

Audiological fitting bulletin no. 69

Using the DAI manager in Compass V4.6 to change the DAI programs

News from Audiological Research and Communication

This bulletin describes the DAI manager in Compass V4.6. The descriptions include step by step guides in setting up the DAI manager for SCOLAflex and other DAI devices. Please refer to Compass in order to see the details of the screen. Remember that Compass offers several help functions to explain the different options in the program: Tooltips, Using this window panels and the help manual.

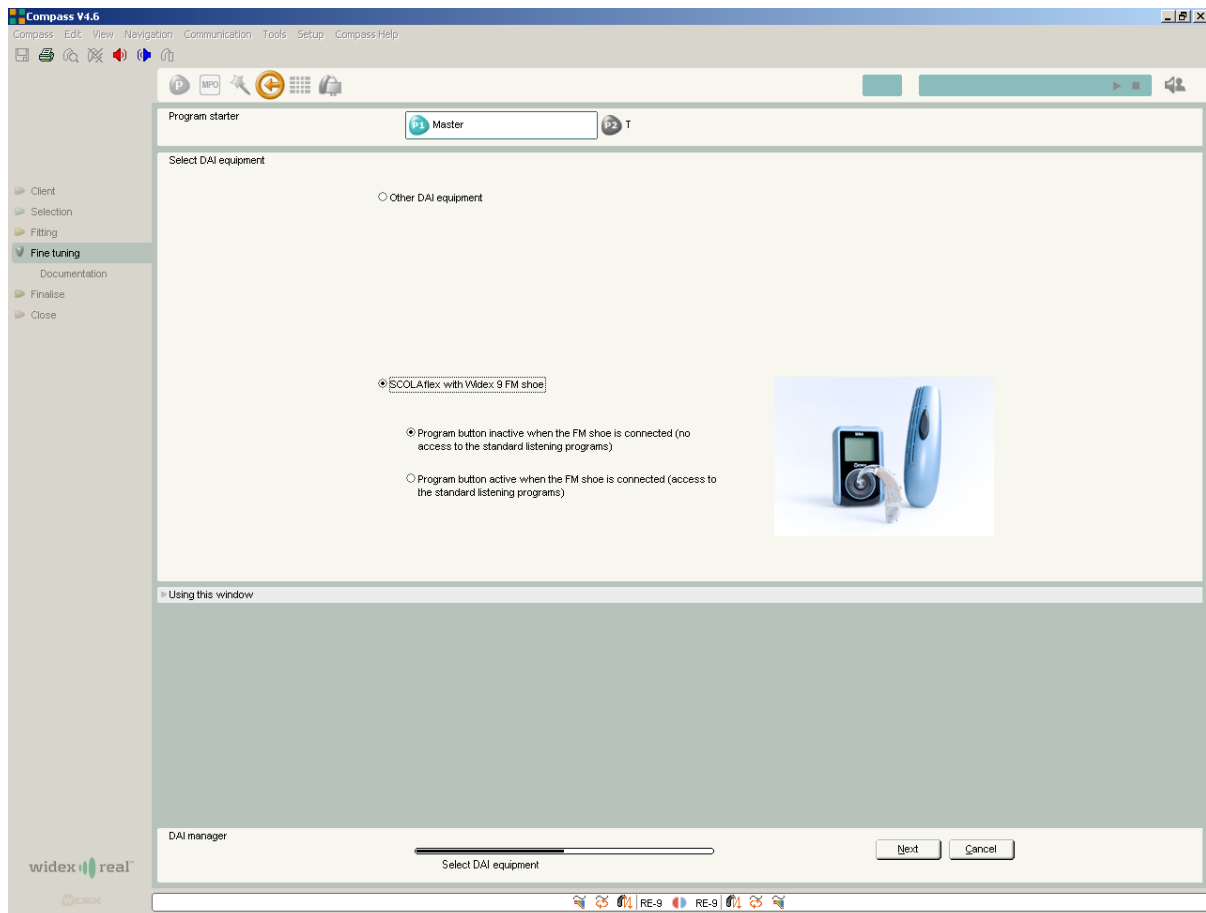
DAI manager

The DAI manager enables you to select and fine tune the direct audio input programs. The DAI manager is opened from the Toptool bar in the Fine tuning window. When you work with the DAI manager, the user will be listening to the Master program.

