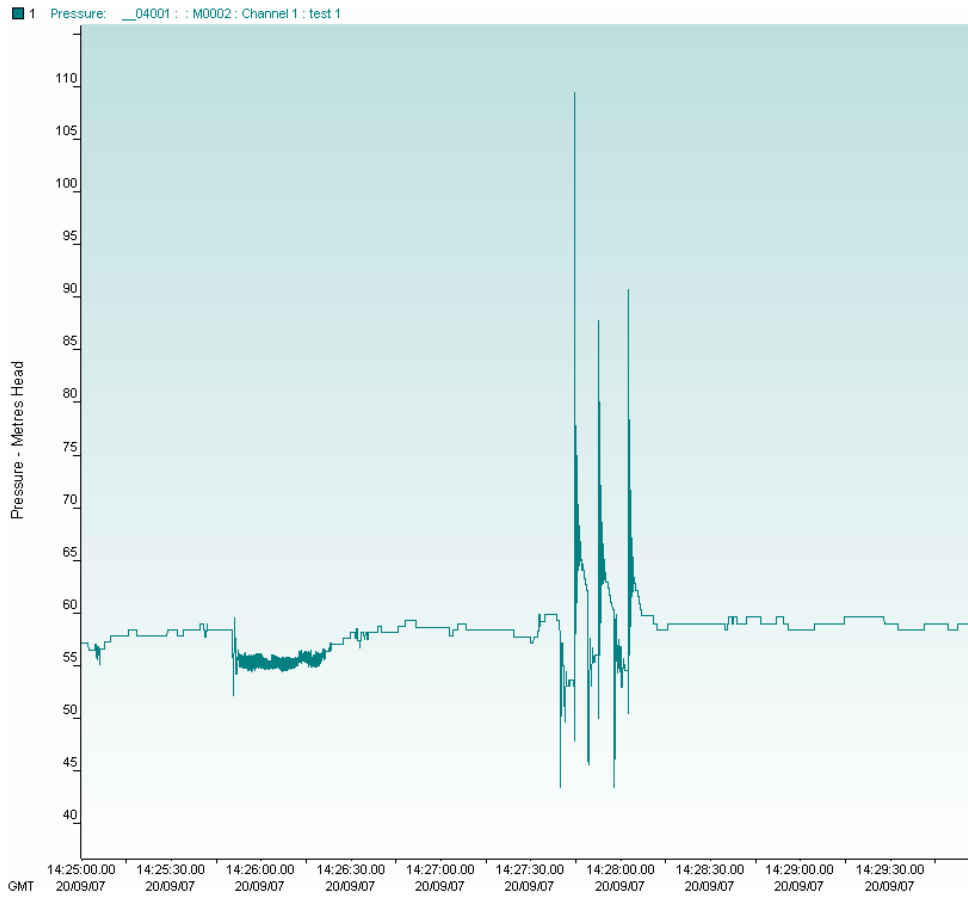


# Pressure Transient Logger User Guide





## Pressure Transient Logger User Guide

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## Pressure Transient Logger User Guide

