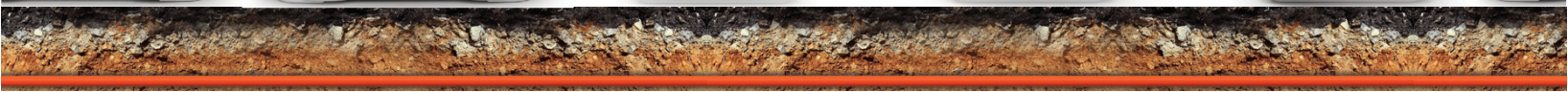# C.SCOPE XL2

Bluetooth™

PC Toolkit XL2 Edition User Guide

How to transfer Locator Activity Records from C.Scope XL2 products to a computer.

Only for use with:
Microsoft® Windows XP™
Windows Vista™
Windows 7™

C.Scope PC Toolkit XL2 Edition Version 1.01

DATA LOGGING Bluetooth

cscopelocators.com

C.SCOPE CXL2
CABLE AVOIDANCE TOOL

C.SCOPE DXL2
DEPTH MEASURING CABLE AVOIDANCE TOOL

C.SCOPE MXL2
MULTI FREQUENCY PRECISION PIPE & CABLE LOCATOR

C.Scope PC Toolkit XL2 Edition for Windows® based computers

Introduction

The C.Scope Toolkit enables Locator Activity Records ('Records') from any of the C.Scope XL2 Data Logging Cable Avoidance Tools ('Locators') to be transferred to a (Windows® based) computer and then examined.

The Records can be viewed in a variety of ways, as a time-stamped data format in WordPad, exported in Excel® for integration into a reporting or similar computer application, or viewed in a simple pie chart format.

The Table below indicates the products that this User Guide is relevant to and the functions that are applicable to each product:

	System Validation Certificate	Data Transfer by USB	Data Transfer by Bluetooth™
CXL2	●		
DXL2	●		
MXL2	●		
CXL2-DL	●	●	
DXL2-DL	●	●	
MXL2-DL	●	●	
CXL2-DLB	●	●	●
DXL2-DLB	●	●	●
MXL2-DLB	●	●	●

Before you start

1. Go to www.support.cscopelocators.com to register and download your free C.Scope PC Toolkit XL2 Edition.
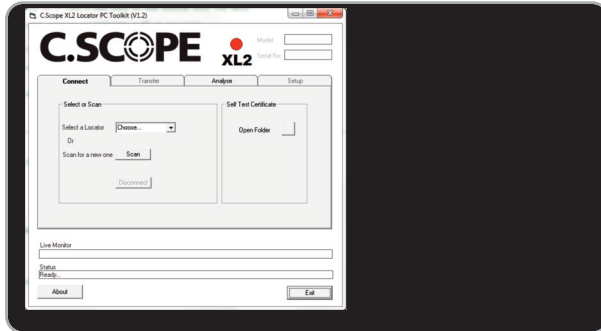
By registering you will be informed of any updates containing new features. These updates are free.

2. Follow the instructions on the webpage to install the Toolkit.

Note: You may need to contact your company IT dept to install new software on your computer.

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Overview

There are tabs on the Toolkit that allow you to Connect, Transfer, Analyse and Setup.

CONNECT:
This tab allows you to connect the Locator to your computer. This tab also allows you to create a Test Validation Certificate.

Note: Any previously saved certificates may be viewed and printed from this tab.

Certificates may be created based on historical data stored on the Locator.

TRANSFER:
This tab enables the user to manage the transfer of Records and System Validation Certificates from your Locator to your computer.

ANALYSE:
This tab details the options for viewing the transferred Records.

SETUP:
This tab lets you amend the User Settings, and advanced menu settings.

Data can be transferred by USB from the following products:
CXL2-DL
CXL2-DLB
DXL2-DL
DXL2-DLB
MXL2-DL
MXL2-DLB

Note: System Validation Certificates can be transferred by USB from all versions of the XL2 Locators including standard CXL2, DXL2 and MXL2.

1. Open the Cscope PC XL2 Edition Toolkit on your PC.

2. Connect the USB cable between the Locator and the PC. The Locator will power up automatically.

3. If it is the first time that you have transferred Records from this particular Locator, select 'Connect' from the tab list and then 'Scan'.

If you have Transferred Records from your Locator before, then simply select the serial number from the 'Choose' box.

The Toolkit Software will prompt you with a dialogue box asking if you wish to connect with a Locator by quoting the model type and serial number in a pop-up box. Select Yes.