As mentioned in the bulletin “Using the Program manager in REAL fittings”, the M-DAI (microphone plus direct audio input) will initially be placed as a “shadow program” at program position 1. If more than one program has been selected, an additional DAI (DAI only) shadow program will be placed at program position 2.

The default setting of the DAI programs is suited for most direct audio input devices. However, if your client is using the SCOLAflex FM system from Widex, you should choose a setting optimised for this type of device. The procedure for this is described in the following.

Selecting DAI program setup with SCOLAf^{lex}



The Select DAI equipment window

SCOLAf^{lex} is the latest FM receiver from Widex. The SCOLAf^{lex} receiver is provided with a standard FM/FM+M switch and a Channel Scan button. The switch allows the user to choose whether they want to receive only the FM signal, a combination of the FM signal and the hearing aid microphone signal or turn the receiver off. With the Channel Scan button, the SCOLAf^{lex} receiver can be set to scan the selected channels automatically and stop scanning when a signal is received. SCOLAf^{lex} can be used with both SCOLAtalk and SCOLAt^{each} transmitters.

The following is a step by step description of how you may set up REAL to work with SCOLAf^{lex} using the DAI manager in Compass:

Step 1

Open the DAI manager by selecting the DAI icon in the Toptool bar in the Fine tuning window. The DAI manager is a wizard guiding you through the necessary steps.

Step 2

In the first window you must select the relevant type of DAI equipment. Select *SCOLAflex with Widex 9/10 FM shoe*. *SCOLAflex* should always be used together with the Widex 9 slide-on shoe for RE-9 and the Widex 10 slide-on shoe for RE-19.