### 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

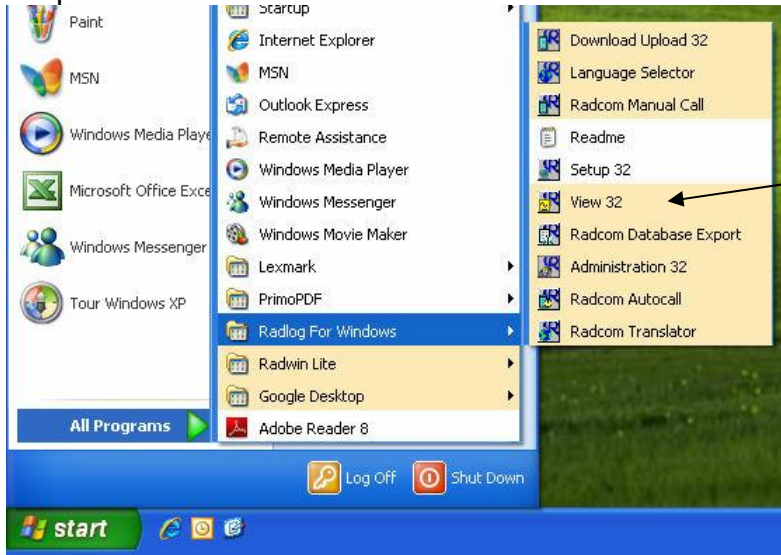
The kit comprises

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

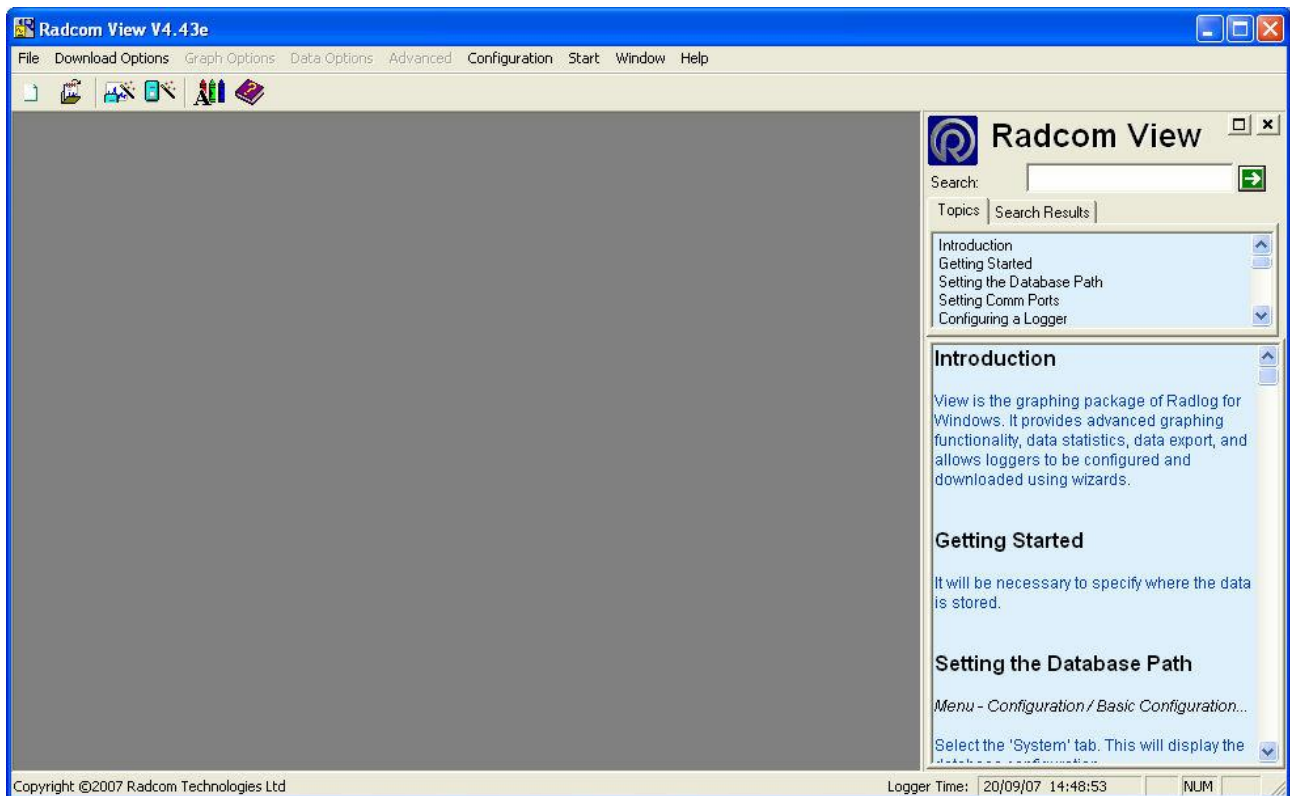
# Pressure Transient Logger User Guide

## Getting Started – Start the logger recording

### Step 1



Run Radcom View



Radcom View is running

