13.0 Test & Calibration

13.1 Introduction

A reasonable confidence check can be made using conventional test equipment by following the procedure given below. This will determine if the audio processing systems are operating in a nominal fashion but will not permit a full and detailed analysis.

Presently, we regret that we are unable to supply a comprehensive test and calibration procedure that could be performed in the field. A full and proper procedure requires numerous specially constructed test fixtures and other precision laboratory equipment. We are forced to advise you that, should you run into any doubt about the proper performance of your Model 2020, you must return the unit to the factory or one of our overseas factory authorized service centers.

We continuously put new technical information on the worldwide web at www.aphex.com/2020. Be sure to check it occasionally to discover if any pertinent information is available concerning the problems you may be experiencing.

13.2 Quick Confidence Check

13.2.1 Purpose

Some customers may wish to test their FM Pro to see if everything is working correctly. This is a fast and easy test to verify nominal operation of nearly all parameters. Each unit undergoes this confidence test at the factory just prior to shipping.

13.2.2 Test Procedure

You will need a pink noise generator equivalent to what is supplied in the Audio Precision System One analyzer. You do not need an analyzer, only the signal generator.

1. Set the pink noise output to +6dBu and feed only one channel of the model 2020.

2. Set up the 2020 as follows (unspecified parameters are not important):

Input: No filters, Input ref = +4dBu

Leveler: 2Sec, +15, -15, all other options OFF

Multiband: 300, 1200, 3400; Drive = 0dB; All releases at 10; All mixes at 0dB; all coupling OFF

Limiter: Master Drive = +6; everything else at 0

Pre-emp Limiter: 75uSec/Pre-De

3. The panel meters should now indicate as follows:

VU Meter = -9dB

Leveling = 0dB

Multiband GR: all = -9dB (can jump a step plus or minus)

Limiting: Flickering between 3 and 5dB

That's it. If you cannot accurately set your pink noise generator to +6dBu, then simply adjust its output level to get 0dB on the leveling meter and the other meters should all line up correctly. You can also adjust the model 2020's input ref level to move the leveling meter to 0dB if the output adjustment of your generator is insufficient. Switch input channels of the 2020 to verify both channels.

end