ULTRAMETER II[™] Computer Interface (U2CI) Installation Guide and Features Summary

Myron L Company Release Revision 1.0

Note: This document is based on the Windows XP platform.

Part I: Installation Guide

The U2CI program requires our application to be properly installed on your PC. This section provides a step-by-step guide to help you quickly get your uDock and U2CI application running.

U2CI Executable and Support Files Installation

- Insert installation CD into CD drive or download the installation package from our website (www.myronl.com)
- Double click on setup.exe
- Follow installation procedure as prompted. Use the default settings whenever possible
- Leave the CD-ROM in the drive for the next step

Myron L uDock, USB Driver and USB Serial Converter Driver Installation *

- Insert uDock into any USB port on your computer
- Follow driver installation procedure as prompted. You may select the option of going to the Windows Website for locating the USB drivers or you may select the CD as the location to oad the drivers from
- Install the USB Driver
- Repeat the above steps for the USB Serial Converter driver installation

* NOTE: If you downloaded from our website the driver installation will be a little different. DO NOT check CD-rom as the location of the drivers. You will have to provide the location of the drivers – which will be the location you installed to. The default is C:/Program Files/U2CI.

Notes on using the U2CI program with uDock

• Always select the highest available serial communication port number to communicate with the uDock

Part II: Menu Summary

The U2CI main menu includes the following drop-down menus: File, Edit, UMII Commands and Help. This part describes each menu and its submenus' functions in detail.

File:

• Load (Ctrl + L)

This will "load" a data file in the main window screen. If the user chooses this submenu, the standard open file dialog will be displayed (Fig. 1).

Open			? 🛛
Look in: ն	tmp	🔽 🔾 🌶	⊳ 🖽
Cons			
File name:			Open
Files of type:	application/mlc	~	Cancel
	application/mlc	_	
	application_sci/csv _application/all		

Fig. 1 U2CI Open File Dialog in Loading Data

The file types supported by the U2CI are .mlc and .csv formats. If the user chooses the "Open" button, the corresponding data file will be loaded into the U2CI main window. If the user chooses the "Cancel" button, the open dialog will be closed and no file will be loaded.

If a loading error occurs (for example, wrong data file type or damaged data file), the U2CI will display the following warning message (Fig. 2).



Fig.2 U2CI Loading Error Message

After loading the data file, the corresponding filename will be displayed on the right-top corner above the reference information field, and the reference information (if there is any) will be displayed in the reference information field.

If the user chooses to load a data file and the current data has not been saved, the U2CI will display the following warning message (Fig. 3).



Fig.3 U2CI Warning Message of Unsaved Data in Loading Data

If the user chooses the "Save" button, then the following standard "Save As" dialog will be displayed (Fig. 4):

Save As		? 🛛
Save in: ն	U2CI_Mar09r3 🛛 🕑 🤌	⊳ 🖽
Cons Project Coc RC test coc Sample Coc SerialTestX	itest file de Backup intmp de is reg sedgf sedf g de K.app Build	
File name:		Save
Save as type:	application/mlc	Cancel

Fig.4 U2CI Save As Dialog in Loading Data

If the user chooses the "Don't Save" button (Fig.3), the current data will not be saved and the standard open file dialog (Fig.1) will be displayed and the selected file will replace the current data in the U2CI main window screen.

If the user chooses the "Cancel" button (Fig. 3), then the loading operation will not be executed and the current data will not be changed.

• Clear Data (Ctrl + D)

This will clear the current data in the main window screen as well as its reference information and file name. When there is no data on the screen, this submenu will be grayed out.

If the user chooses to clear the data, the following message will be displayed (Fig. 5):

Clear Display Data		
?	Clear Data List ?	
	OK Cancel	

Fig. 5 U2CI Clear Data List Dialog

If the user chooses the "OK" button (Fig.5), the U2CI will check if the current data is saved or not. If it is not saved, the U2CI will prompt the user to save the data before clearing it.

• Save (Ctrl + S)

This will save the data in .mlc format, i.e. the truncated data that is displayed in the U2CI main window screen and on the ULTRAMETER II display.

• Save As

This will provide the user with a choice to save the data in either .mlc format or in .csv format. If the .csv format is chosen, then the data will be saved as the scientific data format without truncating any data. The "Save As" submenu will always display the following standard "Save As" dialog (Fig. 6):

Save As			? 🗙
Save in: ն	U2CI_Mar09r3	💌 😋 🦻	⊳ 🖽
Cons Project Coc RC test coc Sample Coc SerialTestX	ie Backup intest file de Backup inter de Sajaaaa de Sajaaaaa de Sajaaaaa de SajOutFile uild		
File name:			Save
Save as type:	application_sci/csv	~	Cancel
11	application/mlc	uS	KC

Fig.6 U2CI Save As Dialog in Save As Submenu

• Print (Ctrl + P)

This submenu will be active only when there is data displayed in the main window screen. When the user chooses to print the data, the following standard Page Setup dialog will be displayed (Fig. 7).

