

SFRA45 & SFRA5000

Saving / Recalling Results using a USB memory stick & SFRAComm PC software.

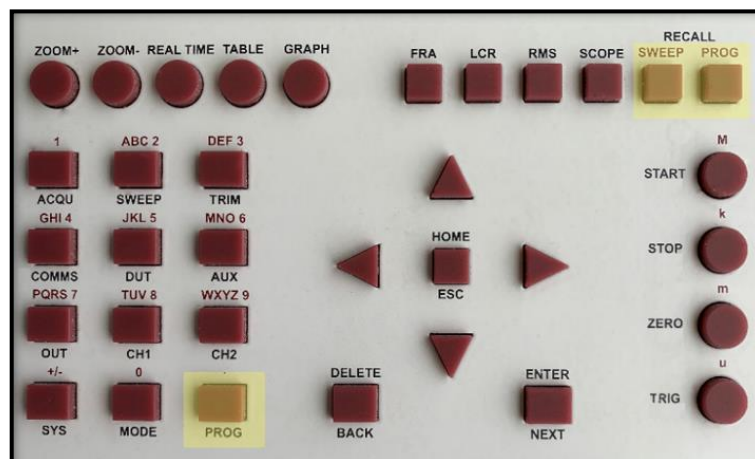
Conventions used in this document:

References to physical instrument keys such as [SWEEP](#) are in blue

References to Menu names or selections such as [internal](#) are in red

Saving results to USB Memory

This document explains how to save and recall results on the SFRA45 and SFRA5000. Please note that the maximum capacity USB Memory stick that can be used is 2GB.



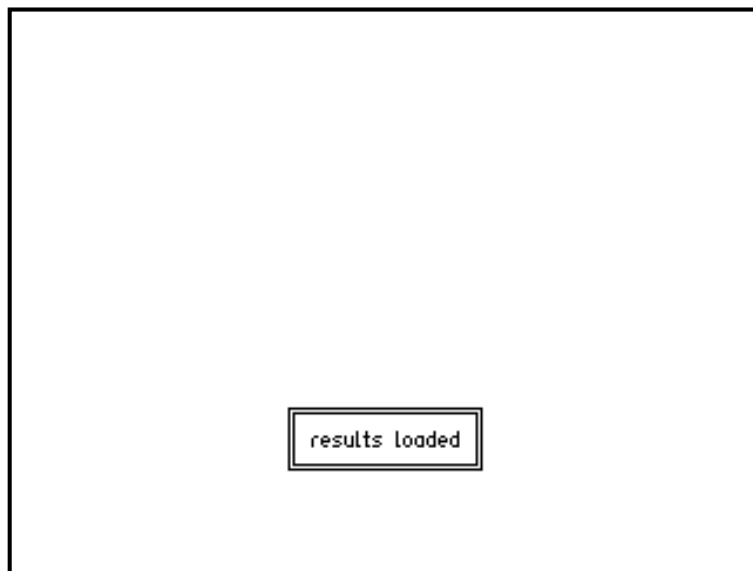
If the data is stored in the instrument memory, use the Recall > [SWEEP](#) key (highlighted above) to display the data on the instrument display. Press the Recall > [SWEEP](#) key then use the [arrow](#) keys to highlight the required results file.



internal results file directory				
1	0123456789	A	B	15/06/2008
2	0123456789	A	B	10/03/2008
3	JIGAR	1	B	15/11/2013
4	0123456789	L	N	16/12/2013
5	0123456789	A	B	07/05/2014
6	0123456789	L	N	13/02/2014
7	0123456789	A	B	09/04/2014
8	754440 04	LEADTESTB		13/06/2008
9	0123456789	A	B	04/04/2014
10	VR	V	W	08/05/2014
11	VS	V	W	08/05/2014
12	VR2	V	W	08/05/2014
15	0123456789	A	B	27/05/2009
20	0123456789	A	B	14/01/2008
23	754440 04	2W	2U	13/06/2008
25	0123456789	A	B	07/02/2008
33	0123456789	A	B	13/06/2008
36	754440 04	LEADTESTB		13/06/2008

