

Configuration Software
CSW6100-2
Version 1.92

for the
DVCS6100
Digital Voice Communication System

INSTALLATION AND OPERATION MANUAL
DV 64492.01

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1 Scope

This document is an introduction and explanation of the configuration software CSW6100 delivered and license controlled by CodeMeter®.

With assistance of this document the user will be able to use this software to configure a DVCS6100.

For a description of the Digital Voice Communication System DVCS6100, refer to the following DVCS6100 manuals:

ACU6100	DV 64440.03	„Installation and Operation“	Article-No. 0589.845-071
ACU6101	DV 64470.03	„Installation and Operation“	Article-No. 0614.564-071
REU6100	DV 64460.03	„ Installation and Operation “	Article-No. 0589.829-071

This manual is written for software version 1.92 or later, and is not suitable for earlier software versions. Some differences in operation may be observed when comparing the information in this manual to earlier or later software versions.

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2 Basic Requirements

2.1 System Requirements

The minimum system requirements for proper operation of the CSW6100-2 are:

- Standard Personal Computer (PC) with minimum 2 USB ports (this can be also a Notebook!)
- Microsoft Windows XP
- PCAN-USB-Adapter installed

2.2 Connection Cable

To connect the configuration system to a DVCS6100, you need a special cable set. This set adapts the D-SUB9 (male) connector of the configuration system (Pin 2 = CAN L; Pin 7 = CAN H) with the bus system in your helicopter installation or test bench. You can prepare a connection anywhere in the bus system inside the DVCS6100 aircraft installation.

For Eurocopter EC145 helicopter standard installations, there is a service connector available in the cockpit. Please refer to the corresponding documentation provided by Eurocopter.

2.3 PCAN-USB-Adapter

The interconnection between the PC and the DVCS6100 must be established by using the PCAN-USB-Adapter delivered with the Configuration Set CSW6100-2. This adapter has to be interconnected with the PC by using an USB port.

3 Installation

All needed files for operation of the CSW6100 are stored on the CodeMeter. The CSW6100 is not needed to be installed on a local drive on the used PC or Notebook. It's the easiest way to operate it directly from the CodeMeter.

But the CAN-USB-Adapter needs a driver which has to be installed the first time when you want to operate it on a dedicated PC. For this, please follow the instructions in chapter 3.1.

3.1 Driver Installation

The needed driver for the CAN-USB-Adapter is located in a dedicated folder on the CodeMeter. The driver must be installed the first time when the CAN-USB-Adapter is connected to the PC.

Note: The Screen-Shots shown in this chapter are showing text in English.

Please note that this is depending on your locale windows settings.

Note: The herein described process for driver installation is based on a 32bit Windows® system. The appearance on your screen may vary depending on your installed operating system.

For 64bit Windows® there are dedicated drivers on the CodeMeter Stick available.

Please follow to this instructions:

- ▶ Connect the CodeMeter to the PC via an USB port.
- ▶ Connect the CAN-USB-Adapter to another USB port of this PC.
- ▶ A window will appear on screen with following content:



Figure 1 Driver Installation Start Screen

- ▶ Please select the last list entry and click button "Next >"

- ▶ A window will appear on screen with following content:

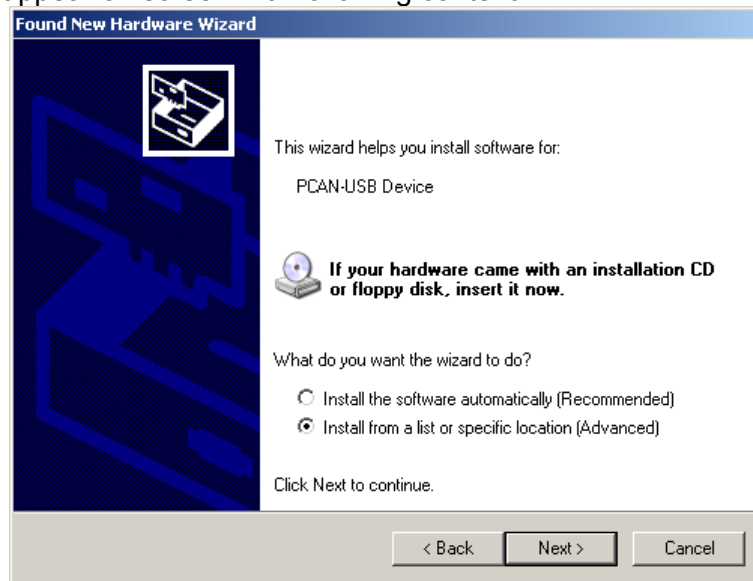


Figure 2 Driver Installation Second Question

- ▶ Please select the last list entry and click button “Next >”
- ▶ A window will appear on screen with following content:

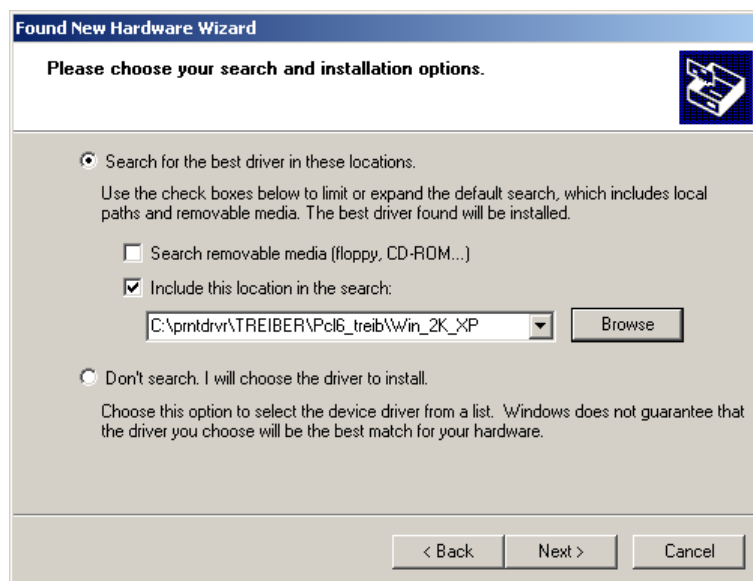


Figure 3 Driver Installation Source Selection

- ▶ Click button “Browse”