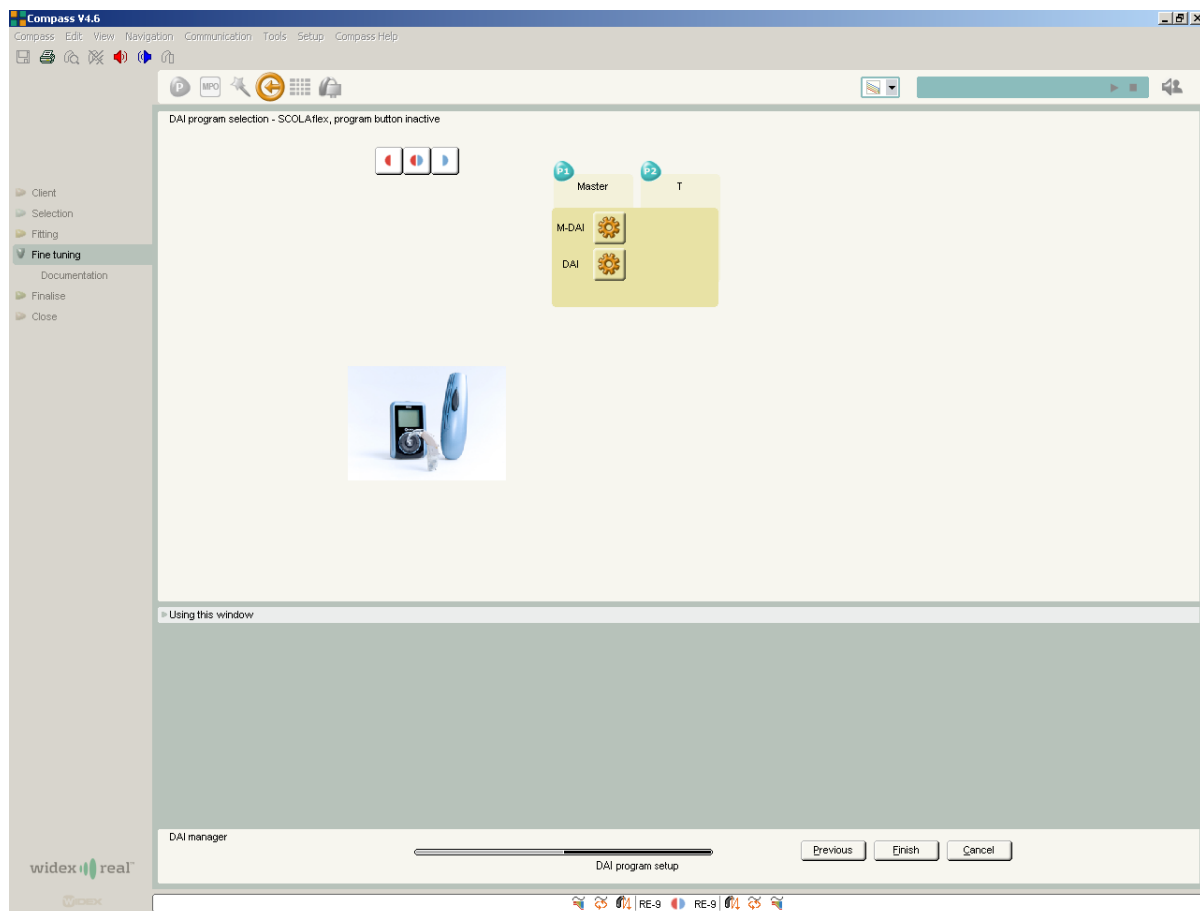
Step 3

An additional question will appear asking you whether you want the hearing aid program button to be inactive or active when an audio shoe is connected. In the default setting the program button is inactive, meaning that you can always be sure to listen to the direct audio input program when the audio shoe is connected. This can be particularly useful for paediatric users of *SCOLAflex*, who might otherwise risk toggling away from the direct audio input programs by accident. If, on the other hand, your client needs access to standard listening programs also when the audio shoe is connected, you should select the radio button for *Program button active when audio shoe is connected*.