Press RECALL SWEEP to toggle between Internal and USB memory

Having highlighted the required file press the **ENTER** key to recall the file. You will hear a bleep from the instrument and after a few seconds a “Results Loaded” message will be displayed:



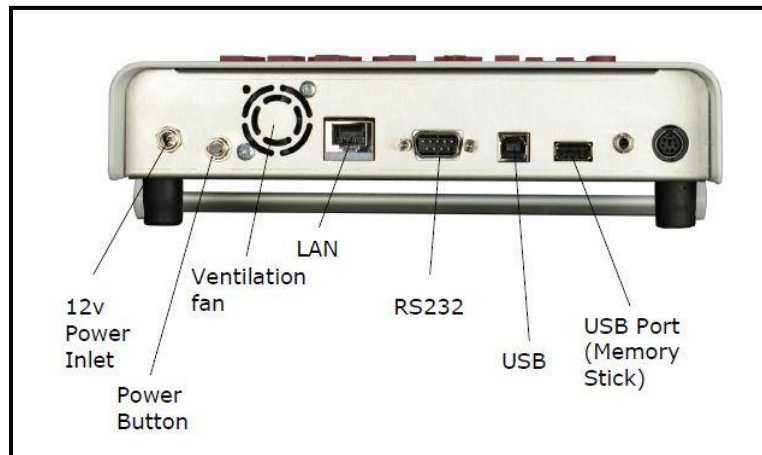
Wait for this message to clear. The results will now be displayed on the instrument screen. The **REAL TIME**, **TABLE** and **GRAPH** keys can now be used to review the results data if required. Subsequent pressing of the **GRAPH** key will cycle between dB, Gain and both dB/Gain graphs

Now insert the 2GB (maximum) memory stick into the USB Memory stick port:

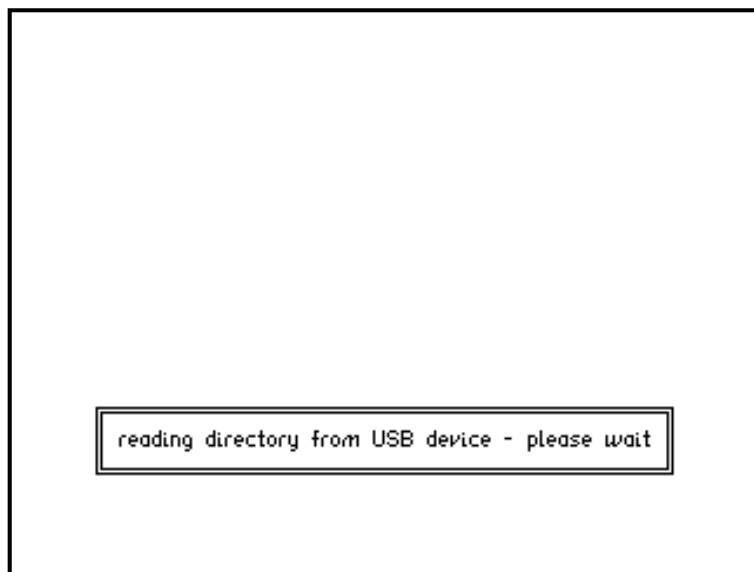


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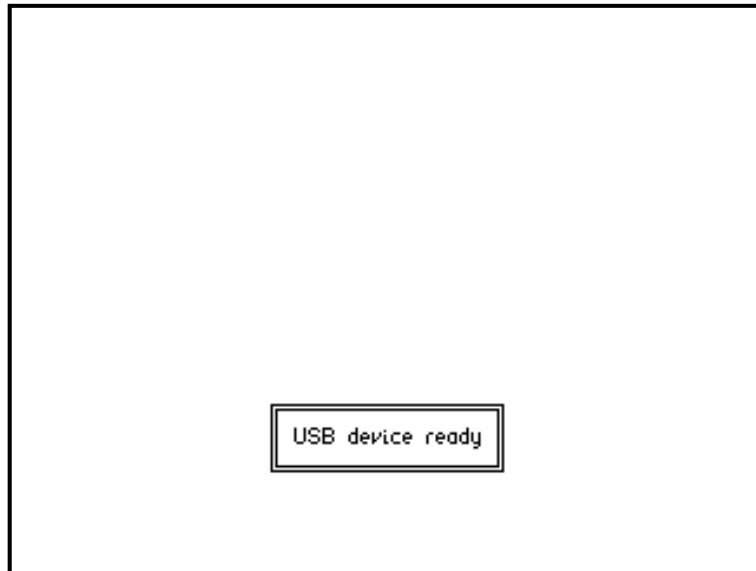
Newtonson4th Ltd
1 Bede Island Road
Leicester
LE2 7EA, UK
www.newtonson4th.com



Several bleeps will be heard from the instrument and messages will be displayed. The following message will be displayed for several seconds:

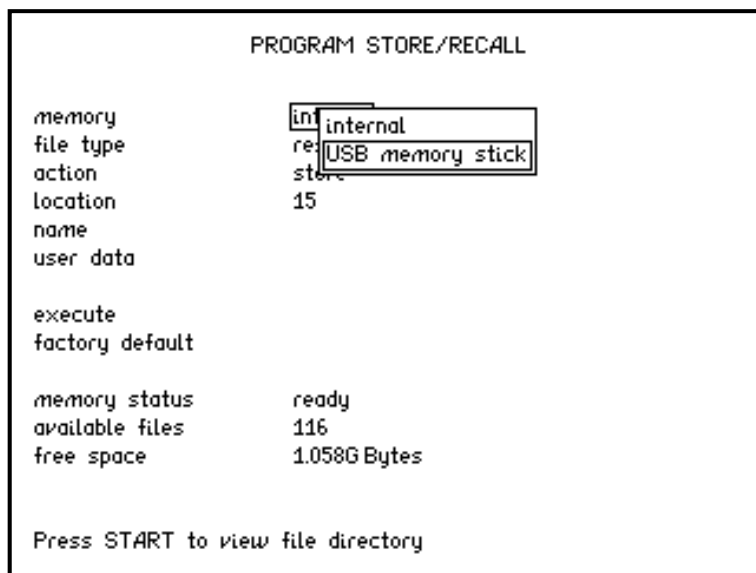


Eventually this message will be replaced briefly by a USB device ready message:



Once this message clears the USB memory stick and instrument will be ready to continue.

Press the **PROG** key to display the **Program Store / Recall** menu options:



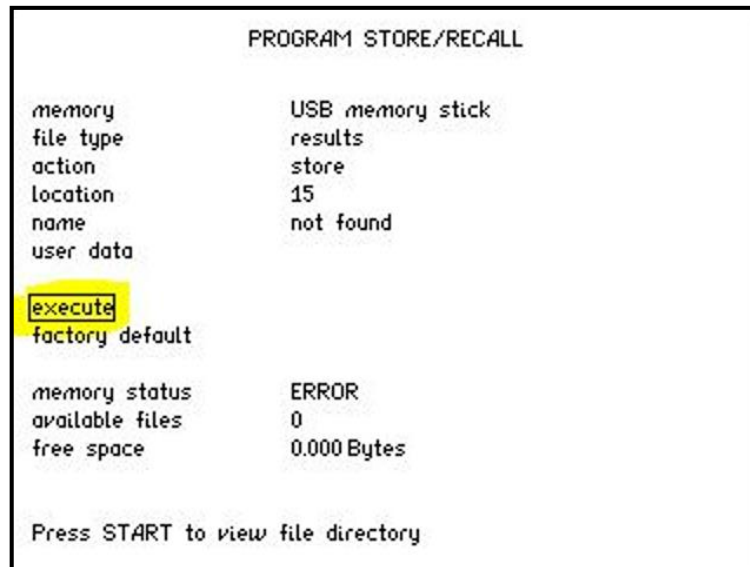
Use the **arrow** keys on the instrument keypad to set the Memory setting to **USB Memory stick**, this can be seen in the previous screenshot. Having highlighted **USB Memory Stick** press the **ENTER** key to update and save the new setting.