## Pressure Transient Logger User Guide

### Step 2



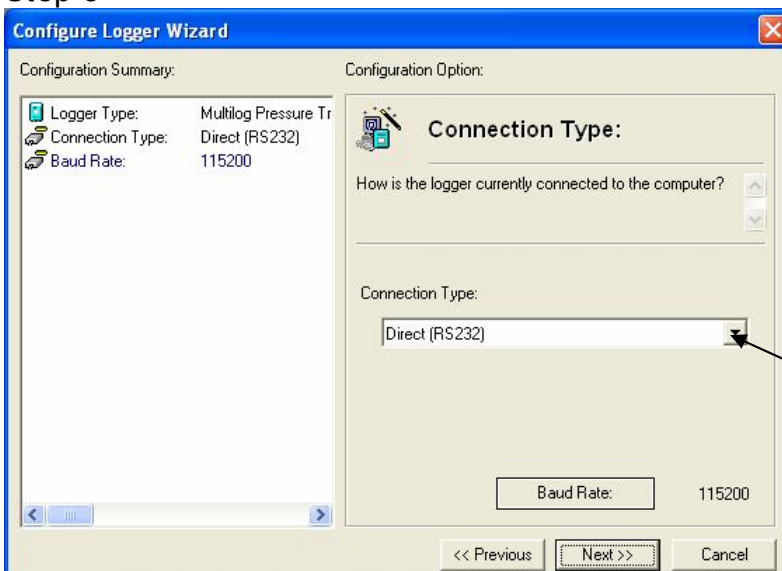
Click the Configure Logger Wizard icon

### Step 3



Change the logger type to Multilog Pressure Transient

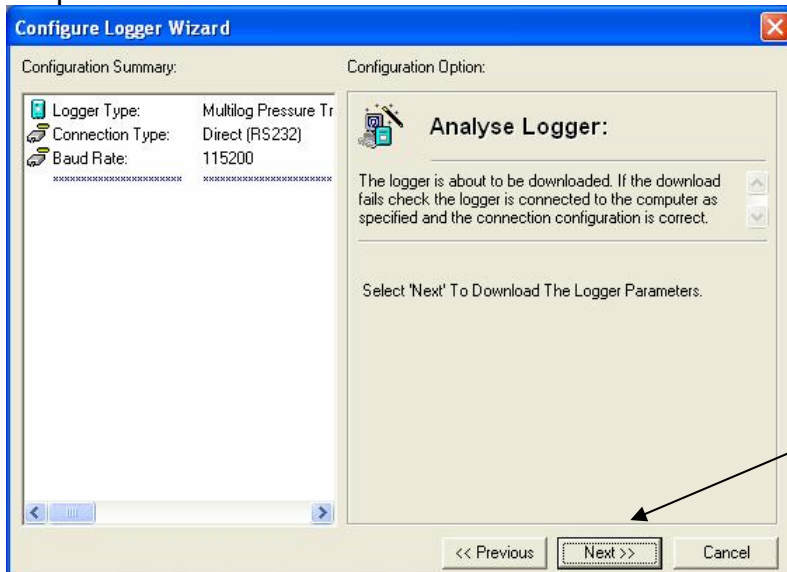
### Step 3



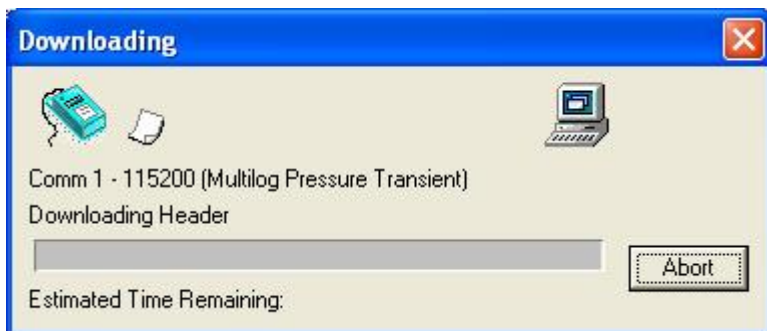
Check the connection type is Direct (RS232)

