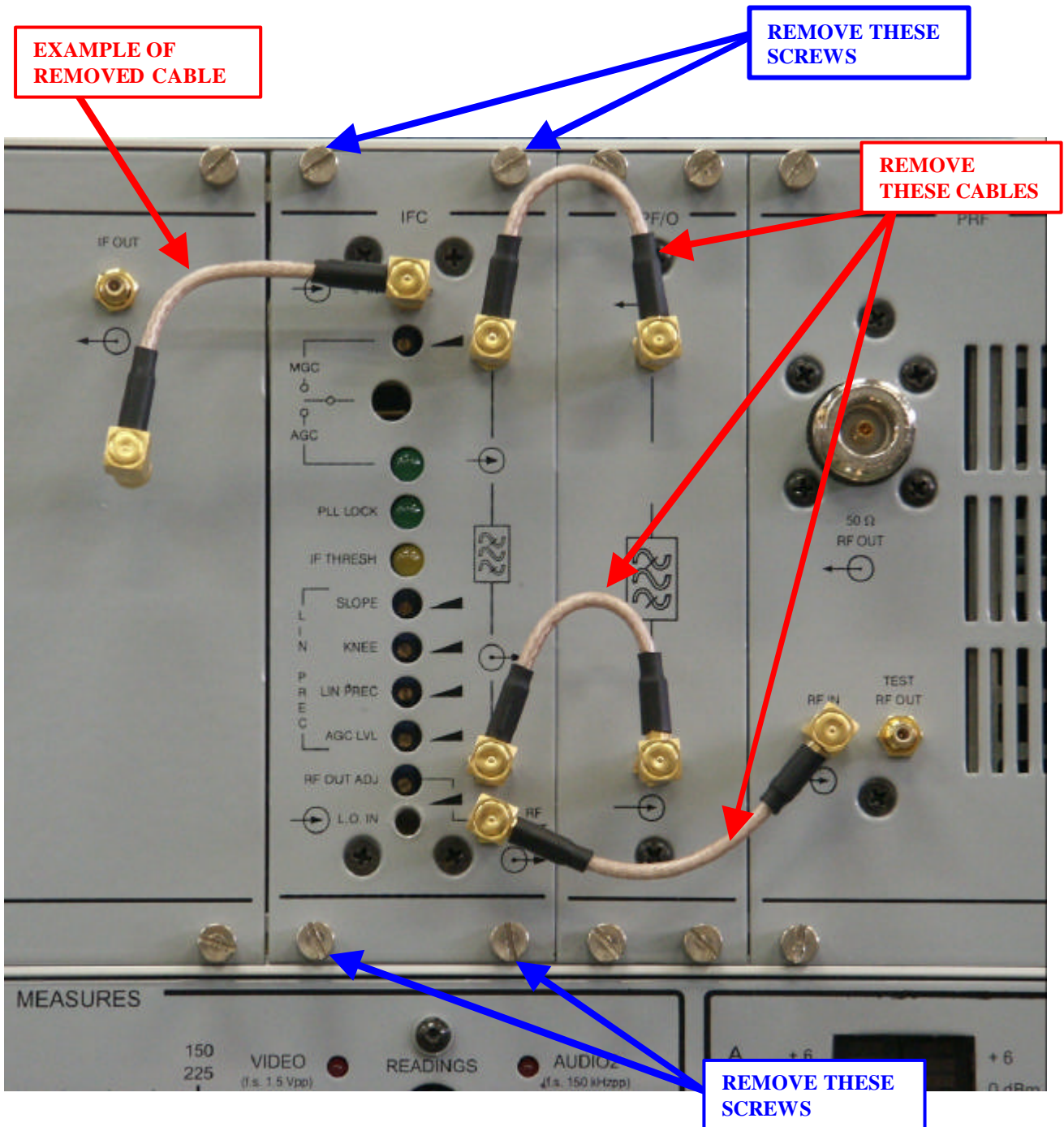


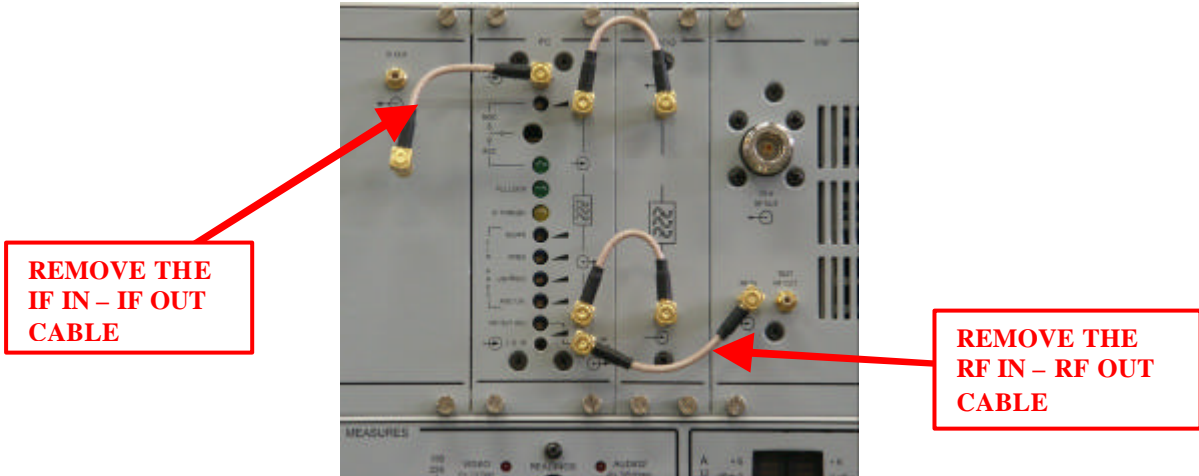
SUBSTITUTION OF THE IFC UNIT

1. With the equipment switched OFF, remove the small cables that connect the IFC module with the other modules on the converter (See the figure below).
2. Remove the screws on the front panel of the IFC unit and extract the module from the equipment (See the figure below).
3. Insert the new module in the same position, fix the screws on the front panel and connect again the small cables in their original position.