Repeat this procedure to set the **file type** to **results**, **action** to **store** and to select the required memory location on the USB memory stick. The user can choose to use the same memory **location** that was used on the instrument or to use a different memory location on the USB memory stick.

It is optional to give the file created on the memory stick a name or leave it as **not found**.

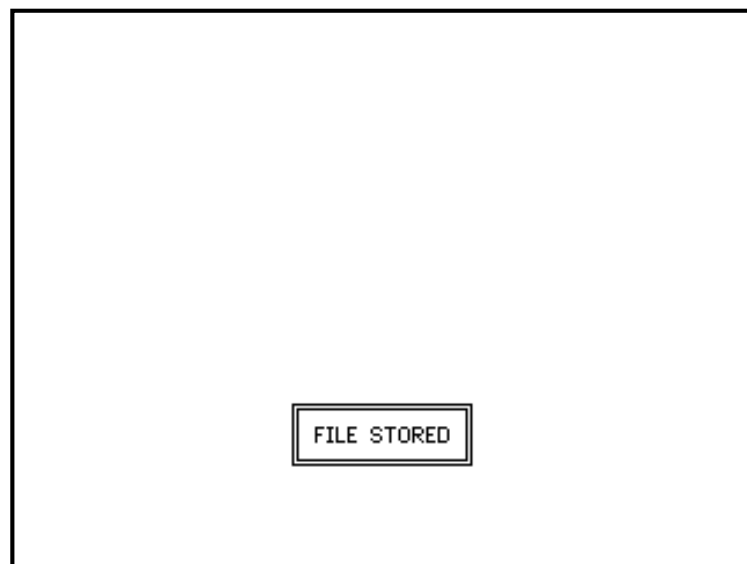
PROGRAM STORE/RECALL	
memory	USB memory stick
file type	results
action	store
location	15
name	not found
user data	
execute	
factory default	
memory status	ERROR
available files	0
free space	0.000 Bytes
Press START to view file directory	

Once all settings have been selected the **arrow** keys should be used to move the flashing cursor to highlight **execute** in the menu options. See screenshot below:



Press the **ENTER** key to continue:

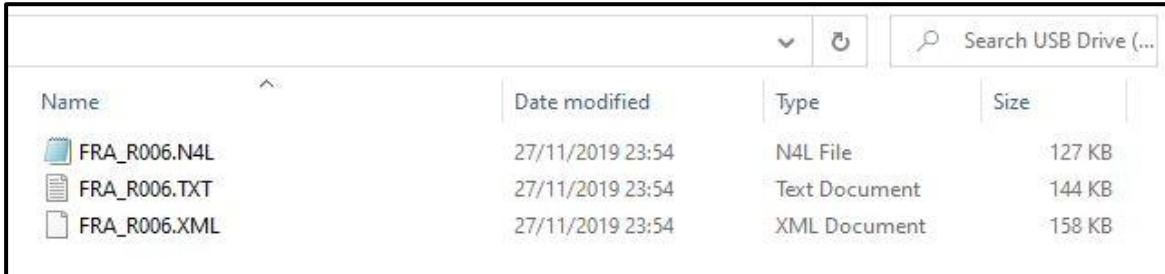
After a period of time dependent on the size of the results file the following message will be displayed:



Once this message clears the results will have been saved to the USB memory stick.