Step 4

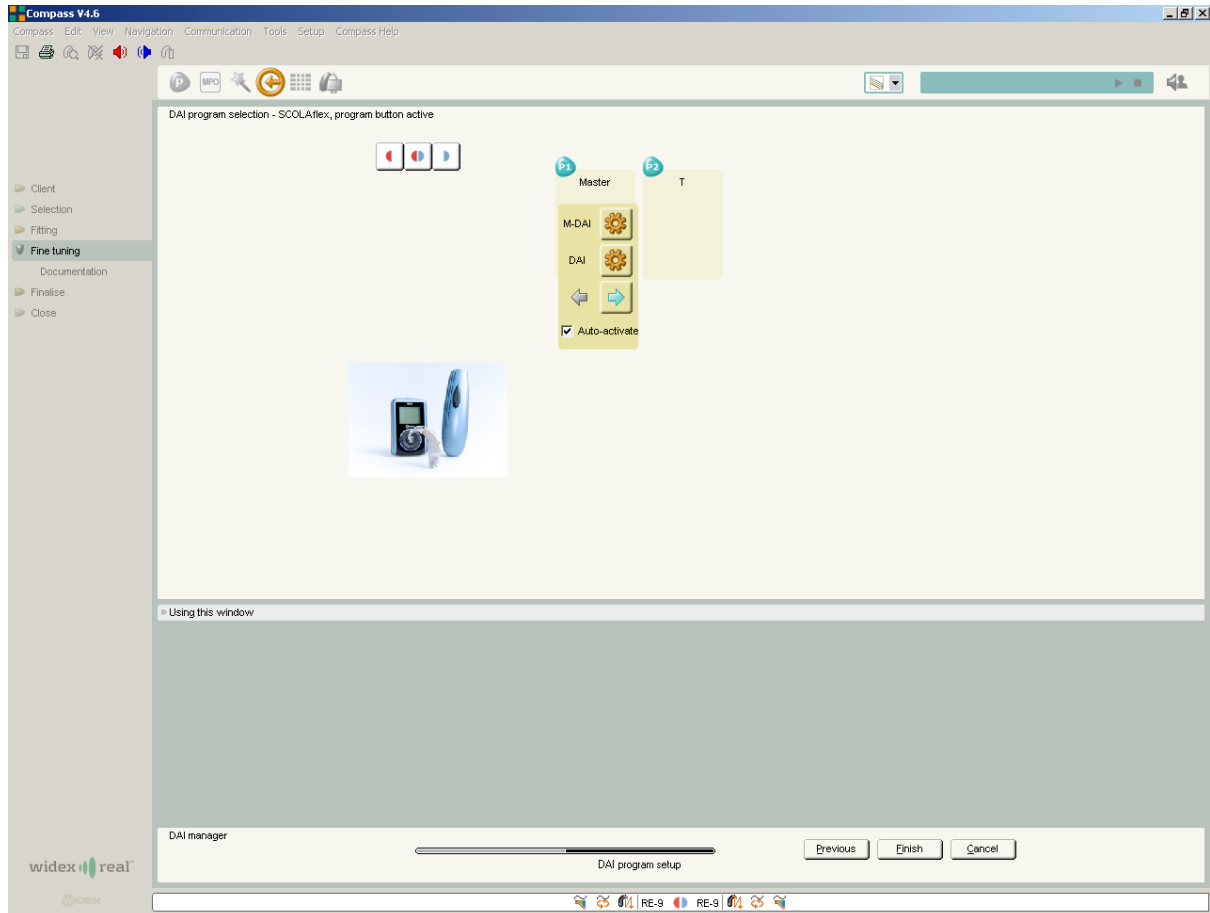
Select *Next* to proceed to the second window of the DAI manager. In the DAI program selection panel you can view the program setup used when an audio shoe is connected.

If you have selected the Program button inactive option in the previous step, you can now see that the direct audio input programs (both M-DAI and DAI) are placed as shadow programs on all program positions in the hearing aid. When an audio shoe is connected, one of the direct audio input programs is automatically activated – which one will depend on the position of the switch on the *SCOLAflex* FM receiver. Position 2 sets the hearing aid in the M-DAI program. Position 1 sets the hearing aid in the DAI program. If the switch is set in position 0, the FM receiver is turned off, which is similar to removing the audio shoe. The user will then be able to listen to the standard listening programs and toggle between them using the hearing aid program button.




The DAI program selection – Scolaflex, program button inactive window

If you have selected the Program button active option in the previous step, you can now see that the direct audio input programs (both M-DAI and DAI) have been placed as shadow programs at program position 1. When an audio shoe is connected, the hearing aid will automatically switch to program position 1 and activate one of the direct audio input programs – which one will depend on the position of the switch on the SCOLAflex receiver as described above. While the audio shoe is connected, the client can access standard listening programs other than P1 by using the hearing aid program button. If you want the direct audio input programs to be placed as shadow programs at another program position, use the arrow buttons in the program item to move them. If your client does not wish the hearing aid to automatically switch to the M-DAI/DAI program when an audio shoe is connected, you should uncheck the tick box for Auto-activate.



