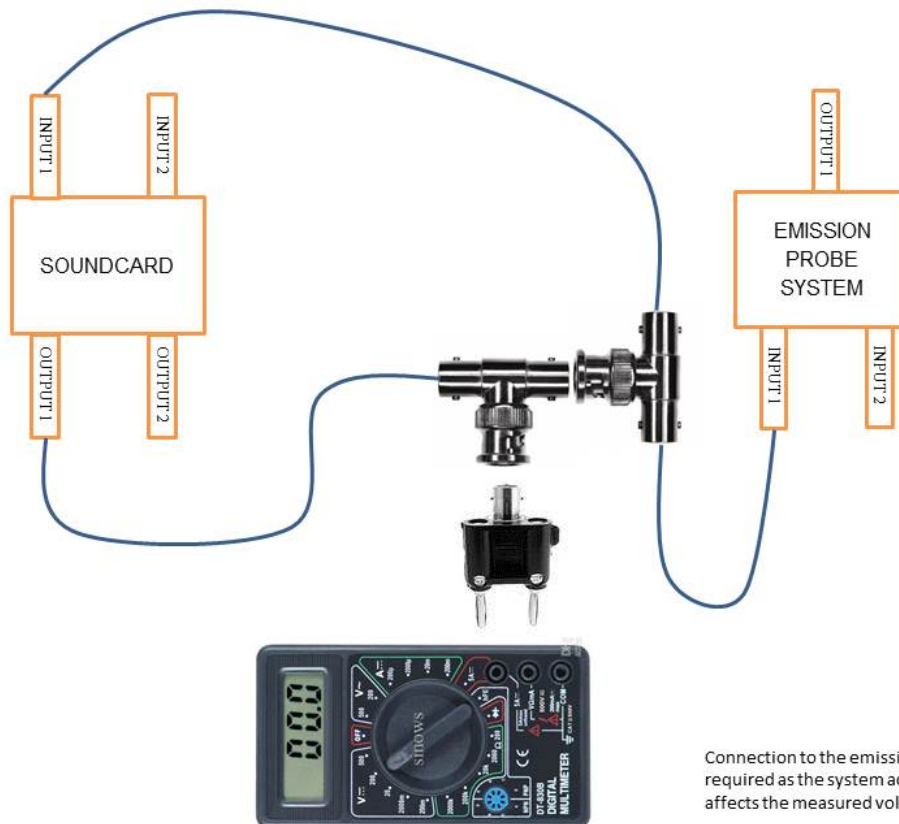


ARSC Check Program Instructions

The ARSC check program is used to set soundcard sensitivity parameters and enter that information into the Windows sound card registry. In order to make the soundcard sensitivity measurements you will need to setup your equipment so that the D/A output of the soundcard feeds into the A/D input of the soundcard. Additionally, your probe emission system should be connected so that its load is taken into account. The following schematic illustrates how the equipment should be configured. The setup is the same for A/D and D/A measurements.

Equipment setup for determining both D/A and A/D sensitivities



Connection to the emission probe system is required as the system acts as a load and affects the measured voltage.

Getting Started (numbers in brackets are default settings)

1. Open ARSC check
2. Select device and card type: (option 1)
3. Which Device : (select your soundcard from the list)

4. Select card type : (select 1 to overwrite the default card type or 2 to append a new card type after the default.)

Checking D/A settings for Channel 1 (Set up equipment as in illustration)

1. Check device volts-full-scale: (option 2)
2. Select Check D/A Volts-full-scale: (option 4)
3. Confirm D/A channel [1]: (type in # if bracketed # is not the channel you are testing)
4. Observe D/A volts-rms on DVM...

(Plays 1 volt signal. If voltmeter displays 1 volt, setting is correct and you can hit enter. If not 1 volt, enter the voltage from the DVM)

5. Confirm D/A volts-rms: (enter voltage from DVM)
6. Displays D/A channel 1 volts-full-scale: (new D/A setting=####)
7. Returns to Menu
8. Confirm that new D/A setting (####) is correct (voltage = 1.0) by repeating steps 2-7

Checking A/D settings for Channel 1– (don't change setup)

9. Check A/D volts-full-scale: (option 5)
10. Confirm D/A channel [1]: (return to confirm using D/A setting for channel 1)
11. Confirm A/D channel [1]: (return to confirm testing A/D setting for channel 1)
12. Observe A/D volts-rms on DVM.....
13. Confirm A/D volts-rms: (enter voltage from DVM)
14. Displays A/D channel 1 volts-full-scale: (new D/A setting=####)
15. Returns to menu
16. Confirm that new A/D setting (####) is correct (voltage = 1.0) by repeating steps 9-15

Checking D/A settings for Channel 2 - SWITCH INPUT AND OUTPUT CABLES TO CONNECT CHANNEL 2

1. Select Check D/A Volts-full-scale: (option 4)
2. Confirm D/A channel [1]: (type in 2)
3. →D/A Channel = 2 (confirms channel change for D/A)
4. Observe D/A volts-rms on DVM...

(Plays 1 volt signal. If voltmeter displays 1 volt, setting is correct and you can hit enter. If not 1 volt, enter the voltage from the DVM)

5. Confirm D/A volts-rms: (enter voltage from DVM)
6. Displays D/A channel 2 volts-full-scale = (new D/A setting=####)
7. Returns to Menu
8. Confirm that new D/A setting (####) is correct (voltage = 1.0) by repeating steps 2-8

Checking A/D settings for Channel 2– (don't change setup)

9. Check A/D volts-full-scale: (option 5)
10. Confirm D/A channel [2]: (return to confirm using D/A setting for channel 2)
11. Confirm A/D channel [1]: (return to confirm testing A/D setting for channel 2)
12. →D/A Channel = 2 (confirms channel change for A/D)
13. Observe A/D volts-rms on DVM.....
14. Confirm A/D volts-rms: (enter reading from DVM)
15. Displays A/D channel 2 volts-full-scale: (new A/D setting=####)
16. Returns to menu
17. Confirm that new A/D setting (####) is correct (voltage = 1.0) by repeating steps 10-16
18. Return (option 6) when settings produce 1 V on DVM

Double checking card info before writing to registry

Check card info: (option 5) - this displays what the program will write to the Windows registry

-first column = settings for channel 1, second column = settings for channel 2, etc.....

-if you are satisfied that these numbers are correct, you can write them to the registry. The settings for the two channels should be similar.

Writing the settings to the Windows Registry

Write cardinfo: (option 2)

(This will create a registry file named arsc.reg on the Desktop with soundcard settings. Double-click on the filename (arsc.reg) to enter this information into the Windows registry).

28. Return: (option 3)
29. Exit: (Option 6)