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### Step 4

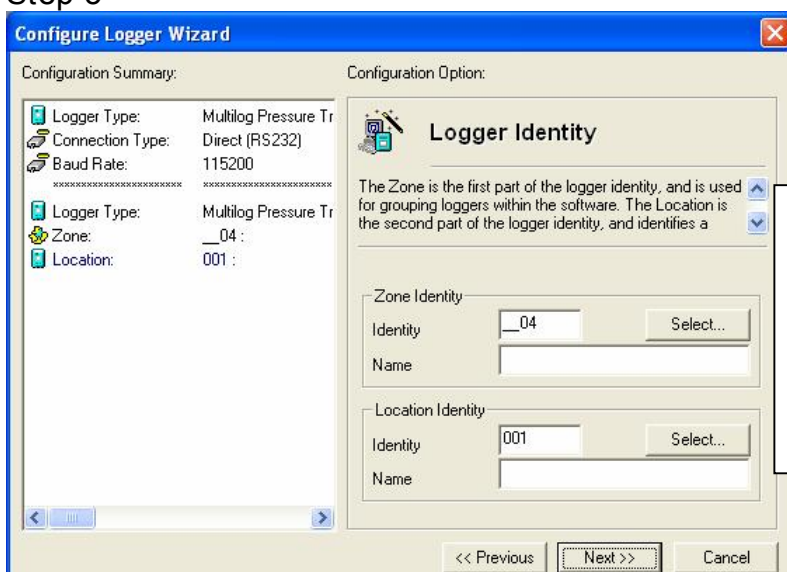


Click Next to download the logger parameters



Wait for the parameters to download

### Step 5

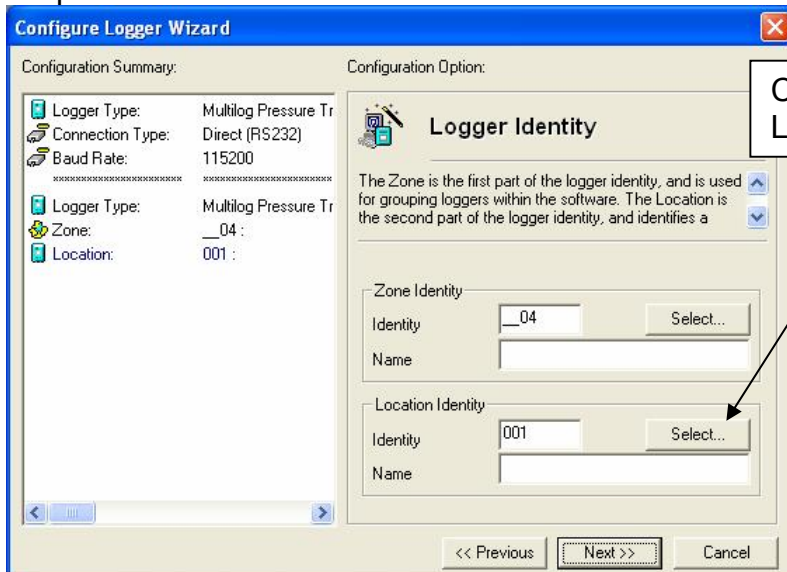


The zone and location number for the last recording are shown. Change them if required – instructions follow.

To keep the same zone and location go to Step 9

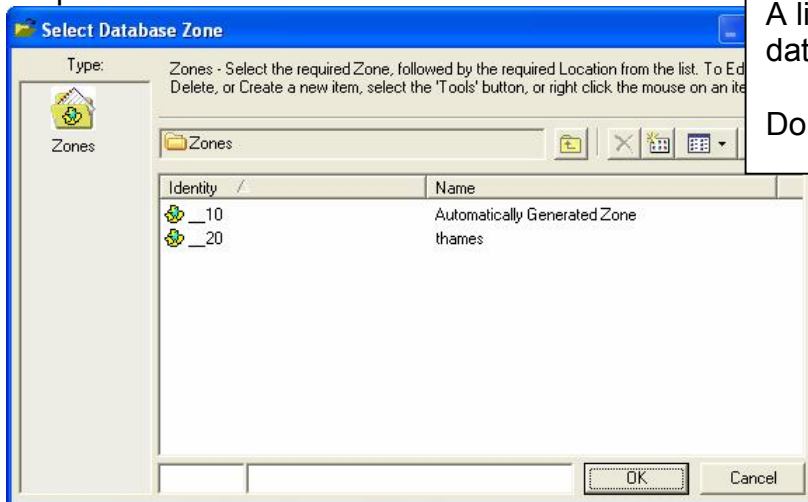
## Pressure Transient Logger User Guide

### Step 6



Click the Select button inside the Location Identity box.