When the software is recognising the Locator, the red indicator will change to yellow. Once it has connected, the indicator in the 'Connect' box will change from yellow to green indicating that the Toolkit has connected the selected Locator to the computer correctly.

A further confirmation is that the model number, serial number and any registered user name will appear in their respective boxes.

You will also notice a $ and flashing 'C.SCOPE' in the 'Live Monitor' box.

4. YOU ARE NOW CONNECTED AND READY TO TRANSFER RECORDS FROM THE LOCATOR.

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Data Transfer via Bluetooth™ for:
CXL2-DLB
DXL2-DLB
MXL2-DLB

1. Ensure that you have Bluetooth™ wireless technology capability on your computer. A computer that does not have embedded Bluetooth™ wireless technology can be used with a Bluetooth™ wireless technology adaptor that will enable it to communicate with other Bluetooth™ wireless technology devices (such as mobile phones, mice and keyboards).

2. The first stage of connecting the Bluetooth™ device is to pair the Locator to your computer. The method of 'pairing' may differ depending on the Windows Operating System version you are running on your computer. Please consult the appropriate PC User Guide for assistance.

3. Ensure that your Locator has a set of good condition batteries and that any other nearby Bluetooth™ wireless technology devices are switched off.

Note: During the 'pairing' process the Locator On/Off switch must be held in the 'On' position until pairing is complete.

During the 'pairing' process, you may be prompted to provide the following information:
- A 4 digit PIN number. Enter 0000
- A 'port number'. Ensure that the port number is between 1 and 15.

Once you have paired your Locator with your computer, you may now release the On/Off switch on the Locator.

Note: You only need to go through this process once with each Locator to add it to the list of valid Locator serial numbers on your computer.

We have help files and support guides on our website to help in the Bluetooth™ wireless technology pairing process.

4. YOU ARE NOW CONNECTED AND READY TO TRANSFER RECORDS FROM THE LOCATOR.

TRANSFER

To transfer Records between specific dates, enter those dates in the 'Transfer' tab and press 'Data Transfer'.
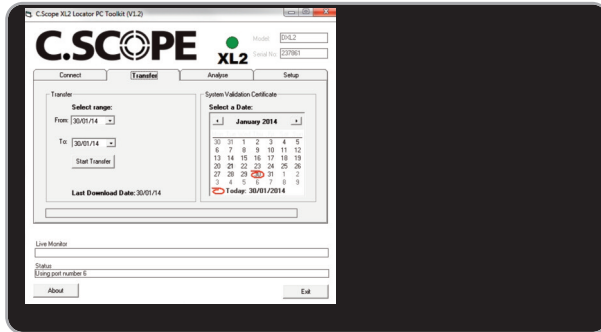
There will be a delay before the transfer starts as the PC Toolkit locates and verifies the selected data. The transfer is indicated by the progress of the blue bar. The Live Monitor window will show the Records as they are being stored on your computer.
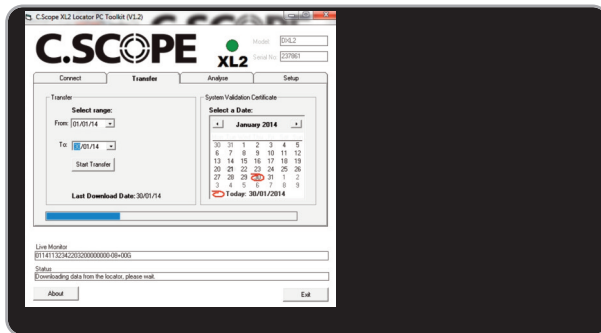
Once the data has downloaded it will be saved to your computers hard drive and displayed immediately.

You may now select any dates from the records transferred and review the information either in a second by second list or in a pie chart summary. Any pie chart may be saved and reviewed later using the 'Analyse' tab.

If required, a historical Self Test can be checked by retrieving the System Validation Certificate from the locator for a particular date. Select the date required from the calendar. If the locator was used on that day, the certificate will be retreived and stored in the Self Test folder accessed from the 'Connect' tab.

In the unlikely event of a cable strike, it can be swiftly established whether the Locator had passed its self test on a particular date and has been used.

Go to next page.