Transferring results into SFRAComm PC software

Remove the memory stick from the instrument and insert it into the PC. In this example three files were created for memory location 6:



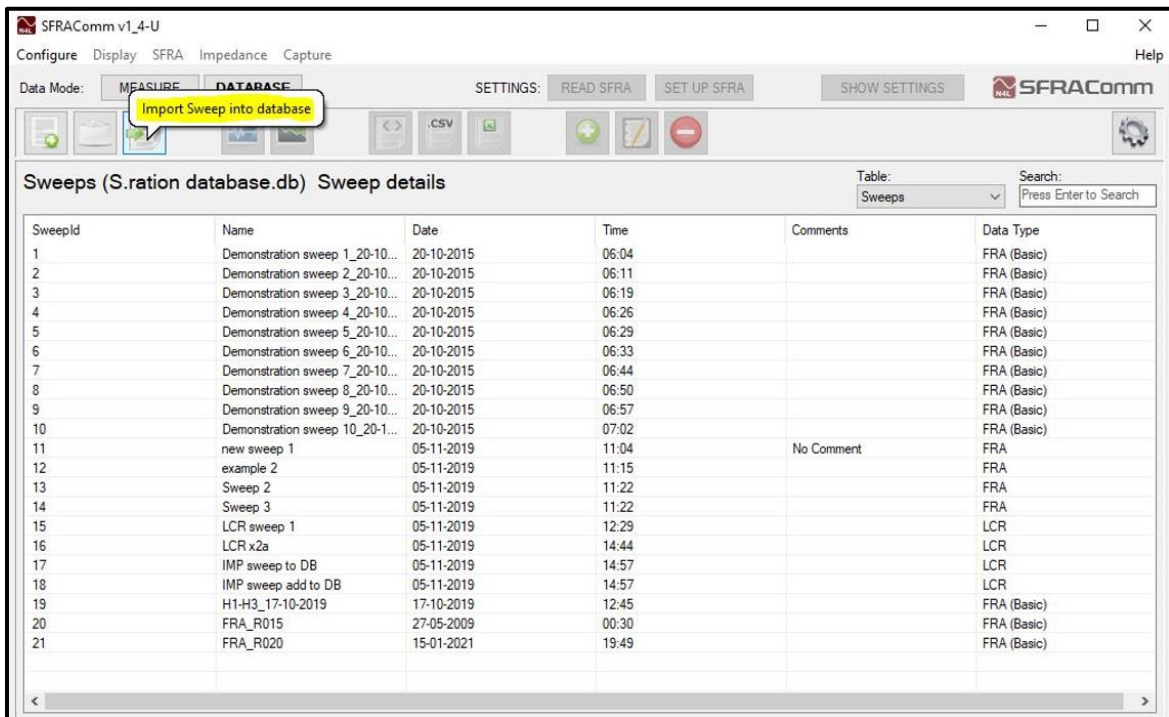
Name	Date modified	Type	Size
FRA_R006.N4L	27/11/2019 23:54	N4L File	127 KB
FRA_R006.TXT	27/11/2019 23:54	Text Document	144 KB
FRA_R006.XML	27/11/2019 23:54	XML Document	158 KB

The FRA_R006.XML file is used to transfer the sweep data into the SFRAComm2 database or back into the instrument.

The “.XML” file should be saved to the PC desktop or into a folder of the user’s choice.

Open the SFRAComm2 software and click the **Database** button.