- ▶ A folder selection dialog will appear on screen. Select the folder on CodeMeter which contains the driver files:

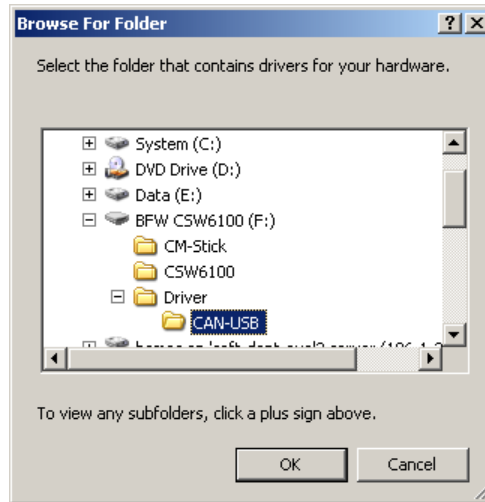


Figure 4 Driver Installation Folder Selection

- ▶ Click button “OK” to take over the selection.
- ▶ The selected path is copied into the selection field of the shown dialog:
Note: The drive letter for the CodeMeter can be different to “F:”. This depends to the drive structure on your PC.

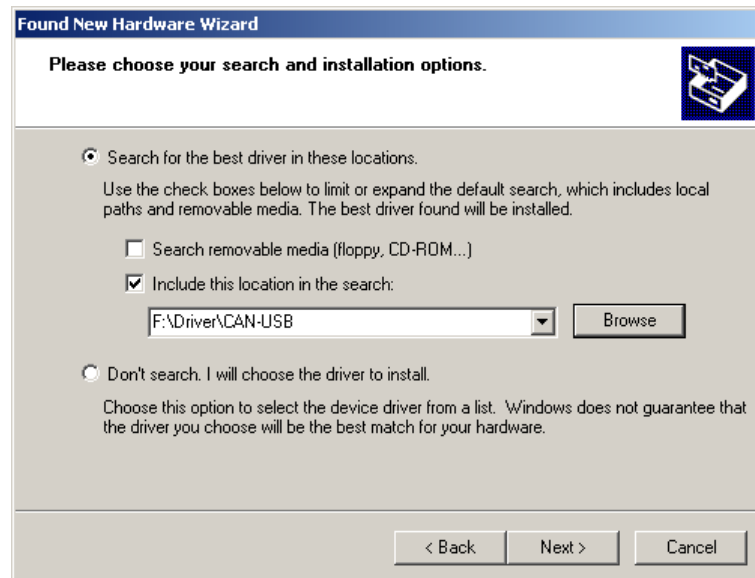


Figure 5 Driver Installation Source Folder Selection

- ▶ Please click button “Next >”

- ▶ The driver software is been installed, which is shown by following dialog:

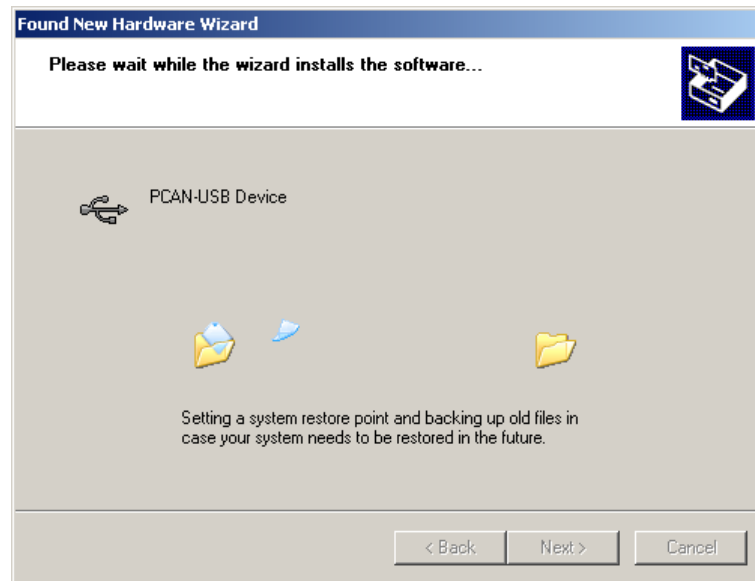


Figure 6 Driver Installation Process

- ▶ After copying and installation of all needed files on the PC, a confirmation window appears:



Figure 7 Driver Installation Completion

- ▶ Click button "Finish" to finalize the installation procedure.

4 Start of Configuration Software

To start the CSW6100 Configuration Software, launch panel is available on the CodeMeter stick. The name of this launch panel is “CSW6100 Start Menu”.

Dependent to the operating system which installed on the PC you use, the launch panel is started automatically if the CodeMeter stick is connected or you have to start it manually.

To start it manually you have to execute file “CSW6100start.exe” in root of the CodeMeter stick.

The CSW6100 Start Menu looks like shown in Figure 8:



Figure 8 CSW6100 Start Menu

By clicking the button “Start CSW6100” on the launch panel, the CSW6100 configuration software will be started.

A click on “Show Manual” will open the Installation and Operation Manual (this document) for the CSW6100-2.