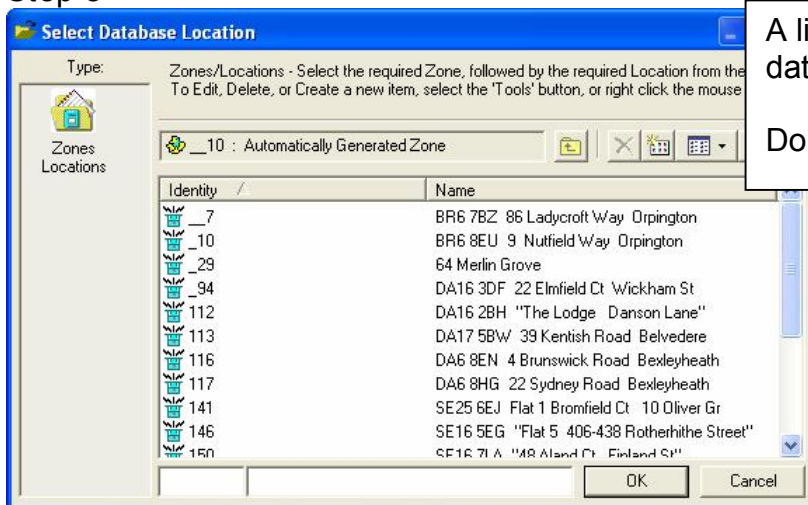
### Step 7



A list of Zones held in your database will be listed.

Double click the required Zone.

### Step 8



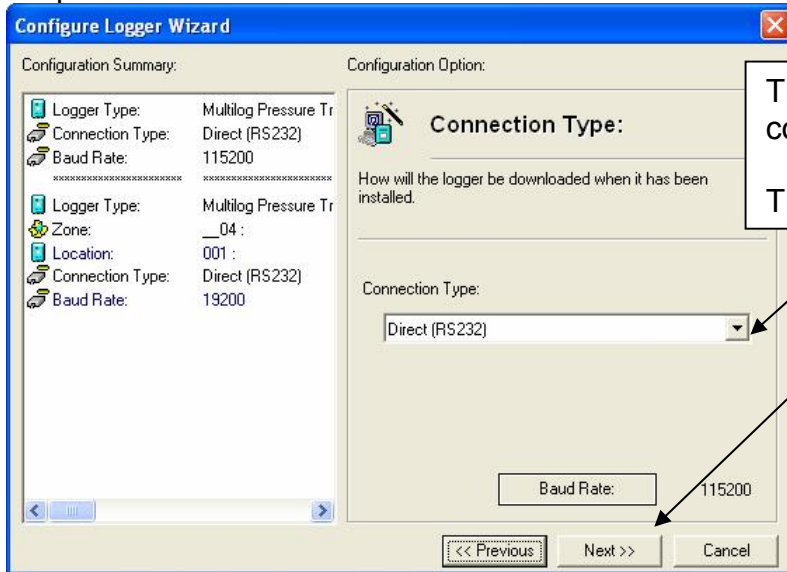
A list of Locations held in your database will be listed.

Double click the required Location.



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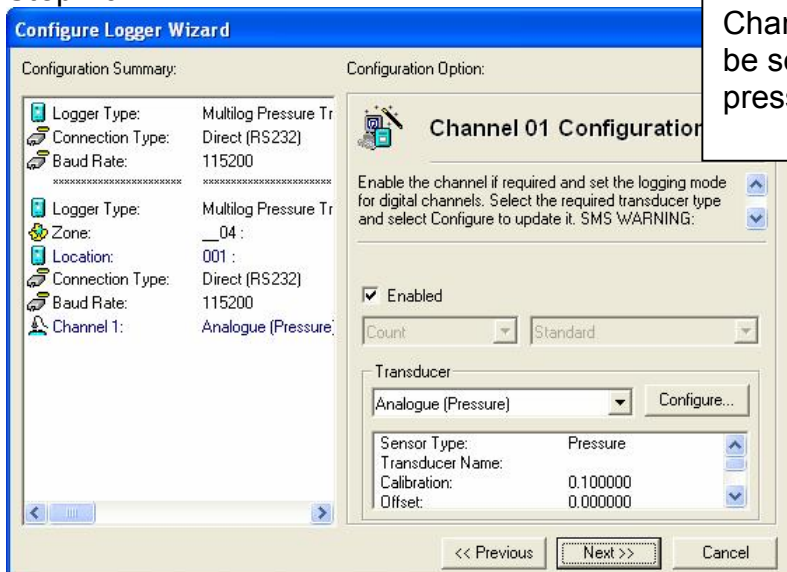
### Step 9



The connection type for future communications should be direct.

Then tap next.

### Step 10



Channel one configuration should be set as default (analogue pressure)

## Pressure Transient Logger User Guide

### 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

## Pressure Transient Logger User Guide

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### 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

## Pressure Transient Logger User Guide

### 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.

## Pressure Transient Logger User Guide

### 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)