Note: The transferred Records are saved with a detailed file name to allow easy identification using your computer File Manager. The file name appears in the following format: serial number/ model type/ user name/ record activity period/ date and time of when Records were saved.
eg. 237352 DXL2 ASHLEY MARTIN [From 02-09-13 to 04-09-13-14-39-07)

Note: All saved Record files can be reviewed whether the Locator is connected or not by using the 'Analyse' tab.
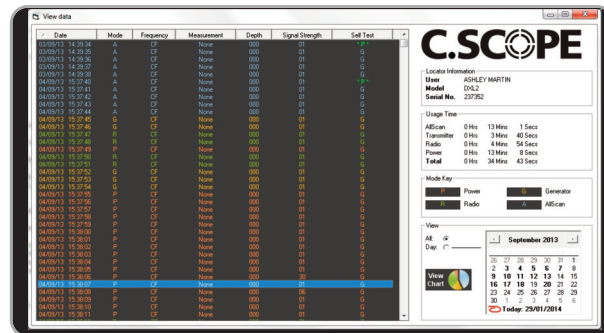
The 'Analyse' tab enables you to examine the locator data log files in detail. If you have just transferred data then you will see a screen like below appear.
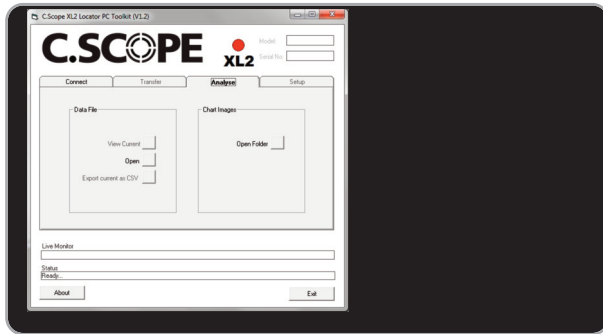
If you wish to look at data from a previously transferred data log file then select 'Open' in the File section of the Window and select the record you wish to view.
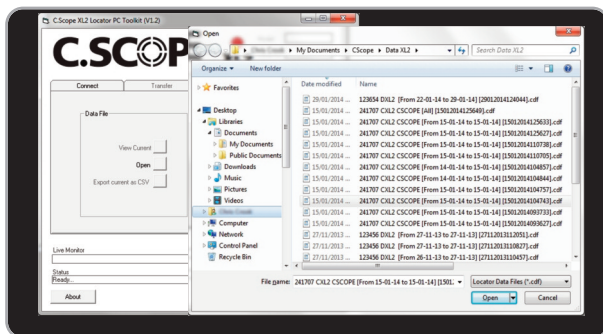
The Record is opened in a WordPad File, as below:

Here you have the key information about the Locators usage. You can see how and when the Locator has been used each day over the selected period. It shows the date, time and mode of detection as well as the indicated signal strength for every second of Locator usage.

Note: All instances of the Automatic Daily Self Test (ADST) have been stored. They are indicated by a P or F (Pass or Fail) in the right hand column of the main data window.

If required a System Validation Certificate may be produced from these tests by selecting the test date required and using the 'Print Certificate' button and selecting the test date required.

In the unlikely event of a cable strike, it can be swiftly established whether the Locator had passed its self test on a particular date.

Examining the Records using
the Analyse Button

When a datafile has been
opened the following
information is shown:

1. Raw data, by time / second,
colour coded by mode, and
ADST results.

2. Unique identity of locator,
user name and model number.

3. Total usage time over
selected data download
period by mode.

4. Open pie chart window.

5. Calendar, days when
equipment was used shown
in bold, scroll back and
forward to explore data
download period. Select days
to see mode usage data in a
pie chart.

Examining the Records using the Analyse Button

To see a simple pie chart of how a Locator has been used, select the 'View Chart' button.

The Chart indicates the ratios of the mode Usage and the total time in each mode for a given period.

Using the calender, you can now move between months and see the changes in the detection mode usage over that period. Days within a month when the Locator has been used are highlighted. Selecting a highlighted day will show what percentage of that day's usage had been in each mode.

Also indicated is the total usage time, ie. how long the Locator has been used over the selected period.
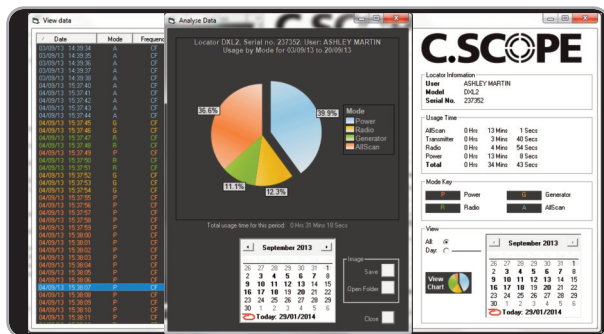
You can save any of the pie chart images to your computer for future reference.