The following sub-chapters describe all configuration settings for the DVCS6100 and operation possibilities of the CSW6100.

4.1 Main Screen

Start the Configuration Software via your shortcut on the desktop or in the "START" menu. The following main screen will appear:

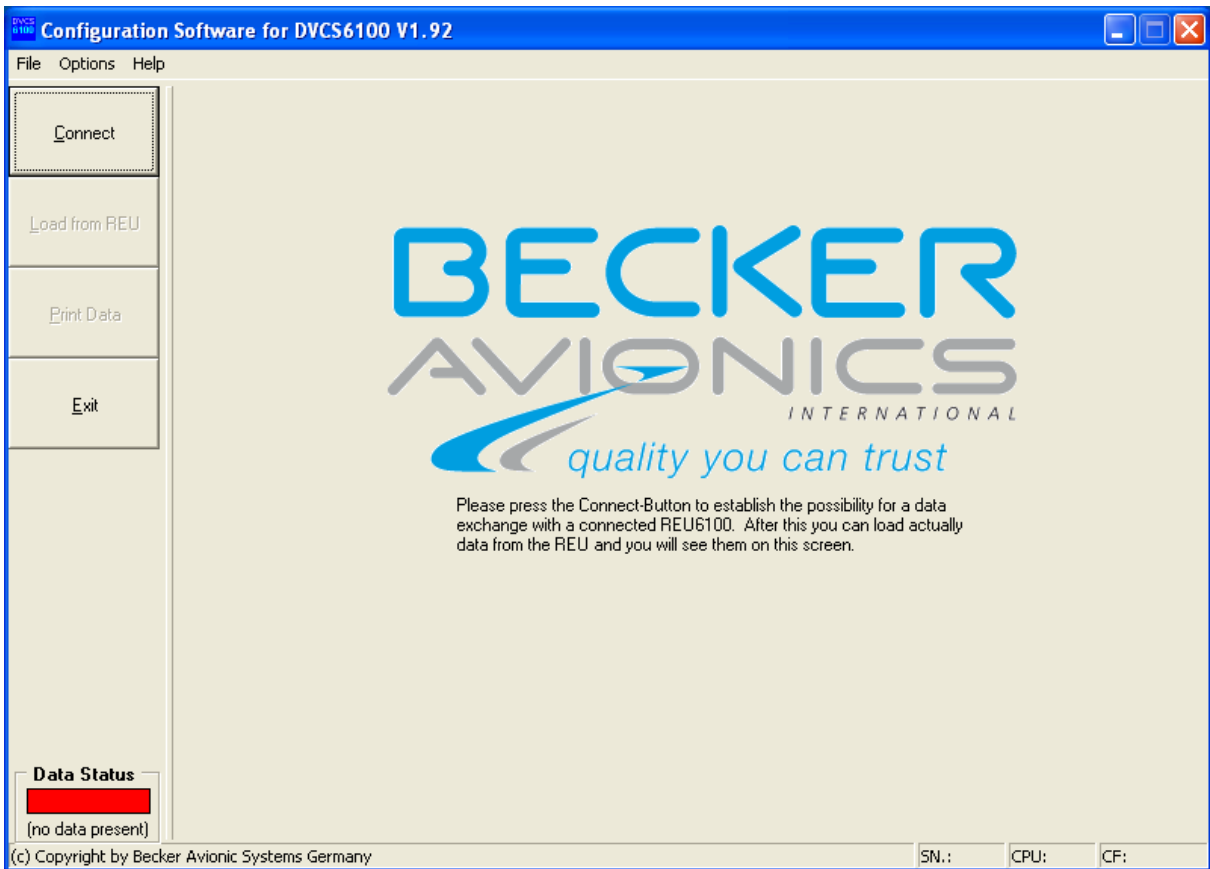


Figure 9 Start Screen

The main window is divided in:

4.2 Menu Bar

This is the standard WINDOWS menu bar and is the upper bar in the main window.

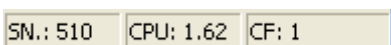
4.3 Function Buttons Bar

Is located at left side and has buttons with direct access to most used functions.

4.4 Data Window

Is the biggest window in the center of the screen. This window shows the configuration data after loading form the connected DVCS system or from a data file.

4.5 Status Bar



The status bar is located at border of the program window and shows some interesting messages while program running: REU SN, CPU version and Config File Version.

5 Menus & Submenus

5.1 File Menu

In this menu there are 5 entries for data file handling, two entries for printout and "Exit" for aborting the configuration software.

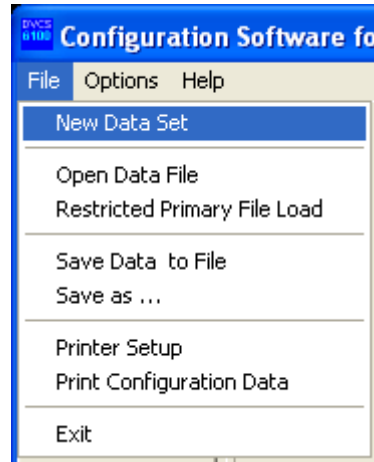


Figure 10 File Menu

5.1.1 Menu Item "New Data Set"

You are able to create a new configuration data set by selecting "New Data Set" in the "File"-menu. This will load standard configuration data which you can edit in the different data screens (explained later).

5.1.2 Menu Item "Open Data File"

If you have a previously stored data set in a data file and want to open it you will start with "Open Data File".