The DAI program selection – Scolaflex, program button active window

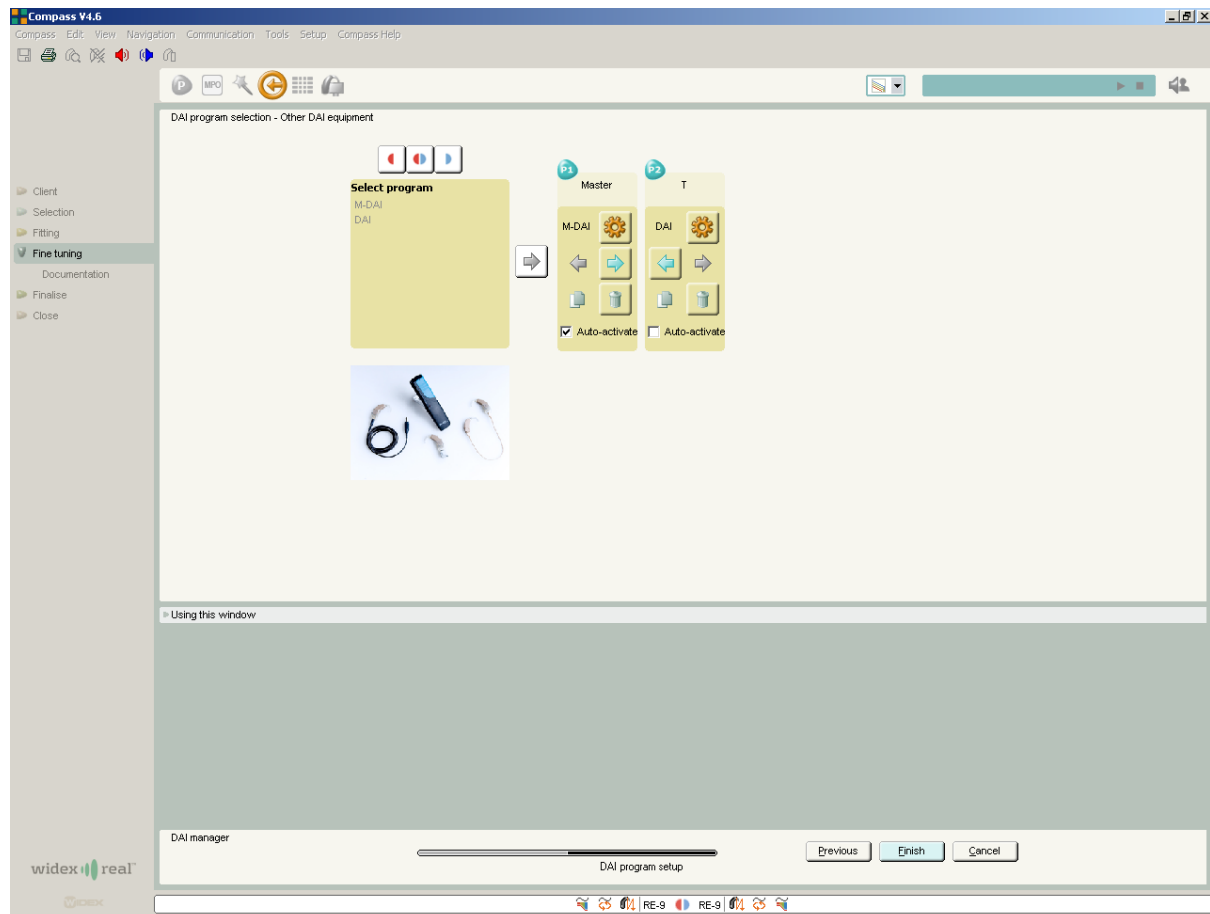
Step 5

Select the M-DAI/ DAI icon button  to fine tune the setting of the individual direct audio input programs. The options will be described later in this section.

Step 6

Select *Finish* to close the DAI manager and save all the changes you have made.