The images are saved with a file name in the following format: serial number/ product model type/ User name / record activity period /date and time of when image was saved eg. 237352 DXL2 ASHLEY MARTIN [on 010-9-13] [11092013153754] [Day]

To retrieve any saved pie chart image, select 'Open' in the Chart Images section of the Analyse tab or use the 'open image folder' button on the Pie chart itself.

Records transferred to your computer by C.Scope Relay via email

Data logs that have been transferred from a Locator to your PC using a smartphone are also available to View using the PC Toolkit XL2 Edition.

For viewing Records sent as an email via the C.Scope mobile phone App 'Relay', firstly save the email attachment to My Documents/CScope/data on your computer (for Windows Vista™ and Windows 7™, save the email attachment to Documents/CScope/data) and then browse to it using the 'Open Existing Log File' button in the Toolkit. The Records will then appear as if you had transferred directly from the Locator.

Further Record usage

Any data log file can be transferred into a .csv file (a raw data file) is to enable a customer to create any number of tables or graphs or pie charts based on any of the parameters recorded in the .csv table. We have simply chosen to do mode usage pie charts but you could very easily create others.

For example, a graph can be created to show the length of time a Locator is used and when in the day that usage occurs. The options are numerous and relatively easy to create.
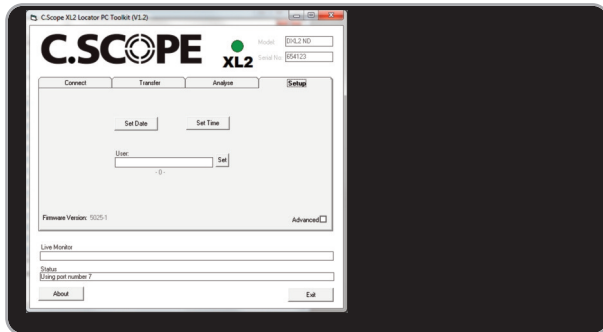
While the Locator is connected you can add or change the user name and the time and date on the computer from the 'Setup' tab.

By selecting the advanced features option box, you can re-allocate Bluetooth™ Ports and use the 'Transfer All' function.

Be aware that the 'Transfer All' function could take over 30 minutes to complete and may contain more than 12 months usage.

Consider using the 'Transfer by date' to select specific usage periods, reducing the data transfer time.

Note: Bluetooth™ connection only. If you select 'Transfer All', once the Records have started to be transferred you can release the On/Off switch on the Locator. It will switch off the display but continue to transfer the entire Locator memory.

Changing the time and date using the Toolkit will not amend any of the existing Records on the Locator.

Support

To check the version number of your Toolkit press CTRL A when you have initially opened the Application.

For further information on the range of Data Logging Cable Avoidance Tools and Locators, how to use them and their applications, contact your local C.Scope or your local C.Scope distributor.

Glossary of Terms

TOOLKIT:
C.Scope PC Application that transfers Locator Activity Records from C.Scope XL2 Data Logging Cable Detection Tools to a Windows™ based computer.

USAGE MODE:
Describes the proportion of Locator use in Power, Radio, Generator and AllScan modes.

LOCATOR ACTIVITY RECORDS:
The data that is stored on the Locator providing Date, Time, Mode, Frequency, Depth and signal strength.

GPS:
Geographical Positioning System.

COMPUTER:
Windows based Computer using Microsoft® Windows XP™, Windows Vista™ and Windows 7™ only.

BLUETOOTH™:
A proprietary open wireless technology standard for exchanging data over short distances.

PORT NUMBER:
In computer networking, the term port can refer to either physical or virtual connection points. Physical network ports allow connecting cables to computers, routers, modems and other peripheral devices. The port number identifies which port is being used for a particular connection.

PAIRING:
Many of the services offered over Bluetooth™ can expose private data or allow the connecting party to control the Bluetooth™ device. For security reasons it is necessary to be able to recognise specific devices and thus enable control over which devices are allowed to connect to a given Bluetooth™ device. To resolve this conflict, Bluetooth™ uses a process called bonding, and a 'bond' is created through a process called 'pairing'. The 'pairing' process is triggered either by a specific request from a user to create a 'bond' (for example, the user explicitly requests to 'Add a Bluetooth™ device'), or it is triggered automatically when connecting to a service where (for the first time) the identity of a device is required for security purposes. These two cases are referred to as dedicated bonding and general bonding respectively.

Pairing often involves some level of user interaction; this user interaction is the basis for confirming the identity of the devices. Once pairing successfully completes, a bond will have been formed between the two devices, enabling those two devices to connect to each other in the future without requiring the pairing process in order to confirm the identity of the devices. When desired, the bonding relationship can later be removed by the user.

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