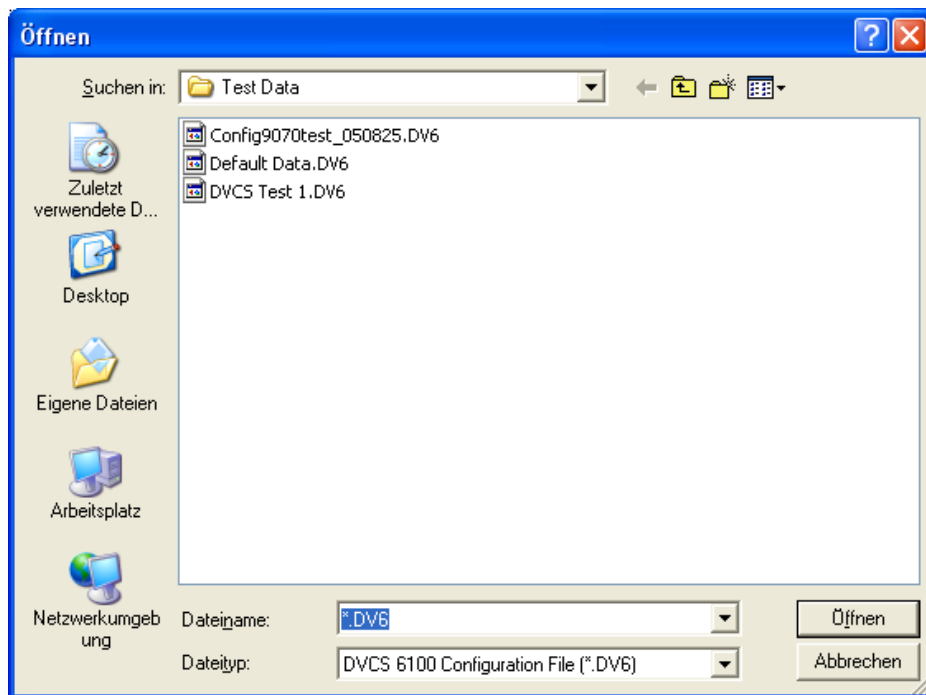


Figure 11 Open Dialog

This is a standard windows dialog, so it can have a different appearance. It's depending to the installed windows version and the used language of the operating system.

5.1.3 Menu Item “Restricted Primary File Load”

If you have a previously stored data set in an old data file and want to open it, being sure new features are disabled and the structure is cleaned, you will start with " Restricted Primary File Load".

5.1.4 Menu Item “Save Data to File”

For archiving or reproduction you can save a configuration data set to a file. See more details in chapter 11.

5.1.5 Menu Item “Save as ...”

If you want to save the current configuration data set under a new name select "Save as“:

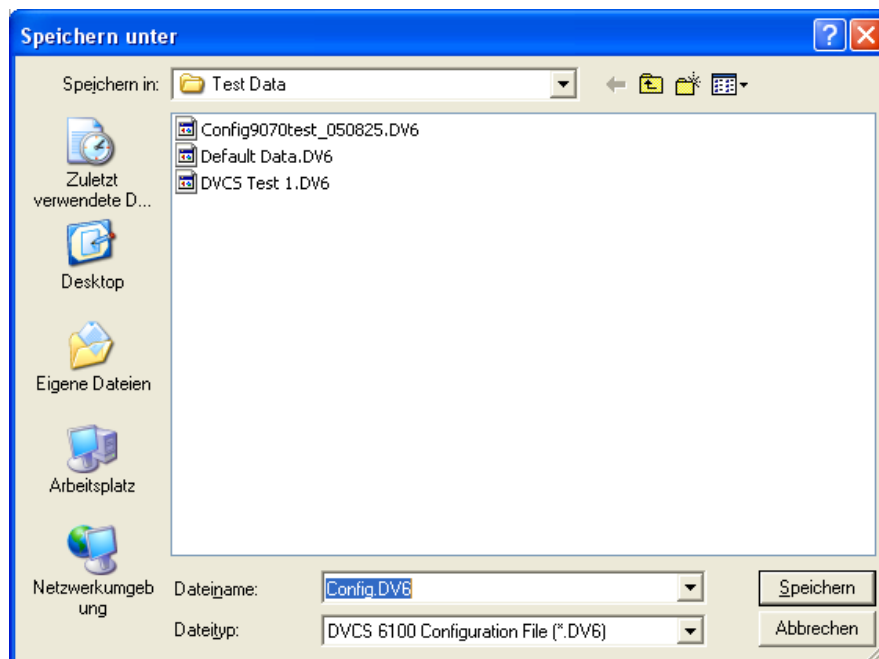


Figure 12 Save Configuration

This is a standard windows dialog, so it can have a different appearance. It's depending to the installed windows version and the used language of the operating system.

5.1.6 Menu Item “Printer Setup”

For printer selection and configuration you can use the “Printer Setup” menu entry.

5.1.7 Menu Item “Print Configuration Data”

If you want to print the current configuration data for documentation you can do this by selecting this menu item. The printout will be sent to the standard printer you defined in your Windows® operating system if there is an printer available.

5.1.8 Menu Item “Exit”

By selecting this menu item, you can end the work with the configuration software. If you made changes in the data set shown on screen, a confirmation window will be shown asking the user for saving of this data:

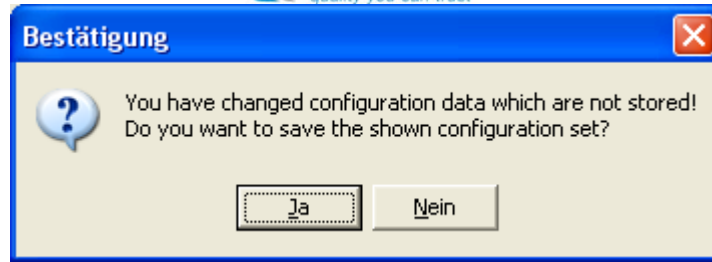


Figure 13 Question dialog for program abortion.