Selecting DAI program setup with other DAI equipment



The DAI program selection - Other DAI equipment window

In addition to the SCOLAflex system, Widex hearing aids are compatible with a wide selection of direct audio input devices including FM systems, Bi-CROS and direct audio cables. The default setup of the direct audio input programs is designed for such devices and as such, you do not need to use the DAI manager in this case. However, you do have the option of changing the M-DAI/DAI programs. In the default setting there is one M-DAI and one DAI program. This setting can be changed to two M-DAI or two DAI programs instead. Furthermore, you can change program position and fine tune the program settings. Below is a step by step description of how to do this:

Step 1

Open the DAI manager by selecting the DAI icon in the Toptool bar in the Fine tuning window. The DAI manager is a wizard guiding you through the necessary steps.

Step 2

In the first window, you have to select the relevant DAI equipment. Leave the radio button at its default setting *Other DAI equipment*. Please note that the correct audio shoe to use with DAI devices other than SCOLAflex is Widex 7 for RE-9, and Widex 5 for RE-19. These shoes come both in a slide-on version for use with SCOLAhear and in a Europlug version for other types of DAI devices.

Step 3

Select *Next* to proceed to the second window of the DAI manager. In the DAI program selection panel you can view the program setup used when an audio shoe is connected. The M-DAI program will, by default, be placed as a shadow program at program position 1 and – if more than one standard listening program has been selected – the DAI program will be placed at program position 2. The client must use the hearing aid program button to toggle between the M-DAI and DAI programs and another standard listening program that may have been selected for program position 3.

If the client is using a FM system featuring a switch on the receiver for switching between FM+M, FM only and off, this switch will have no effect other than turning the FM signal on and off. The user should set the switch to the FM+M position and then use the hearing aid program button to switch between M-DAI or DAI programs. When the switch is set in the off position, the hearing aid will receive no input from the DAI system. This means that if the hearing aid is set to the M-DAI program, the user will hear only sound from the hearing aid microphone. If the hearing aid is set to the DAI program, the user will hear no input at all. If the user does not wish to use the DAI system, the best solution is therefore to remove the audio shoe.

In the DAI program selection step you can also:

- Delete, add or copy direct audio input programs. The hearing aid can have a maximum of two direct audio input programs.
- Select which program to auto-activate. When an audio shoe is connected, the hearing aid will, by default, automatically switch to program position 1, where the M-DAI program is positioned. If you would rather have it switch to the DAI program, tick off the Auto-activate option for this program instead. Or, if you do not want the hearing aid to automatically switch program position at all, simply uncheck the tick box for Auto-activate.