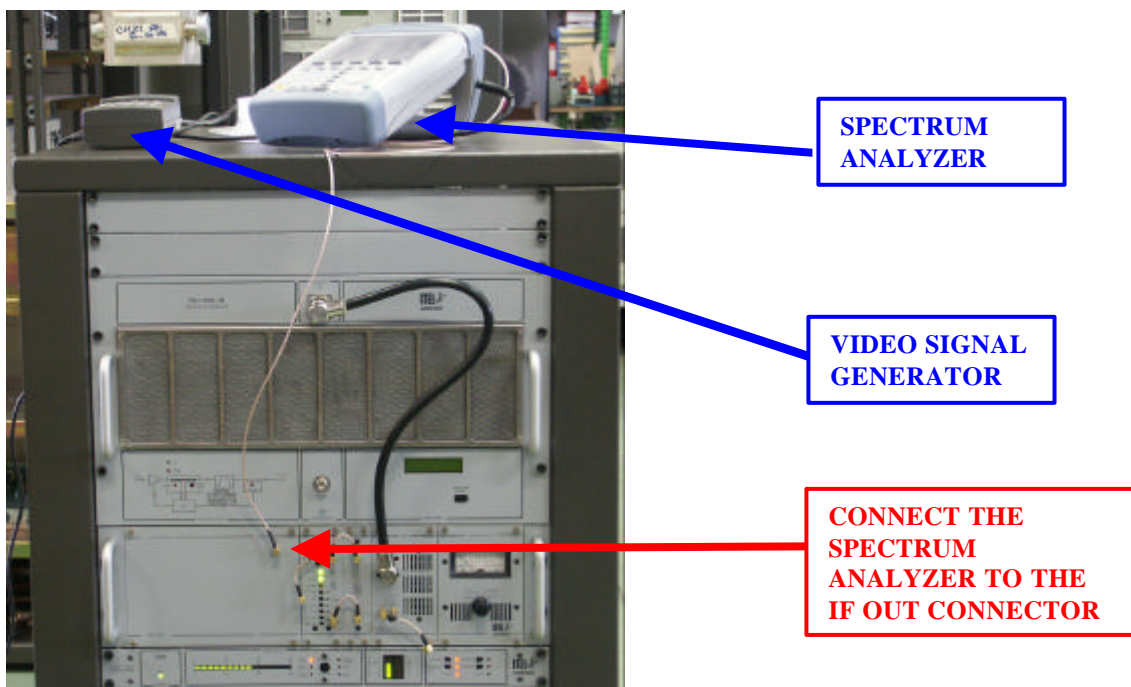


HOW TO CHECK THE CORRECT FUNCTIONING OF THE NEW IFC MODULE

1. Disconnect the cable IF OUT – IF IN and the cable RF OUT – RF IN indicated in the figure below.

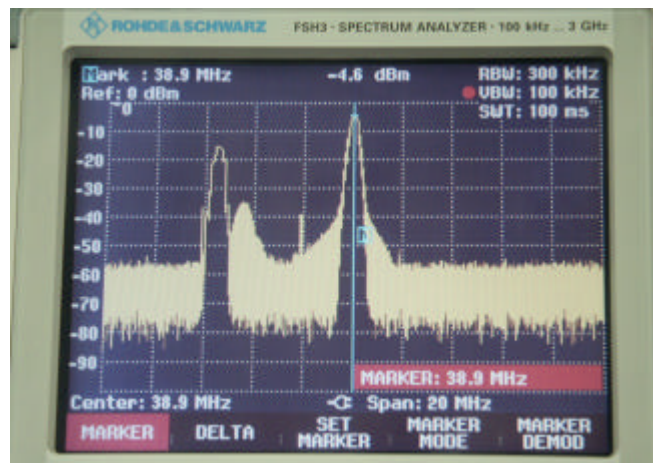


2. Connect a video generator to the VAM video input connector: a cable between the VIDEO OUT connector of the generator and the VIDEO INPUT connector on the rear of the VAM; a cable between CH1 connector of the generator and AUDIO 1 connector on the rear of the VAM. Use a “PAL 0% field” signal (black signal) to test the equipment.
3. Switch on the VAM and IFC modules. The amplifier module has to remain switched off.
4. Connect the spectrum analyzer to the IF OUT connector.



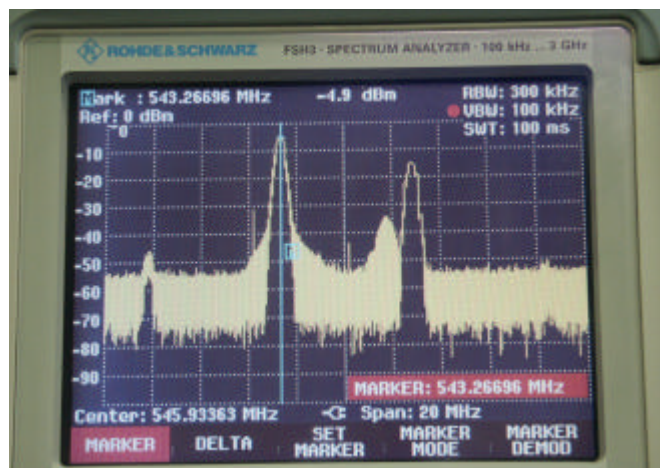
5. Verify on the spectrum analyzer monitor that the signal has the following characteristics:

Video Frequency: 38.9 MHz
Audio Frequency: 33.4 MHz
Video Peak Amplitude: About -5 dBm