The appearance of this window can be configured in the settings dialog described in chapter 5.2.

5.2 Options Menu

In this menu you can select the settings dialog, functions to connect and disconnect the system and functions to handle the data exchange with a connected REU6100:

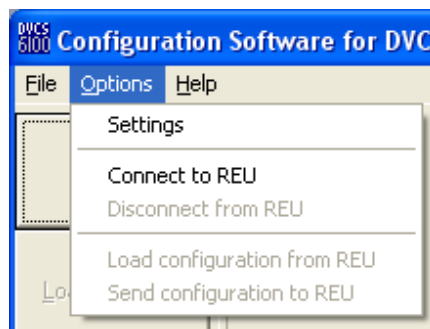


Figure 14 Options Menu

5.2.1 Menu Item "Settings"

The selection of the menu item settings starts an dialog for changing some basic settings for the program appearance.

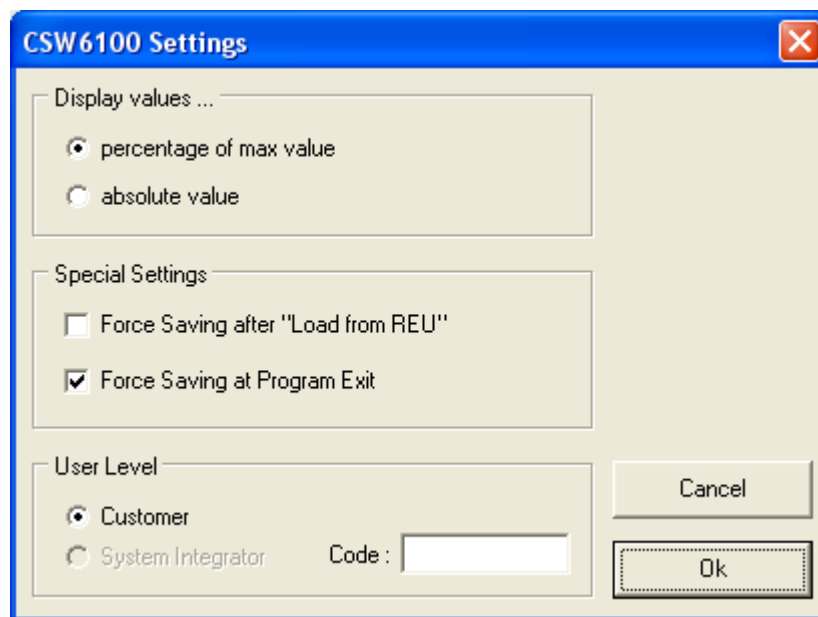


Figure 15 Settings Dialog

There are three subsets of settings. First you can select the unit for the displayed potentiometer values (percentage of max. value or absolute value). Second, you can define

the appearance of save data dialogs after “Load from REU” and at program exit. Third, the user level (customer or system integrator).

If you select “Cancel”, no settings will be changed. Selection of “OK” changes the settings in that way you have selected and they will take affect immediately.

The settings are stored permanently in the used computer system, so after a restart of the CSW6100 software you will get the same settings you have selected before.

See chapter 10 to learn more about the user levels.

5.2.2 Menu Item “Connect to REU”

If you want to make a data exchange between the configuration software and a REU6100 first you have to create a connection. That can be done by using this menu item or the according function button. If the connection is created, this menu item will be disabled.

5.2.3 Menu Item “Disconnect from REU”

To end a data exchange between the configuration software and a REU6100 it is possible to close the connection. That can be done by using this menu item or the according function button. If the connection is closed, this menu item will be disabled.

5.2.4 Menu Item “Load configuration from REU”

This menu item is enabled while a connection between the configuration software and a REU6100 is established. It starts the transfer of all configuration data from the connected REU6100 to the host CSW6100 software. While data transfer a small dialog shows the progress of the data exchange.

5.2.5 Menu Item “Send configuration to REU”

This menu item is enabled while a connection between the configuration software and a REU6100 is established. It starts the transfer of all configuration data from the host CSW6100 software to the connected REU6100. While data transfer a small dialog shows the progress of the data exchange.

5.3 Help Menu

A help system is not yet implemented in this software, so this submenu consists by one entry only for displaying the info dialog:

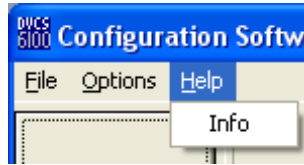


Figure 16 Help Menu

5.3.1 Menu Item “Info”

The selection of this menu item opens a dialog box with info about the program version, the author and the contact address.