Page Setup	? 🔀
	Termination model (Con- Instrumentation of the Con- Instrumentation of the Construments of the Construme
Paper	
Size:	etter (8.5 x 11 in.) 💌
Source:	uto 💌
Orientation	Margins (inches)
O Portrait	Left: 1 Right: 1
 Landscape 	Top: 1 Bottom: 1
	OK Cancel Printer

Fig.7 U2CI Page Setup Dialog in Printing

The user can set up the page according to his or her needs. We recommend using the landscape orientation. Then click the "OK" button. The following standard Print dialog will be displayed (Fig. 8). If the user chooses "Print", the corresponding data list as well as the reference information and the file name will be printed out.

Print	? 🛛
General	
Select Printer	
Add Printer hp photosmart 1115 series	
Status: Ready Status: Ready Documents: 0 Comment:	Preferences Find Printer
Page Range	
⊙ All	Number of copies: 1
Selection Current Page	
O Pages: 0	
Enter either a single page number or a single page range. For example, 5-12	
	Print Cancel

Fig.8 U2CI Print Dialog

• Quit (Ctrl + Q)

This will quit the U2CI application, the same as closing the U2CI main window. If there is any unsaved data in the main window screen, the user will be prompted to save the data.

Edit:

• Preferences (Ctrl + R)

When the user chooses this submenu, the following preference window will be displayed (Fig. 9):

Preferences	U2CI Version 0.4.18
Temp. Scale	Celsius
Sort	Record Asc. O Desc.
Port	COM1
Use Defaults	Save Cancel

Fig.9 U2CI Preference Window

"Temp Scale" - Choose whether you want to display the temperature in Celsius or Fahrenheit.

"Sort" – Choose how you want to arrange and display the data.

"Asc" or "Desc" – Choose whether you want to arrange the data in ascending order or in descending order. For example: You can choose to sort the data by "Date" in descending order and the data will be displayed by date with the most recent date at the top.

"Port" indicates which serial port you want the uDock to communicate with. All available ports on the computer will be found and displayed dynamically. If the user chooses "None" in the preference window, the U2CI will display the following message (Fig. 10):

Myron L	. Company U2CI Version 0.4.18 🛛 🛛 🔀
٩	The selected port was either not available or no port was selected.
	ОК

Fig.10 U2CI "None" Port Selected Warning Message

<u>*Tip*</u>: You can open "Control Panel – System – Hardware - Device Manager" in Windows XP to see which ports are open. Choose "Ports (COM & LPT)" and see what COM number is connected to your uDock (USB Serial Port (COM" ")). Then choose the corresponding COM number in the U2CI preference window.

The U2CI also provides a "Demo" mode in the port list to demonstrate how the U2CI works.

There are three buttons on the preference window in the U2CI, which are: Use Defaults, Save and Cancel (Fig. 9).

The "Use Defaults" button will re-set the preferences to the original values during installation.

The "Save" button will save the preference information that the user has selected and apply the current preference information to the data on screen.

The "Cancel" button will cancel the operation. If this button is selected, the preference window will disappear, and the current display will not be changed.

• Reference Info (Ctrl + I)

When there is no data displayed in the main window screen, this submenu as well as the reference information field will be grayed out. They are activated only when there is data displayed on the screen. The user can then edit and modify the corresponding reference information.

When the user chooses the Reference Info submenu, the "OK" button will be visible under the reference information field (Fig.11). After editing the reference information, the user must press the "OK" button. The maximum number of characters allowed in the reference information field is 100.

File Edit UMII Commands Help	;v	
Ultrameter II Commands	×	
Ultrameter II Commands Reference Information File Name: OutFile.c: Image: Commands Image: Commands This is Demo File		
)	
1 COND 00 S Nacl 17 2000.00.17	=	
2 BES 34.7 kOhm USEBIG32/151 58.5 2005.12.17 19:38.46		
3 BES 20 k0hm USERI392/81 50.6 2006.824 22:5251		
4 COND .00 uS USERI9.6%/7.61 30.7 2006.12.04 5.57.44		
5 COND .00 uS 442 68.6 2006.01.29 7:03:26		

Fig.11 Demonstration of Reference Information Field and OK Button in U2CI

UMII Commands:

You may use the icon buttons (Fig. 12) or the "UMII Commands" drop down menu to send commands to your ULTRAMETER II.

Icon	Command
	Download Data
	Set Date and Time
	Erase Memory
&	Disconnect

Fig. 12 UMII Command Icons

Download Data

This will download data from the ULTRAMETER II to your PC. The U2CI will then display the following message box (Fig. 13):



Fig.13 U2CI Download Data Dialog

If the uDock is properly connected and the ULTRAMETER II is in "PC On" mode, the U2CI will begin to download data from the ULTRAMETER II. The following download progress bar (Fig. 14) will appear while downloading.



Fig.14 U2CI Downloading Progress Bar

If your uDock is not properly connected or your UMII is not in "PC On" mode, the U2CI will display the following warning message (Fig.15):

Myron l	Myron L Company U2CI Version 0.4.18		
٩	No Device Detected. Please ensure uDock is properly connected and UM II PC ON mode is activated		
	ок		

Fig.15 U2CI No Device Detected Warning Message in Downloading Data

In the event that the transmission is interrupted or the data set is not completed within the timeout period, the U2CI will display the following message (Fig. 16) to inform you that there was a problem with the download and to try again.