The screenshot below shows, an example of the files stored in a SFRAComm2 database:



SFRAComm v1.4-U

Configure Display SFRA Impedance Capture

Data Mode: MEASURE DATABASE

SETTINGS: READ SFRA SET UP SFRA SHOW SETTINGS

Import Sweep into database

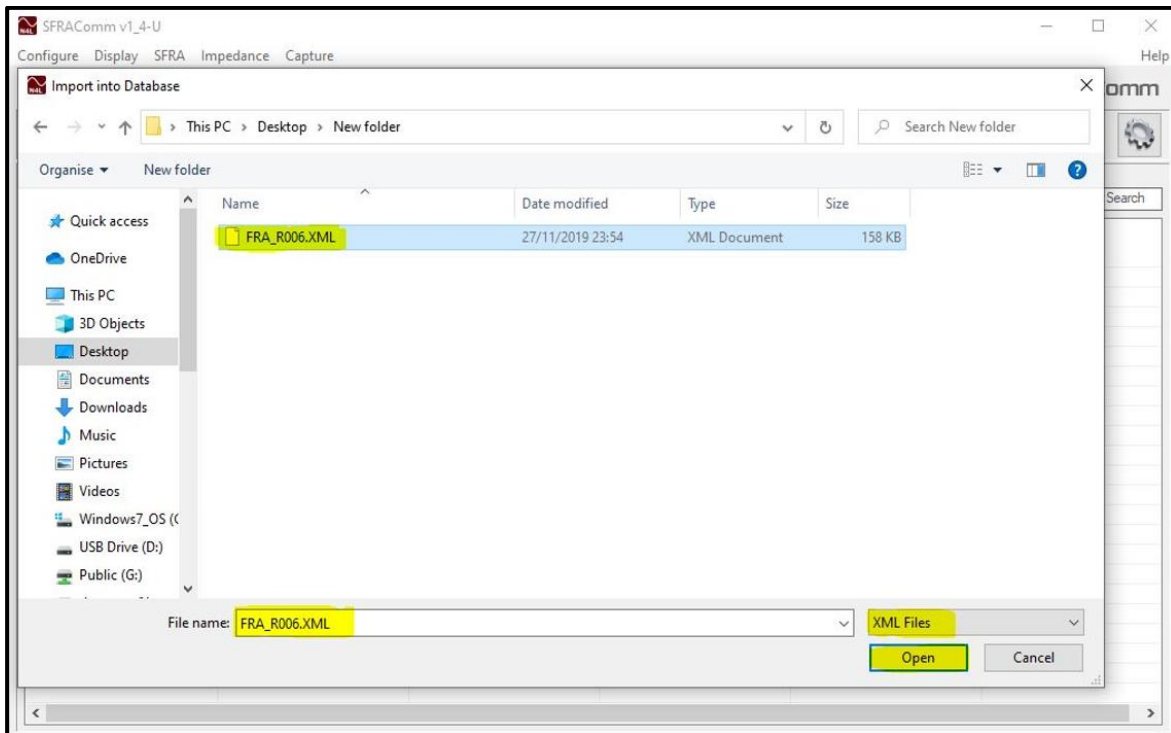
Sweeps (S.ration database.db) Sweep details

SweepId	Name	Date	Time	Comments	Data Type
1	Demonstration sweep 1_20-10...	20-10-2015	06:04		FRA (Basic)
2	Demonstration sweep 2_20-10...	20-10-2015	06:11		FRA (Basic)
3	Demonstration sweep 3_20-10...	20-10-2015	06:19		FRA (Basic)
4	Demonstration sweep 4_20-10...	20-10-2015	06:26		FRA (Basic)
5	Demonstration sweep 5_20-10...	20-10-2015	06:29		FRA (Basic)
6	Demonstration sweep 6_20-10...	20-10-2015	06:33		FRA (Basic)
7	Demonstration sweep 7_20-10...	20-10-2015	06:44		FRA (Basic)
8	Demonstration sweep 8_20-10...	20-10-2015	06:50		FRA (Basic)
9	Demonstration sweep 9_20-10...	20-10-2015	06:57		FRA (Basic)
10	Demonstration sweep 10_20-1...	20-10-2015	07:02		FRA (Basic)
11	new sweep 1	05-11-2019	11:04	No Comment	FRA
12	example 2	05-11-2019	11:15		FRA
13	Sweep 2	05-11-2019	11:22		FRA
14	Sweep 3	05-11-2019	11:22		FRA
15	LCR sweep 1	05-11-2019	12:29		LCR
16	LCR x2a	05-11-2019	14:44		LCR
17	IMP sweep to DB	05-11-2019	14:57		LCR
18	IMP sweep add to DB	05-11-2019	14:57		LCR
19	H1-H3_17-10-2019	17-10-2019	12:45		FRA (Basic)
20	FRA_R015	27-05-2009	00:30		FRA (Basic)
21	FRA_R020	15-01-2021	19:49		FRA (Basic)

Click on the **Import Sweep into Database** icon.