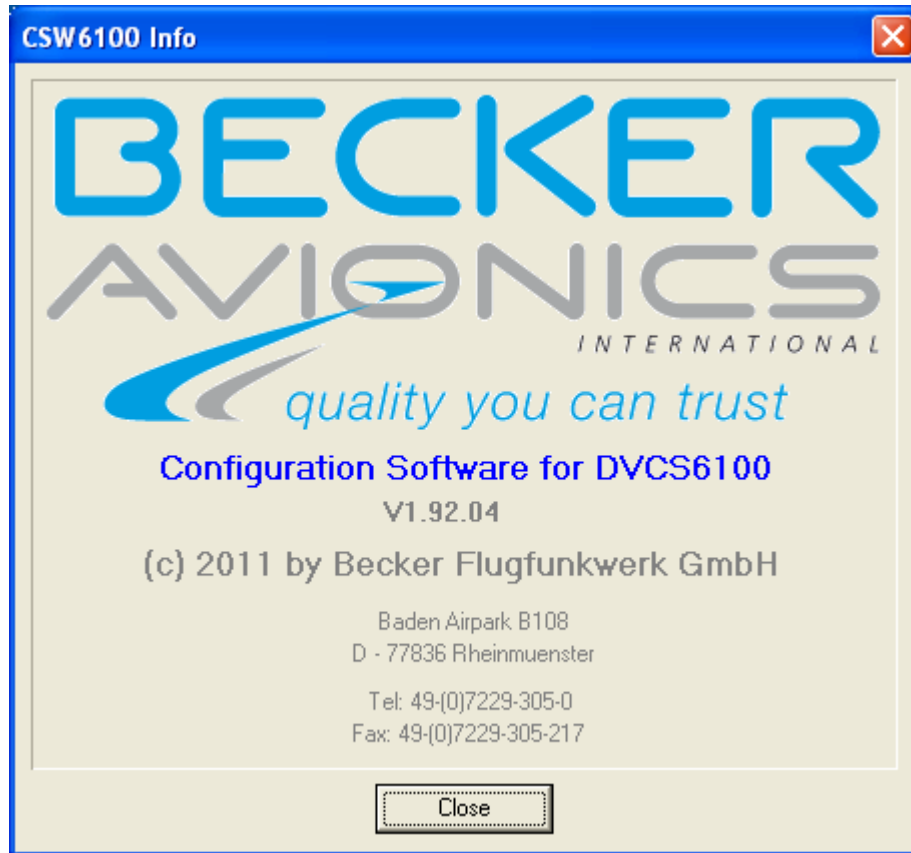


Figure 17 Info Dialog

6 Function Buttons

At the left side of the program screen you can find some buttons for a direct access to most used functions.

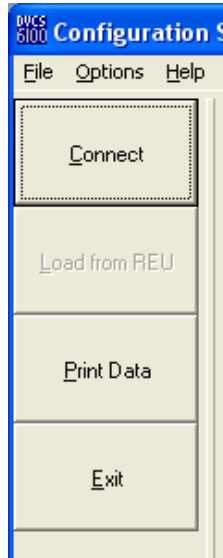


Figure 18 Function Buttons

6.1 Function Button “Connect”/”Disconnect”

This button has the same function as the menu item “Connect” or “Disconnect”. The function switched in accordance to the connect state of the program. If there is no connection to the REU6100 established yet the button can be used to create the connection. Otherwise the button can be used to disconnect.

6.2 Function Button “Load from REU”

This button has the same function as the menu item “Load configuration from REU” (see chapter 5.2).

6.3 Function Button “Print Data”

This button has the same function as the menu item “Print Data” (see chapter 5.2).

6.4 Function Button “Exit”

This button has the same function as the menu item “Exit” (see chapter 5.2).

7 Status Display

There are two status displays in the left bottom corner of the program screen. One of them shows the current bus status and the other identifies the data status.

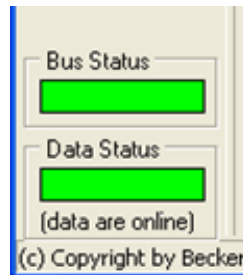


Figure 19 Status Displays

7.1 “Bus Status” Display

This display is been visible when a connection is established only. For an easy visibility there is a colored block. The color of the block shows the current bus state. If the connection is o.k. the color is green, if there is a failure the color will be changed to red. A yellow colored block shows that the host system tries to connect a REU6100 but actually gets no answer.

7.2 “Data Status” Display

There is one colored block that displays the actually state of the shown data. If the data shown on screen are the same as stored in the connected REU6100 the color is green, if there was made any change by editing any value the color is yellow until the user send the new data to the REU6100.

8 Data Screen

For easy usage the data screen is separated in 7 sheets. You can select each sheet by clicking on the tab sheet identifier at top of the data screen.

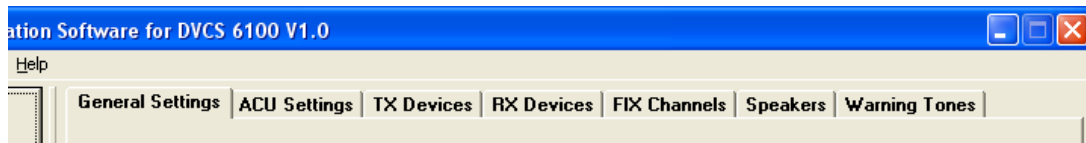


Figure 20 Tab Sheets for Data Screen

8.1 Data Screen “General Settings”

The first tab sheet shows the general settings of the DVCS system.