Step 4

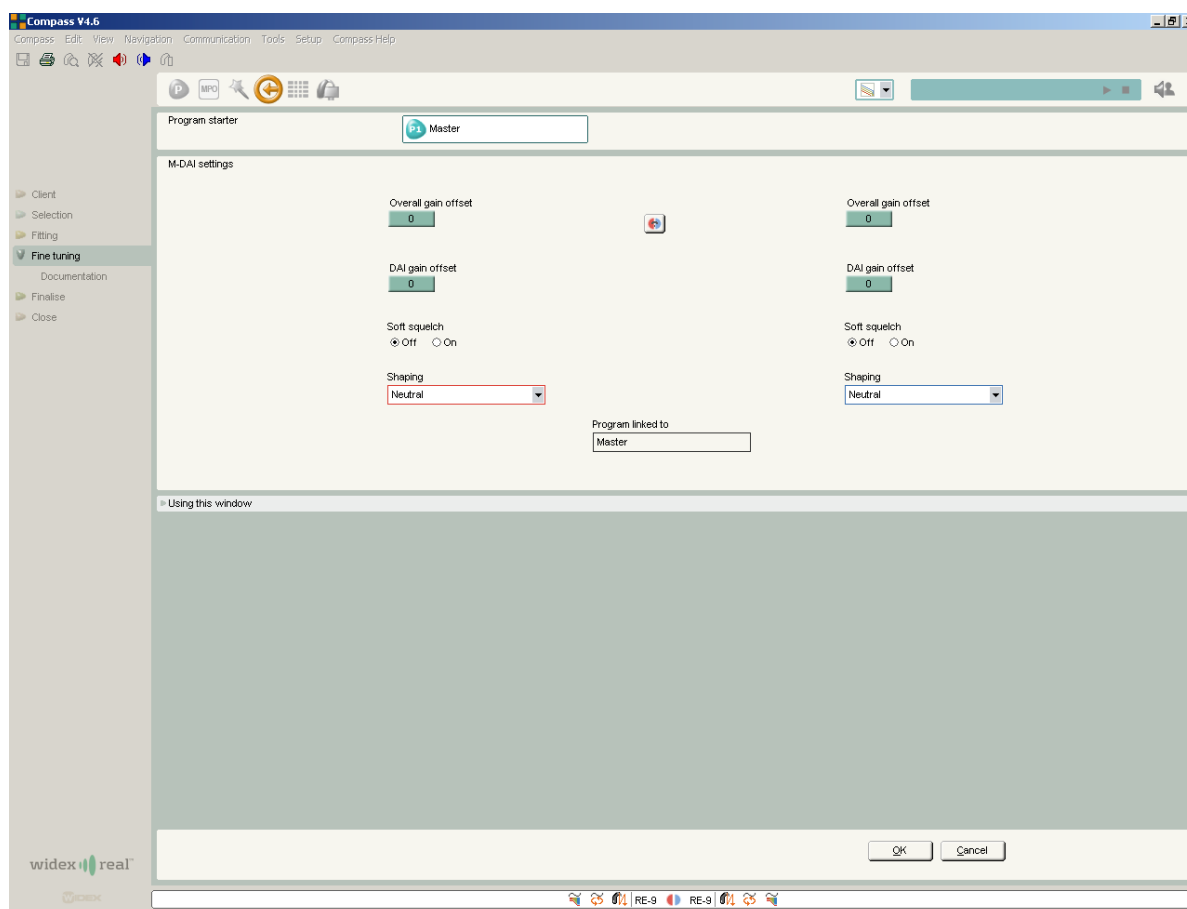
Select the *M-DAI settings* or the *DAI settings* button to fine tune the setting of the individual direct audio input programs. The options will be described later in this section.

Step 5

Select *Finish* to close the DAI manager and save all the changes you have made.

Fine tuning DAI and M-DAI program settings

The direct audio input programs can be fine tuned with a selection of fine tuning handles. When you open the DAI program selection window and select the M-DAI/DAI icon, the fine tuning window available for the chosen program will appear. Below is a short description of the possible handles and when you should change the setting of the handle.



The fine tuning window for M-DAI/DAI

Use **Overall gain offset** if the overall loudness level of the program is too loud or too soft. Adjustment of this parameter will only affect the selected program. The initial value in this field is 0, indicating that the gain has not been fine tuned.

Use **DAI gain offset** if the signal from the direct audio input device is too soft or too loud. Adjustment of this parameter affects the direct audio input level in all direct audio input programs. The initial value in this field is 0, indicating that the gain has not been fine tuned.

Use **Soft squelch** to reduce amplification of internal noise from FM systems. For some types of FM systems, the internal noise in the system may be audible to the client when in a quiet environment. The default soft squelch setting is “Off”.

To reduce audibility of the internal noise level, the soft squelch increases the compression threshold and limits gain at low input levels to a degree that is considered still acceptable for maintaining good speech perception. This setting is similar to the Soft sounds mode: Limited audibility for soft sounds.

Use the *Shaping* drop-down list to select a frequency shaping suitable for the type of DAI device used by the client. If your client uses several different types of DAI devices, leave the parameter in the default neutral setting.

Use the *Program linked to* drop-down list to select an alternative acoustic program to which you want to link the direct audio input program. You can choose between any of the acoustic programs selected for the client. By default the direct audio input programs are linked to the Master program.

When you change the link of the DAI program, it will adopt the settings of this acoustic program, including any fine tuning settings in this particular acoustic program.