FYTRONIX DIELECTRIC CHARACTERIZATION SYSTEM
(FYTRONIX FY-7000)
FYTRONIX DIELECTRIC CHARACTERIZATION SYSTEM

SETUP OF SYSTEM

Please connect the cable as in figure
Then, tighten the screw
PERFORM MEASUREMENTS

İ) MEASUREMENT OF DIELECTRIC CHARACTERISTICS OF MATERIALS

Please CLICK RIGHT BUTTON OF MOUSE WHEN MOUSE IS ON THIS BUTTON

CLICK RIGHT BUTTON OF MOUSE TO RUN ADMINISTRATION

A WINDOW WILL BE OPENED AS

FIRSTLY, CLICK SETTINGS ICON,
THEN, CONFIGURE HIOKI IM 3536 LCR METER AND FY HEATING CONTROLLER COMMUNICATIONS

PLEASE SELECT USB PORT NUMBERS FOR

HIOKI IM 3536 LCR METER

THEN CLICK, use this LCR instrument

AND THEN

SELECT USB PORT NUMBER FOR FY HEATING CONTROLLER

Then click SAVE and then click OK.

Now, all settings are ready.
MEASUREMENTS

1) DIELECTRIC MEASUREMENT AT ROOM TEMPERATURE

PLEASE CLICK SETTINGS

PLEASE SELECT USB PORT NUMBERS FOR

HIOKI IM 3536 LCR METER

THEN CLICK, use this LCR instrument

AND THEN

SELECT USB PORT NUMBER FOR FY HEATING CONTROLLER

THEN CLICK, SIMULATE CONTROLLER

Then click SAVE and then click OK.

Now, all settings are ready.

THEN, CLICK C-FREQUENCY ICON
NOW, YOU HAVE

FREQUENCY START: it is initial frequency, for example: 10kHz=10000

FREQUENCY STOP: it is final frequency: 1 MHz=1000000

STEP: It is step of increase in frequency: 10kHz=10000

Thickness (cm): it is sample thickness in cm

Area: it is contact area: It is 1.32 for your system.

Do not use Start (°C): Do not input when you measure dielectrics parameters at room temperature

Stop (°C): Do not input when you measure dielectrics parameters at room temperature

Heating rate (°C/min): Do not input when you measure dielectrics parameters at room temperature

Step: it is the temperature step: Do not input when you measure dielectrics parameters at room temperature

Level: it is measurement level: please select CV:

Level value: it is level voltage: Please input 2

Now, all inputs are OK. Please click START BUTTON
MEASUREMENTS

1) DIELECTRIC MEASUREMENTS AS A FUNCTION OF TEMPERATURE

PLEASE CLICK SETTINGS

PLEASE SELECT USB PORT NUMBERS FOR

HIOKI IM 3536 LCR METER

THEN CLICK, use this LCR instrument

AND THEN

SELECT USB PORT NUMBER FOR FY HEATING CONTROLLER

THEN REMOVE CLICK FOR SIMULATE CONTROLLER

Then click SAVE and then click OK.
Now, all settings are ready.

THEN, CLICK C-FREQUENCY ICON

IN COMING MENU, PLEASE INPUT THE FOLLOWINGS,

FREQUENCY START: it is initial frequency, for example: 10kHz=10000

FREQUENCY STOP: it is final frequency: 1 MHz=1000000

STEP: It is step of increase in frequency: 10kHz= 10000

Thickness (cm): it is sample thickness in cm

Area: it is contact area: It is 1.32 for your system.

Start (oC): it is initial temperature: System reads current temperature value

Stop (oC): it is final temperature: for example: 150

Heating rate (oC/min): 10

Step: it is the temperature step for various temperature, i.e, whe you measure the dielectric parameters at constant temperatures. Please input 50

Level: it is measurement level: please select CV:

Level value: it is level voltage: Please input 2

Then, click CHECK

You have a temperature plan
Heating plan will be appeared according your temperature range

IF THE HEATING PLAN WILL NOT APPEAR, PLEASE REMOVE USB CABLE FOR HEATING CONTROLLER AND THEN, GO SETTING AND THEN, SAVE

THEN, GO TO C-F MENU

THEN, AGAIN TRY TO MAKE HEATING PLAN

FOR THIS, PLEASE CLICK CHECK AND THEN YOU WILL HAVE A HEATING PLAN

THEN, START

WHEN YOUR SYSTEM IS GETTING THE DATA, PLEASE PRESS SECOND BUTTON TEMPERATURE CONTROLLER FOR 3 SECOND, THEN RUN WILL BE APPEARED.

NOW, SYSTEM IS READY FOR MEASURING.
FOR ANY WRONG, PLEASE CLICK FIRST BUTTON TO STOP HEATING CONTROLLER

please press for 3 second

PLEASE CLICK 3 SECOND TO STOP