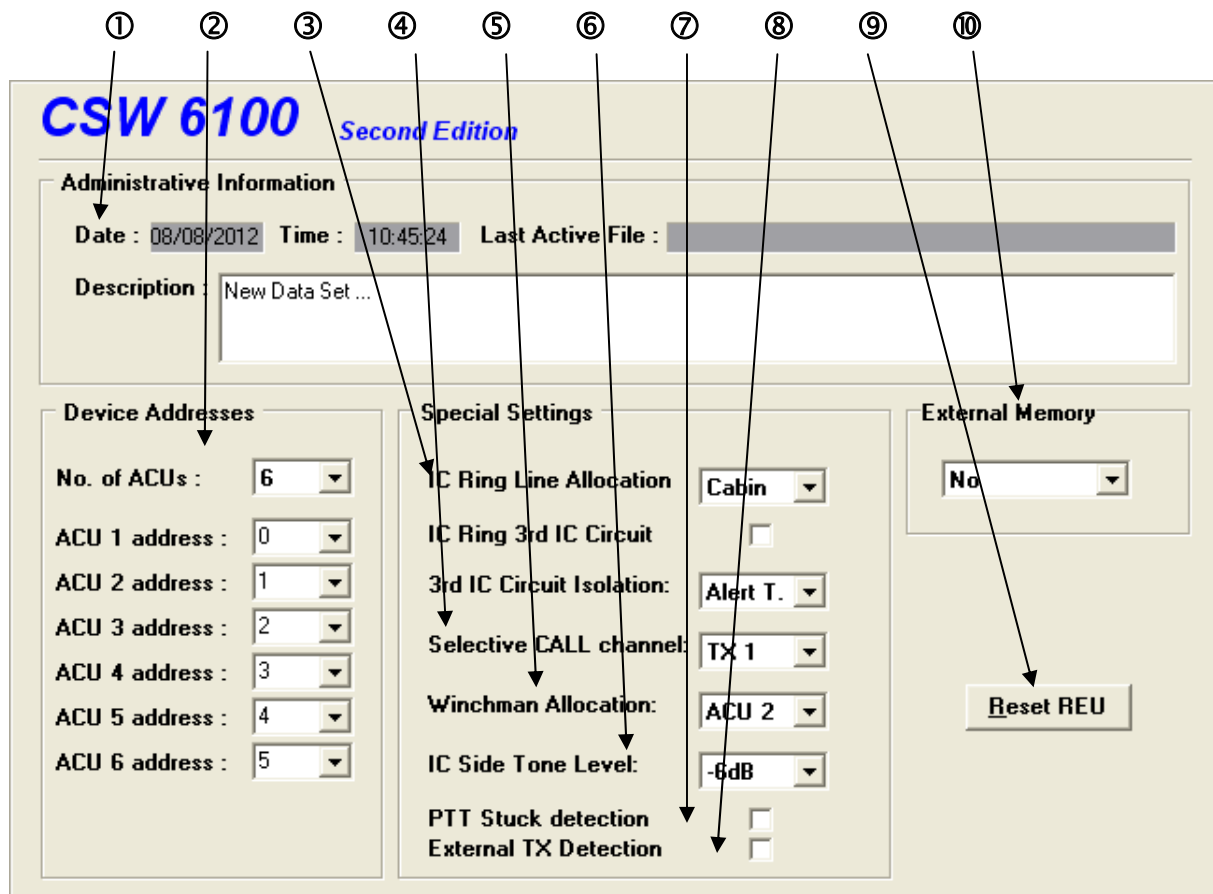


Figure 21 Data Screen “General Settings”

① In this block there are displayed administrative data for storage of a configuration data set in a file. These are the date and time of saving, the file name and the individual description text. If you do not use file stored data, this fields are blank. The date and time are not editable, they are set in the moment you are store the actually data set in a file and will be taken from the computer system real time clock. See more details at chapter 5.2 or chapter 11.

② Here you can see and change the number of ACUs that are activated and their addresses. In Maximum there are 6 ACUs available. The addresses of the ACUs have to be different (2 or more ACUs with the same address are not allowed!). The addresses can be set to a value between 0 and 15.

- ③ IC Ring Line can be allocated to the Cockpit or the Cabin ring using this selector. In addition, IC ring Line can be included in the 3rd IC Circuit, and be isolated by Alert Tone 2 or SellCall input.
- ④ Here, you can select the TX-Channel which is used for the Selective CALL functionality. Note: It must be set to 'No' if Selective CALL input is used for 3rd IC activation.
- ⑤ The winchman functionality can be allocated to one of the ACUs in the system. With this combo box, you are able to select the ACU that shall handle this function.
- ⑥ This value represents the attenuation of the sidetone signal in the system. Values between -15dB and 0dB in steps of 3dB are available.
- ⑦ This checkbox represents the status of PTT stuck detection feature in REU.
- ⑧ Configure alert tones inputs as external TX detection inputs.
- ⑨ The system integrator is able to reset the connected REU6100 by a click on this button (This button is not shown for customers!).
- ⑩ Enable or disable the external memory, if the REU is equipped.

8.2 Data Screen “ACU Settings”

This screen shows all configuration data for the ACUs. The screen itself is separated into two sheets. The first screen represents basic settings and the second screen handles special settings. Each ACU can have its own configuration. With buttons on the left side you can select the ACU you want to configure. If the number of available ACUs is below 6, the buttons for the higher ACUs are disabled.

8.2.1 “ACU Settings” Basic Settings (For Pilot/Copilot and Cabin types)

This sheet shows all the basic settings for an ACU.