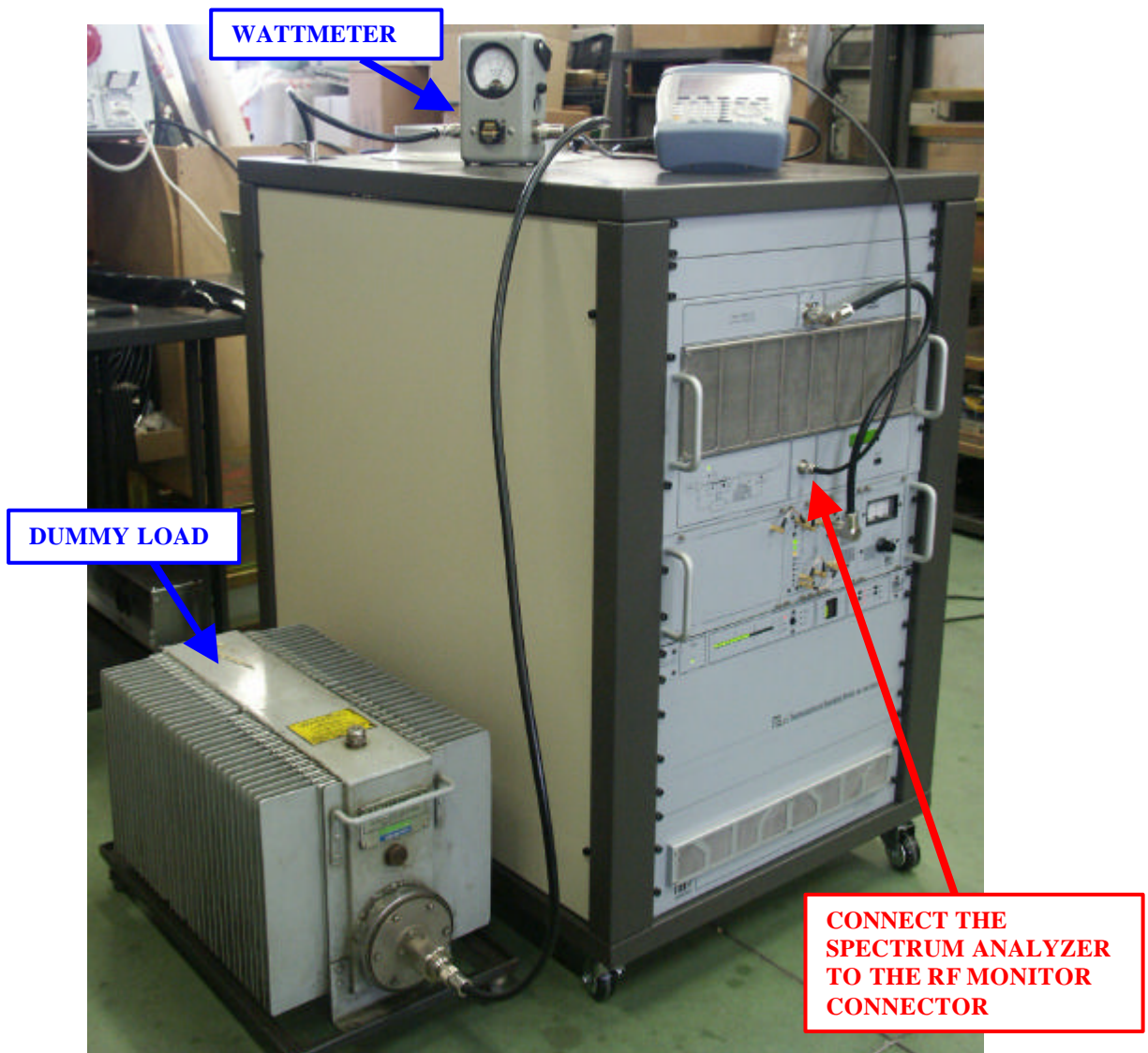


6. Turn counterclockwise the RF OUT ADJ trimmer (present on the front panel of the IFC unit) until you will reach the minimum value.
7. Connect the spectrum analyzer to the RF OUT connector. Connect again the IF IN – IF OUT cable on the front panel of the equipment and wait about 60 seconds (the time the soft-start procedure ends). Turn the RF OUT ADJ trimmer clockwise until you will see on the spectrum analyzer that the level of the video carrier peak is about -5 dBm.

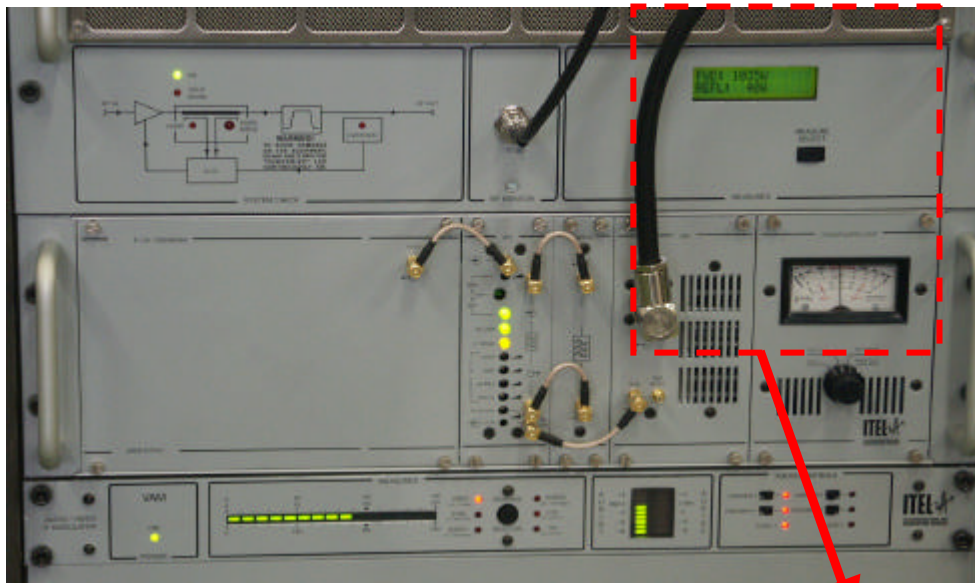
Video Frequency: CH_{xy}
Audio Frequency: CH_{xy} + 5.5 MHz
Video Peak Amplitude: About -5 dBm with factory adjustment of RF OUT ADJ (at the end of the soft start procedure)



8. Disconnect the cable from the IF IN connector and verify that there are no peaks on the monitor of the spectrum analyzer. Re-connect the IF cable and verify that the video and audio carrier peaks appear and their levels increase slowly until, after about 60 seconds (the time the soft-start procedure ends), the video carrier peak level becomes again -5 dBm.
9. Switch off the VAM and IFC modules. Connect the transmitter to a dummy load or, if you have not it, directly to the antenna and insert in series between them a wattmeter.
10. Turn the RF OUT ADJ trimmer counterclockwise until the end.
11. Disconnect the IF IN – IF OUT cable on the front panel. Disconnect the spectrum analyzer from the RF OUT connector, connect again the cable between the RF IN and RF OUT connectors and connect the spectrum analyzer on the RF MONITOR output on the front panel of the amplifier unit.



12. Switch ON the whole equipment (VAM modulator, IFC module and the amplifier).
13. Connect the cable between IF IN and IF OUT and wait about 60 seconds (soft-start time).
14. Adjust the RF OUT ADJ trimmer to allow the transmitter to have the correct output power level (the example in the photos is related to a 1000 Wps transmitter). Verify the values on the display of the transmitter, on the wattmeter and on the spectrum analyzer.



**DETAIL OF THE DISPLAY
OF THE 1000 W
TRANSMITTER**





MEASURE ON THE SPECTRUM ANALYZER

**MEASURE OF THE OUTPUT
POWER LEVEL OF A 1000 W
TRANSMITTER (THE
WATTMETER HAS A HEAD
OF 1000 Wps)**

NOTE: you can read the value of the output power on the display on the front panel of the equipment but it would be better to make the measure with the wattmeter (with a right head adapted to the output power level of the transmitter): the value will be more precise and without eventual instruments' errors.

Be careful you have to made the measure of the output power level using the "PAL 0% field" signal and that the wattmeter always indicate the power value in Wrms that is about half of the value of the power indicated in Wps in the case of "PAL 0% field" signal!!!