Fig.16 U2CI Transmission Error Message in Downloading Data

If there is a problem and the download process cannot be started within the timeout period, the U2CI will display the following message indicating there is a timeout error (Fig. 17). In this case, put your UMII back into "PC On" mode and try again.



Fig.17 U2CI Serial Communication Timeout Message in Downloading Data

The U2CI will also protect the unsaved data in the main window screen by displaying the following warning message (Fig. 18) when the user tries to download new data from the ULTRAMETER II.

Myron L Company U2CI Version 0.4.18		
♪	Do you want to save the current data before downloading new data from Ultrameter II? If you don't save, your current data will be lost	
	Save Don't Save Cancel	

Fig.18 U2CI Unsaved Data Warning Message before Downloading Data

• Set Date and Time

This will set the date and time on your ULTRAMETER II. If the uDock is properly connected and the ULTRAMETER II is in "PC on" mode, the following message will be displayed (Fig. 19). Please note: The date and time is taken directly from your PC. To ensure accuracy, verify your computer's Date and Time is correct.

€ Setting Date and Time on the Ultrameter II	

Fig.19 U2CI Setting Date and Time Status Bar

• Erase Memory

This will erase the data stored in your ULTRAMETER II memory. If the uDock is properly connected and the ULTRAMETER II is in "PC on" mode, the following message will be displayed (Fig. 20).

Erase Memory		
?	Erase data stored in your Ultrameter II memory?	
	OK Cancel	

Fig.20 U2CI Erase Memory Dialog

• Disconnect

This will close the communication port between the U2CI and the ULTRAMETER II. The following message (Fig. 21) will be displayed and the corresponding communication port will be closed.



Fig.21 U2CI Disconnect Serial Port Message

Help:

• U2CI Info

When the user chooses this submenu, the version, build date, etc. will be displayed (Fig. 22).

U2CI Information				
Version: 0.4.18	Build Date: July 01 2005			
This application runs on Microsoft Window or Macintosh operating systems and provides a "smart interface" between Myron L Ultrameter II and the PC of choice. The interface is performed via infrared technology over a USB port.				
The U2CI application is used for basic I/O operations of the stored data allowing you to display, print and save your stored readings.				
<u> </u>				

Fig.22 U2CI Information Window

• Myron L Company

When this submenu is clicked, it will link the user to the Myron L Company website (if an Internet connection is available).

Part II: Other Features in U2CI

- 1. The U2CI main window can be minimized, maximized or resized according to the user's needs.
- 2. When the U2CI application is opened, the following menus and fields will be grayed out:
 - Clear Data
 - Save
 - Save As
 - Print
 - Reference Information

They will be activated only when there is data displayed in the main window screen.

3. The U2CI supported data file (.mlc) format can be opened by the U2CI automatically. To have the U2CI open the .mlc file, you must first associate the .mlc file with the U2CI program. To do this, click or double click the .mlc file and you will see this window displayed (Fig. 23). Select "Select the program from a list" and click OK.

Windows			
Windows cannot open this file: File: test1.mlc			
To open this file, Windows needs to know what program created it. Windows can go online to look it up automatically, or you can manually select from a list of programs on your computer.			
What do you want to do?			
 Use the <u>Web</u> service to find the appropriate program Select the program from a list 			
OK Cancel			

Fig. 23 File Association

4. In the next window that will be displayed (Fig. 24), check the box, "Always use the selected program to open this kind of file. Then click "Browse..." and select the U2CI program.

pen With	?
Choose the program you want to use to open thi File: test1.mlc	s file:
Brograms	
Adobe Acrobat 5.0	~
DVgate Plus	
D ICD-S Interface Program	12
Internet Explorer	0.000
Microsoft Excel	
Wicrosoft Office Binder	
Microsoft Office FrontPage	
Microsoft Office Picture Manager	~
Type a description that you want to use for this kind of	f file:
Always use the selected program to open this kind	of file
	Browse
	general
If the program you want is not in the list or on your comp	uter, vou can looi
for the appropriate program on the Web	
ОК	Cancel

Fig. 24 Open with Dialog Box

- 5. If the user tries to open a non-supported data file or a damaged data file with the U2CI, then the U2CI application will give a warning message (Fig.2).
- 6. U2CI supports balloon help. When you move the mouse to the corresponding area, the balloon help will show up accordingly.

Symptom	Solution
No Device Detected	1. Verify your preference setting is set to the
	correct port. 2. Verify the UMII is in "PC On"
	mode.
Transmission error	The transmission was either interrupted or the
	data was not downloaded within the specified
	timeout period. Verify the UMII is in "PC On"
	mode and download again.
Serial Communications has timed out	The uDock had a problem and the download
	process did not start within the timeout period.
	Verify the UMII is in "PC On" mode and
	download again.

Part III: Troubleshooting