

# QuickMod

## Programming kit for the 4-channel Baseband Modulator

### Quick Start Guide

#### 1 Package Contents

- 1 x Serial programming cable
- 1 x CD containing Software and manual
- 1 x Quick Start Guide

#### 2 Introduction

The Programming kit allows easy, in the field reprogramming of the baseband modulator.

By using the supplied software, it is possible to read the modulator settings and to reprogram the frequencies and video standards.

#### 3 Requirement

This version of the programming software requires Microsoft © Excel (Excel 2000 or more recent).

The PC or Laptop should have at least one free serial (COM) port. If such a port is not available, a USB to Serial converter (i.e. Aten UC232-A) can be used to add a serial port.

The software also requires the presence of a serial port driver (MSComm32.OCX). A test program is supplied to check the presence of this driver. If the driver is not installed, the installation files and procedure are included.

#### 4 Installation files

The software is supplied on a CD-ROM.

The CD-ROM contains at least the following files:

- yymmdd\_QuickMod\_QSG\_EN.pdf  
The manual in pdf format.  
yyymmdd stands for release date of document (yy = year, mm = month and dd = day)
- QuickMod.exe  
Self extracting ZIP archive containing the main Excel © workbook and sample configuration files
- ChkSerialCom.exe  
Checks the availability of the serial driver and COM ports
- serialocx.exe  
Self-extracting ZIP archive containing the serial driver
- Read-me.txt  
Latest installation info

#### 5 Installation procedure

First check the Read-me.txt file for the latest installation requirements and instructions!

Make sure you have installed Microsoft Excel © on your computer.

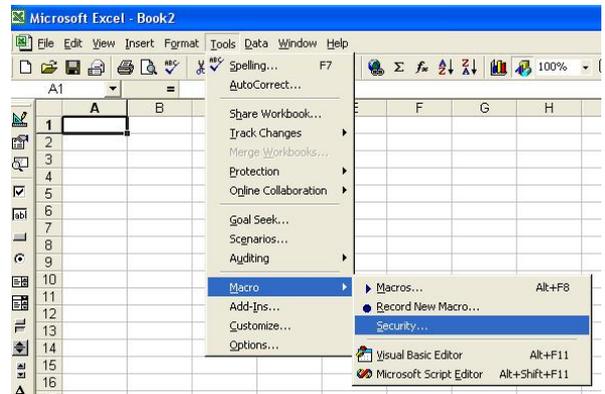
Insert the CD in the CD-ROM drive. The installation screen should start automatically. If this is not the case, open your browser and open the page 'index.htm', located on the CD in the folder html.

The installation programs will install all required components and files in your 'Program Files' directory, in the subfolder 'QuickMod'

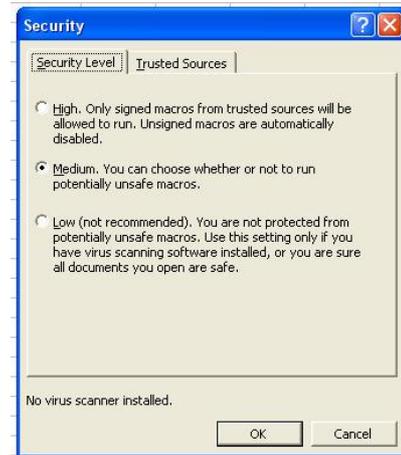
An uninstall script is provided. Be aware the all files, including your custom configuration files, will be removed.

Make sure excel © is able to accept workbooks with macro's. Check or change the security settings as follows.