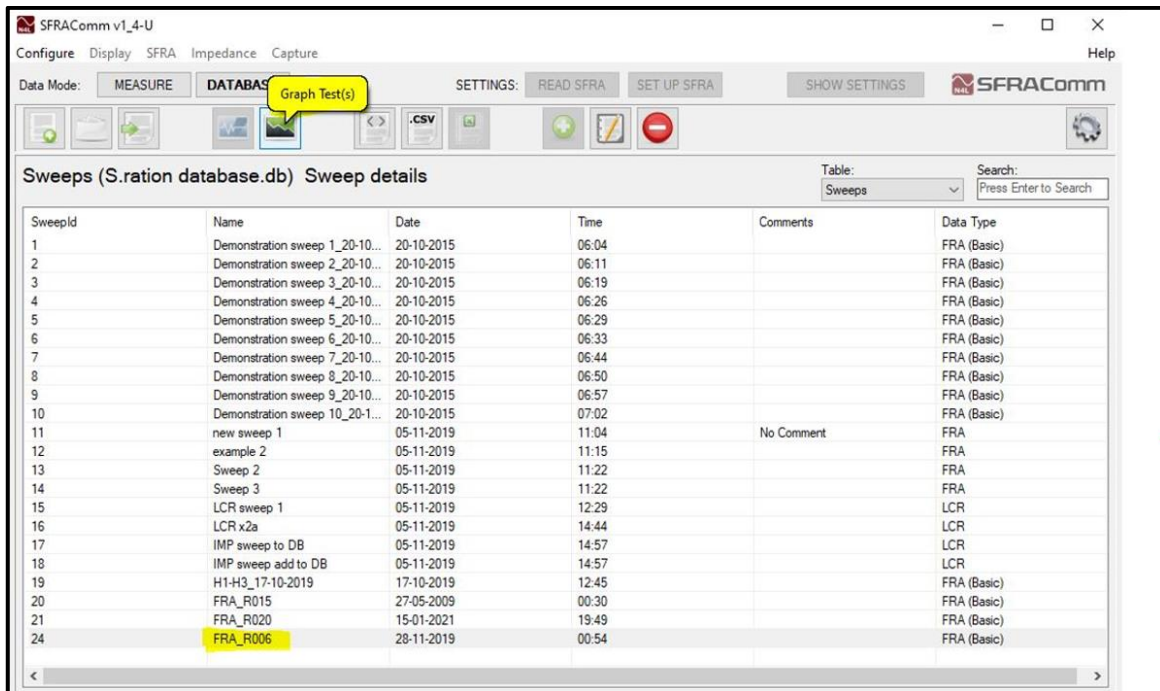
This is highlighted on the screenshot above.

The “Import into Database” window appears:



Search the PC and select the saved XML file. In this example FRA_R006.XML was saved into a folder on the desktop.

Click on **Open** to load the “.XML” file into the database. The file will be added to the end of the list of sweeps saved in the database.



Click on the **Graph test(s)** Icon (highlighted above) to display the SFRAComm2 Graph window:

The screenshot below displays the sweep data saved in the FRA_R006.XML file transferred from the instrument. The functions in the software can then be used to analyze the sweep data.



This procedure can be repeated to transfer further sweep data into the software. The **Graph Tests** button can be used to load multiple sweeps for diagnosis. An example of this can be seen in the next screenshot below:

