lageleka

Initial Installation of Software for the Mageleka MagnoMeter XRS[™] Relaxometer

PLEASE READ IN FULL BEFORE INSTALLING THE SOFTWARE

PLEASE NOTE A INTERNET CONNECTION MAY BE REQUIRED TO COMPLETE THE INSTALLATION

STEP 1: The Magnosoft software is located on the USB pen drive in the accessories kit. If this is the first time Magnosoft Software have been installed on to the computer then use MXRS_xx-x_Full, if it is an upgrade to the latest version use MXRS_xx

Select the appropriate MXRS_xx File.

Please Note – this actual image on your PC/LAPTOP screen may be lightly different from the images below due to software updates. There may be several minutes between the various steps of the installation. Additionally, the screen may go blank for a few minutes. Please be patient and do not abort installation prematurely.

If the following screen is prompted, mouse click More info, the image on the right will be displayed



Select Run Anyway

When prompted, give the computer permission to run the file. The following screen will appear:



Select "Next" and the following screen will appear:

* Installation Options		
Choose installation folder:		
C\Program Files\MXRS_1_0R	Browse	
	Restore Default Folder	
Add a shortcut to the desktop		
^		
•		
c Pack Next >	Cancol	
V DALK IVEXL >	Calicel	

If you want a desktop shortcut, check the box next to "Add a shortcut to the desktop" (see red arrow in screenshot, above), then click "Next". This screen will appear:

NOTE: A Pr	eparing Files k	box may appea	r during this o	peration and ma	v take several	minutes.
					.,	

A Required Software	_ C ×
MATLAB Runtime is required.	
Choose installation folder:	MATLAB [*]
C\Program Files\MATLAB\MATLAB Runtime Browse	RUNTIME R2017g
Restore <u>D</u> efault Folder	
MATLAR and Simulink are registered trademarks of The MathWorks Inc. Diesse see	
mathematic and similar and registered date mathematics of the mathematics, inc. These see mathematics, com/trademarks for a list of additional trademarks. Other product or brand names may	
be trademarks or registered trademarks of their respective holders.	
WARNING: This program is protected by copyright law and international treaties. Copyright 1984-2017, The MathWorks, Inc. Protected by U.S. and other patents. See MathWorks.com/patents	

Click "Next" and this screen will appear:



Select "Yes" to accept the license agreement and then click "Next".

The confirmation screen will appear:



Click "Install" and the installation process will begin:

* 5% Complete		
Installing		
	5%	
		Pause
		Cancel

The bar indicates the progress of the installation.

Once the installation is complete, the following screen will appear:



Click "Finish" to exit the installer.

STEP 2: Additionally, all users must also load the "Mageleka" folder into the Users Public Folder. The Mageleka folder is present on the USB stick supplied in the Accessories kit.

	Application Notes	21/04/2020 11:33	File folder	
\subset		06/06/2021 17:58	File folder	
$(\)$	🕭 Mageleka Quick Start Guide	24/02/2020 10:21	Adobe Acrobat D	1,172 KB
	👃 Magnometer Installation Instructions	21/04/2020 10:56	Adobe Acrobat D	404 KB
	Magnometer Software Instructions	21/04/2020 11:01	Adobe Acrobat D	803 KB
	📣 MCR_R2017a_win64_installer	22/02/2020 13:19	Application	1,179,791 KB
	A MXRS_2_1A	27/04/2020 14:43	Application	5,131 KB
	🐞 MXRS_2_1A_Full	27/04/2020 14:43	Application	702,636 KB

Copy the Mageleka Folder to C:\Users\Public\

	Name	Date modified	Туре
	Documents	15/03/2021 11:13	File folder
	Downloads	15/03/2021 11:13	File folder
<	Mageleka	18/12/2020 14:11	File folder
	Music	12/04/2018 00:38	File folder
	Pictures	12/04/2018 00:38	File folder
		06/06/2021 17:38	File folder
	Roaming	28/09/2019 12:26	File folder
	Videos	12/04/2018 00:38	File folder

To check that the folder has been copied correctly, click on the Mageleka folder, a folder called Magnometer will now be seen.

NOTE: The "Mageleka" folder must be copied to C:\Users\Public\ <u>before</u> continuing. The software will not install correctly if the "Mageleka" folder is not located in C:\Users\Public\

RUNNING THE SOFTWARE FOLLOWING INSTALLATION

NOTE: Ensure that your MagnoMeter XRS is connected to the computer before continuing.

NOTE: If you have not yet configured your MagnoMeter XRS, you must complete the basic set-up procedure before using the instrument. For detailed instructions refer to *A Quick Start Guide to Making Measurements with the MAGELEKA MagnoMeter XRS™ Relaxometer*. This documentation was supplied with your instrument.

STEP 1: Power Up the Magnometer Command Unit please wait 30 seconds before loading the Magnosoft software.

Locate the MagnoMeter XRS software icon and double-click it to run the software. The icon looks like this:



The following screen will then appear:



Shortly afterwards, a start-up screen will appear:

Setup Save Connect			Auto T1	Auto Center	Auto Write Data	Expert
Home Standa Sample d Run opt Print/save Result	e and a second s	Welcome Making a measurement with the Magnometer XRS NNR Relaxometer is straightforward. Use each of the buttons on the left to configure various settings required to make a measurement. A green check mark will appear when you have entered the necessary iformation and it is valid. If information is missing you will see a red exclamation mark to indicate is cometing needs your attention. The START button will appear green when you see only green check marks otherwise it will appear gray.		0.2 0.4		1
STAR Magnet Magnet information - Resona	nce has not been chec	ked this session	Plot FID Plot FFT			^ •

All visible check marks should be **GREEN**, indicating that your software is now ready to begin making measurements.

NOTE: If any of the check marks are RED you should uninstall both the MXRS_1_0R program and MATLAB Runtime 9.2, following typical procedures for your operating system. Additionally, delete the "Mageleka" folder from C:\Users\Public\ then return to STEP 3 to re-copy the folder from your default download folder and re-install the software.

If there is no instrument connected to the computer, the following screen will appear:



Click "OK" and the following screen will appear alerting you that the instrument is "**NOT CONNECTED**":

To connect, select Connect button in the Menu Bar

Setup	Save	
	Home	
	Standard	

The Home scree will dispay without an error message if the Mangnoemter is conenct to the Computor and is commincating correctly.

If problems persit check the Ethernet connection cable between the Computer and rhe Magnometer Command Unit.

STEP 2: Fill a NMR tube with Verification Standard 1 to about 10 mm from the bottom of the tube. Insert the tube in to the MagnoPod and wait a few moments for the sample to stablise.

Make an initial measurement by clicking the Setup button at the top left-hand of the screen. Click OK on pop up display.

At the conclusion the following screens will appear - the first only momentarily:

up Save Connect		Auto T1	Auto Center	Auto Write Data	Expert
Home Standard Sample details Run options Print/save options Results START	Results Load Data date : 2018-11-28 07:42:35 ^ frequency : 12464613 temperature : Not Measured filename : Pre-frequency_Sweep sampleid : SetUp solidphase : No Solid liquidphase : CuStd SeeM volume ratio : 0 testedby : TC notes : Results: Results: Resonance frequency : 12459353 Hz Magnet temperature is : 23.4 °C	14000 13000 12000 7111000 8000 7000 6000 0 10	Finding	Resonance	Raw Fitted
net et information - Resonance has not been check	ted this session	Plot FFT	Resonance frequer Magnet temperatur	ncy : 12459353 Hz e is : 23.4 °C	

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NOTE: Two consecutive measurements are made.

The first is a plot of the resonance frequency; it should be a straight line. The second is a plot of the pulse length.

NOTE: In each of the two plots, the fit to the data points should be good.

In this example, the resonance frequency is 12.465 MHz and the 90° pulse length is 4129 ns (at 22.9°C).

NOTE: The resonance frequency differs slightly for each magnet, and exact numbers may vary from the example shown above.

NOTE: If you do not get a result as shown above (i.e., excellent plot fits, a straight line for the resonance frequency plot), then it is likely that the frequency has been incorrectly set in the *instrument.txt* file. In the unlikely event that this problem occurs, please ask Mageleka for further advice.

NOTE: Never attempt to open the Pod assembly. This can permanently damage the instrument.