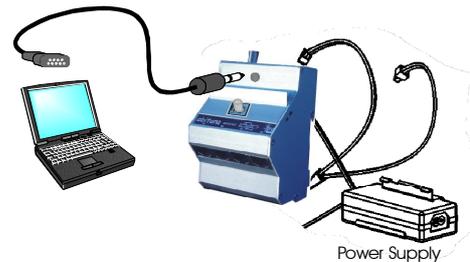
Go to the menu Tools->Macro->Security



Set Security level to 'Medium'



Connect the modulator to the PC by using the supplied RS232 cable (SubD9 to Stereo phone plug). The SubD9 inserts into the serial connector of the PC. In case only a SubD25 is available, an adaptor from SubD9 to SubD25 must be used. The Stereo phone plug is inserted into the 3mm stereo phone jack located on the front of the modulator. Make sure the modulator is powered on.



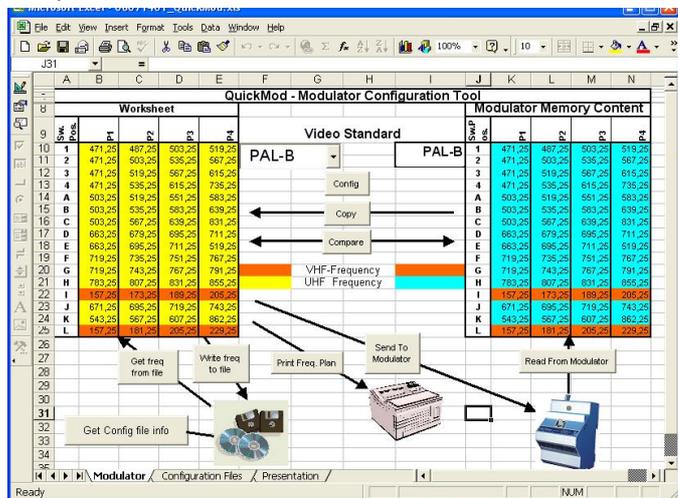
#### 6 Running the configuration spreadsheet

Run Excel © and open the file 'yyymmddxx\_QuickMod.xls'. yyymmdd stands for release date of document (yy = year, mm = month, dd = day and xx = document number). After installation, this file will be located in your Program Files directory (usually 'C:\Program Files') in the subfolder QuickMod.

You will be prompted to either enable or disable Macros. Select 'Enable Macros'



Now you will see the main screen:



There will be 3 sheets visible:

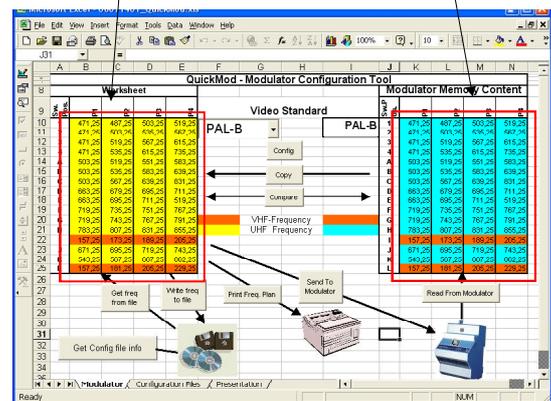
- Modulator  
The main sheet with input fields and command buttons
- Configuration Files  
Will contain the list of all available configuration files after a refresh by 'Get Comfit file info'
- Presentation  
A printable version of the configuration data

All cells are protected. You can only enter data in the yellow cells (B10:E25)

Zone where you can enter the desired frequencies



Zone where you can see the frequencies stored in the modulator



On this screen you have 2 zones with frequencies. The first zone (1) (B10:E25) contains the frequencies you can send to the modulator. These frequencies can be entered/alterd manually (just select the desired cell and enter the desired value). The program will show values in the VHF frequency range in orange. This indicates that you will probably need to install filters. UHF frequencies will show with a yellow background.

Values out of range (47.25 MHz– 900 MHz) will be refused. Please take into account that not all TV sets will allow frequencies above 860 MHz

**6.1 Command Summary**

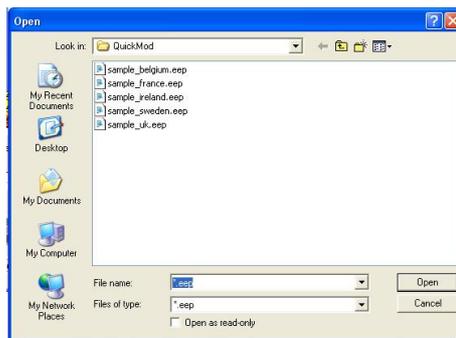
This is a summary of all possible commands. For the actual use of the software, refer to the How-To section (6.2) of this manual

**6.1.1 Read Frequencies from file**

The frequencies can be read from a file (click the 'Get freq from file' Button).



You will see the file selection dialog. Browse to the location where the frequency files are stored and select the correct file. Zone (1) will be updated with the new loaded values.

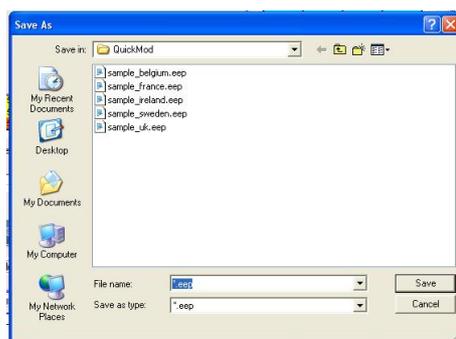


**6.1.2 Save Frequency settings**

Whenever you modify the frequency settings, you can store the new frequency plan in a file for later use. Just click the 'Write freq to file' button.



You will see the file selection dialog. Browse to the location where the frequency files are stored and enter a new filename. Then press the 'Save' button

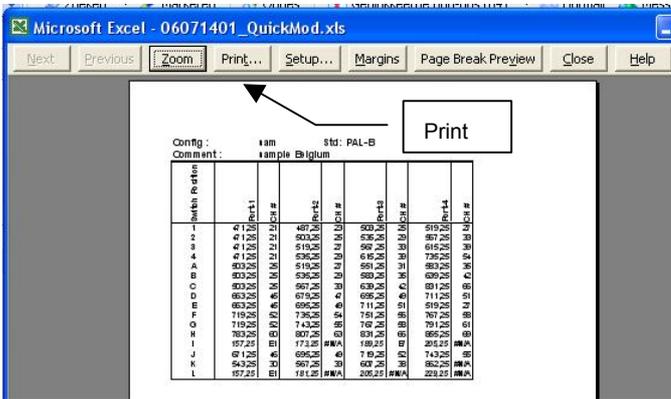


**6.1.3 Print Settings**

The loaded frequency plan can be printed. To print, press the Print Freq. Plan button.

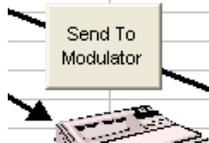


The printout will contain the name of the configuration, the standard, the comment and the different frequencies. The print preview page will be displayed, and you can print the page by pressing the print button.



**6.1.4 Programming the modulator**

The frequencies, specified in Zone 1, can be sent to the modulator by pressing the 'Send To Modulator' Button.



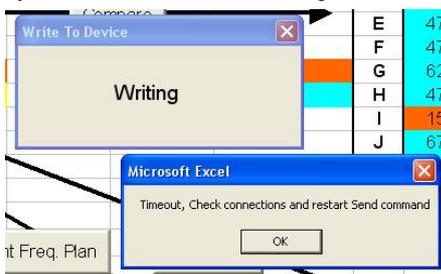
The program will ask if you are sure to do this operation.



If all goes well, you will get the 'OK' message:



In case the modulator is not connected to the PC or the modulator is not powered, you will see the Timeout message.



**6.1.5 Read the modulator frequency settings**

It is also possible to read the content of the modulator into the program. Click the 'Read From Modulator' Button to read the frequency settings from the connected modulator.



If all goes well, you will get the 'OK' message:

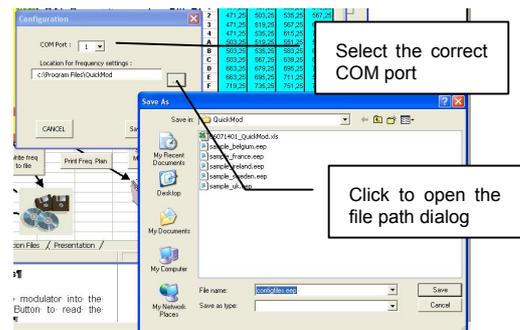
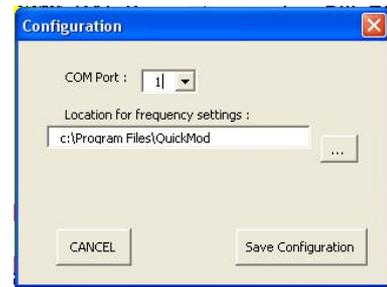


In case the modulator is not connected to the PC or the modulator is not powered, you will see the Timeout message.



**6.1.6 Configuration settings**

The 'Config' Button allows you to select the COM-port and the default file path for the configurations.



Press 'Save' to store the settings in the file. You should save the excel © file to make the changes permanent.

The Path in the program has been preset to "c:\Program Files\QuickMod". The program will not create this directory automatically. Normally this directory is created during installation. If this is not your default 'Program Files' directory, you should create this directory manually or point the 'Location for the frequency settings' to an existing directory.

**6.1.7 Copy Frequencies**

You can copy the frequency settings from Zone 2 to Zone 1 by clicking the 'Copy' Button:

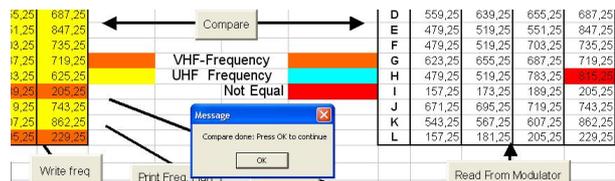


**6.1.8 Compare Frequencies**

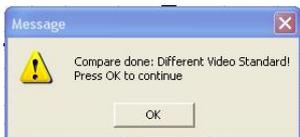
You can compare zone 1 with Zone 2 by clicking the 'Compare' Button.



The differences will be marked in RED in zone 2. Clicking the 'OK' button will restore the initial view of Zone 2.



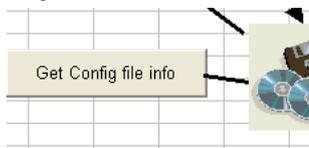
If the video standards are different, the following message box will appear.



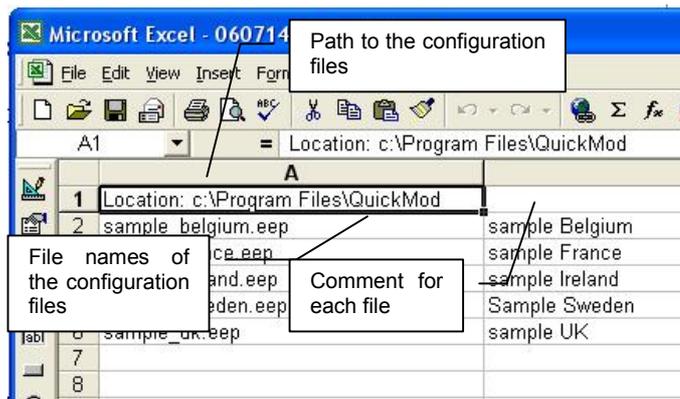
**6.1.9 Catalog frequency settings files**

It is possible to generate a list of all you settings files, including the comments you entered.

Click on the "Get Config file info" button to start the catalog function.



The sheet Configuration files will show. The first row contains the Path to the configuration files. The next rows will contain the actual filenames in column 1 and the comment in column 2.



Do not make any changes in this sheet. The content of this sheet will be overwritten the next time you hit the 'Get Config file info' Button.

This page is for reference and information only. To load the configuration files, you always have to follow the 'Read Frequencies from file' procedure.

**6.2 How-To -**

Make sure the serial cable is connected between the PC and the modulator. Make sure the modulator is powered.

**6.2.1 See what frequencies are programmed in a modulator**

Use 'Read the modulator frequency settings' command. The current settings inside the modulator are visualized in Zone 2 (frequencies and Video standard).

**6.2.2 Change the settings of the modulator based on the current stored settings inside the modulator.**

Read the frequency settings from the modulator using the 'Read the modulator frequency settings' command.

Copy the current settings from the modulator to Zone1 by using the 'Copy Frequencies command'.

Change the frequencies you want to change in Zone 1.

If you want to keep the settings for later use, use the 'Save Frequency settings' command. Add some comment for future reference.

Send the new frequencies (and video standard) to the modulator using the 'Programming the modulator' command.

If you want a correct printout of the new frequency settings with comment, use the 'Read frequencies from file' command and recall the stored settings. Then print the sheet 'Presentation'

**6.2.3 Change the settings of the modulator based on an existing settings file.**

Read the settings file you want to send to the modulator. Use the 'Catalog frequency settings' command to help you locate the correct settings file.

Change the frequencies you want to change in Zone 1.

If you want to keep the settings for later use, use the 'Save Frequency settings' command. Add some comment for future reference.

Send the new frequencies (and video standard) to the modulator using the 'Programming the modulator' command.

If you want a correct printout of the new frequency settings with comment, use the 'Read frequencies from file' command and recall the stored settings. Then print the sheet 'Presentation'

**6.2.4 Compare the settings from 2 modulators**

Read the frequency settings from the 1st modulator using the 'Read the modulator frequency settings' command.

Copy the current settings from the 1st modulator to Zone1 by using the 'Copy Frequencies command'.

Read the frequency settings from the 2nd modulator using the 'Read the modulator frequency settings' command

Compare the two using the 'Compare frequencies' command

**6.2.5 Compare the settings of a modulator with the settings stored on your computer**

Read the settings file you want to compare with. Use the 'Catalog frequency settings' command to help you locate the correct settings file.

Read the frequency settings from the modulator using the 'Read the modulator frequency settings' command

Compare the two using the 'Compare frequencies' command

**6.2.6 Change COM port or the default path to the configuration files**

Use the 'Configuration settings' command

UHF Channel to Frequency (MHz) conversion table:

| CH | Freq   |
|----|--------|----|--------|----|--------|----|--------|----|--------|
| 21 | 471,25 | 31 | 551,25 | 41 | 631,25 | 51 | 711,25 | 61 | 791,25 |
| 22 | 479,25 | 32 | 559,25 | 42 | 639,25 | 52 | 719,25 | 62 | 799,25 |
| 23 | 487,25 | 33 | 567,25 | 43 | 647,25 | 53 | 727,25 | 63 | 807,25 |
| 24 | 495,25 | 34 | 575,25 | 44 | 655,25 | 54 | 735,25 | 64 | 815,25 |
| 25 | 503,25 | 35 | 583,25 | 45 | 663,25 | 55 | 743,25 | 65 | 823,25 |
| 26 | 511,25 | 36 | 591,25 | 46 | 671,25 | 56 | 751,25 | 66 | 831,25 |
| 27 | 519,25 | 37 | 599,25 | 47 | 679,25 | 57 | 759,25 | 67 | 839,25 |
| 28 | 527,25 | 38 | 607,25 | 48 | 687,25 | 58 | 767,25 | 68 | 847,25 |
| 29 | 535,25 | 39 | 615,25 | 49 | 695,25 | 59 | 775,25 | 69 | 855,25 |
| 30 | 543,25 | 40 | 623,25 | 50 | 703,25 | 60 | 783,25 |    |        |