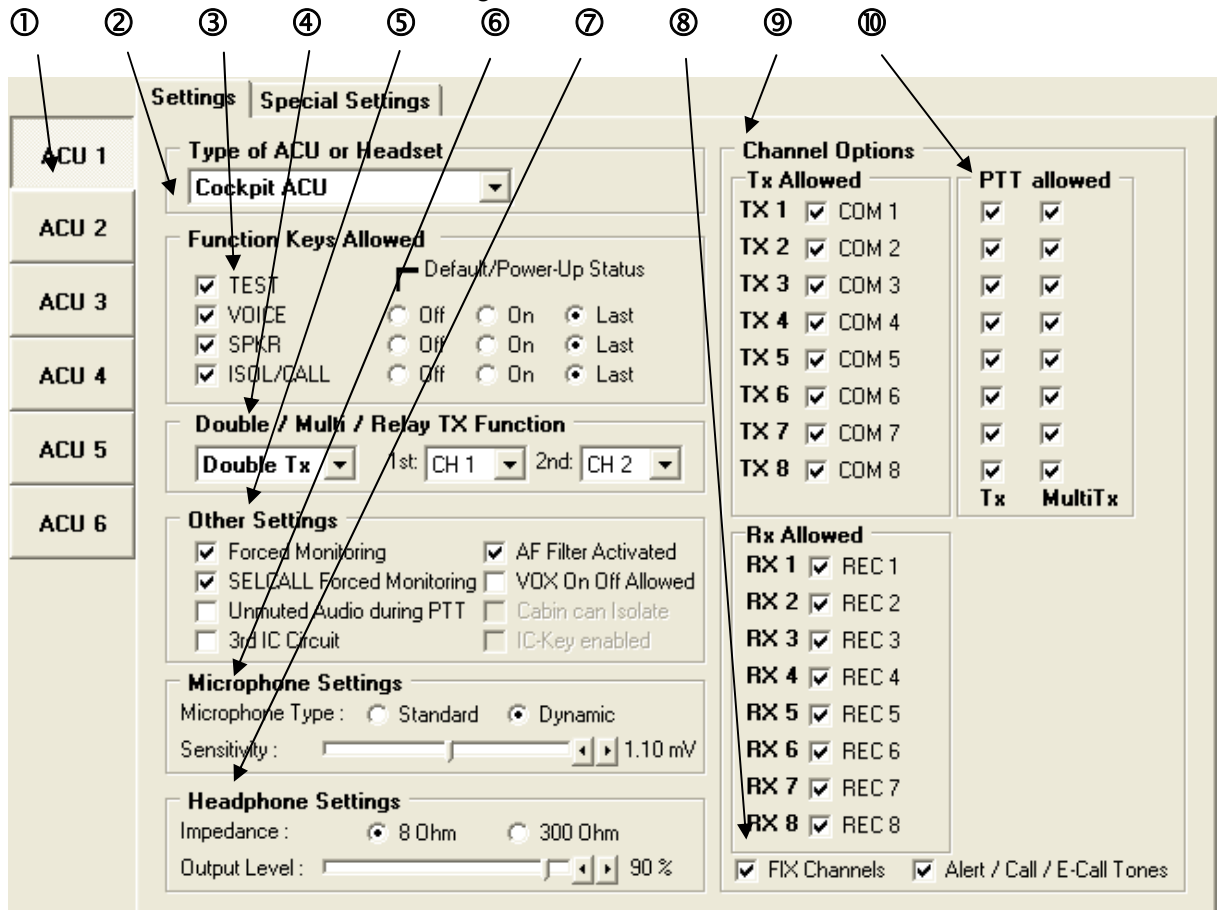


Figure 22 Data Screen “ACU settings for Pilot/Copilot and Cabin”

- ① Those are the buttons for the selection of the ACU you want to configure or see.
- ② In this box the type of the ACU or Headset is be set.
- ③ In this box, all function keys on the panel of the ACU can be enabled or disabled. The second row of settings in this box defines the default or power-up status of the corresponding functionality:
 - Off : Always Off at startup
 - On: Always On at startup
 - Last: State at power down is kept

Remark:

- *Isol/Call function is a group function, which means that the status is always the same for all ACUs!*
- *The SPKR key can be set enabled for ACU 1 to 3 only.*

- ④ This box handles the settings for the double or multi TX function.

You can select DoubleTx, MultiTx or none.

In DoubleTx mode, there are two select boxes enabled. With it you are able to select the two

TX channels. It is not possible to select the same channel in both boxes. Please take care that the selected channel number in the left box is below the number in the right box. There is no check whether the selected channels are available and enabled!

In MultiTx mode, Tx channels are selectable on the ACU.

⑤ Other settings consist by six setting values. With the first, you can enable the “Forced Monitoring” function that result in automatic monitoring the channel you are transmitting. The second is for “Forced Monitoring” in conjunction with the “Selective CALL” functionality. The third setting activates or deactivates the switching functionality of the VOX Push-Push button on the ACU6100. If this function is activated, an impressed knob means that the VOX functionality is deactivated. In the other case, the impression or release of the knob has no relevance and the VOX functionality is always available. (The third setting has relevance only for REU6100 Software Package version 1.50 or higher!). The fifth, Unmuted Audio during PTT: Intercom (IC), released radios (TX) and fixed inputs (FIX-IN) are listenable during transmit (PTT active) for the operator using the PTT (no RX shall be listenable). The sixth setting is used to place the ACU in a virtual 3rd Circuit. The seventh is used to give Cabin ACU possibility to isolate.

⑥ In this box all settings for the microphone input can be done. First you can switch between standard and dynamic type of microphone. Furthermore you can change the sensitivity of the input in the defined ranges.

⑦ The headphone settings are made in this box. The most important adjustment is the selection of the headphone impedance (8Ω or 300Ω). The output level is set to a well defined standard level if you change the impedance from 8Ω to 300Ω or vice versa. If it is necessary, you can change the level by moving the corresponding slider. Please take care to prevent an overcontrol of the headphone.

⑧ These boxes handle audio routing of Fix Inputs and Tones for the ACU. Audio is audible when the checkbox is checked (default).

⑨ For each ACU the TX and RX channels can be enabled or disabled. This can be set in the box “Channel Options”. If any channel isn’t enabled, it can’t be used by the user of this ACU. The column “Name” shows the name of the channel you can define in the TX or RX devices sheet.

⑩ For each TX channel it is possible to allow or disable PTT function by using the check boxes in the left column (TX). In addition, it is possible to allow or disable PTT function for the “Multi TX” feature (see point ④) by using the check boxes in the right column (“Multi TX”)

8.2.2 “ACU Settings” Basic Settings (For Headset type)

For Pilot/Copilot, Cabin and common settings, see previous chapter.

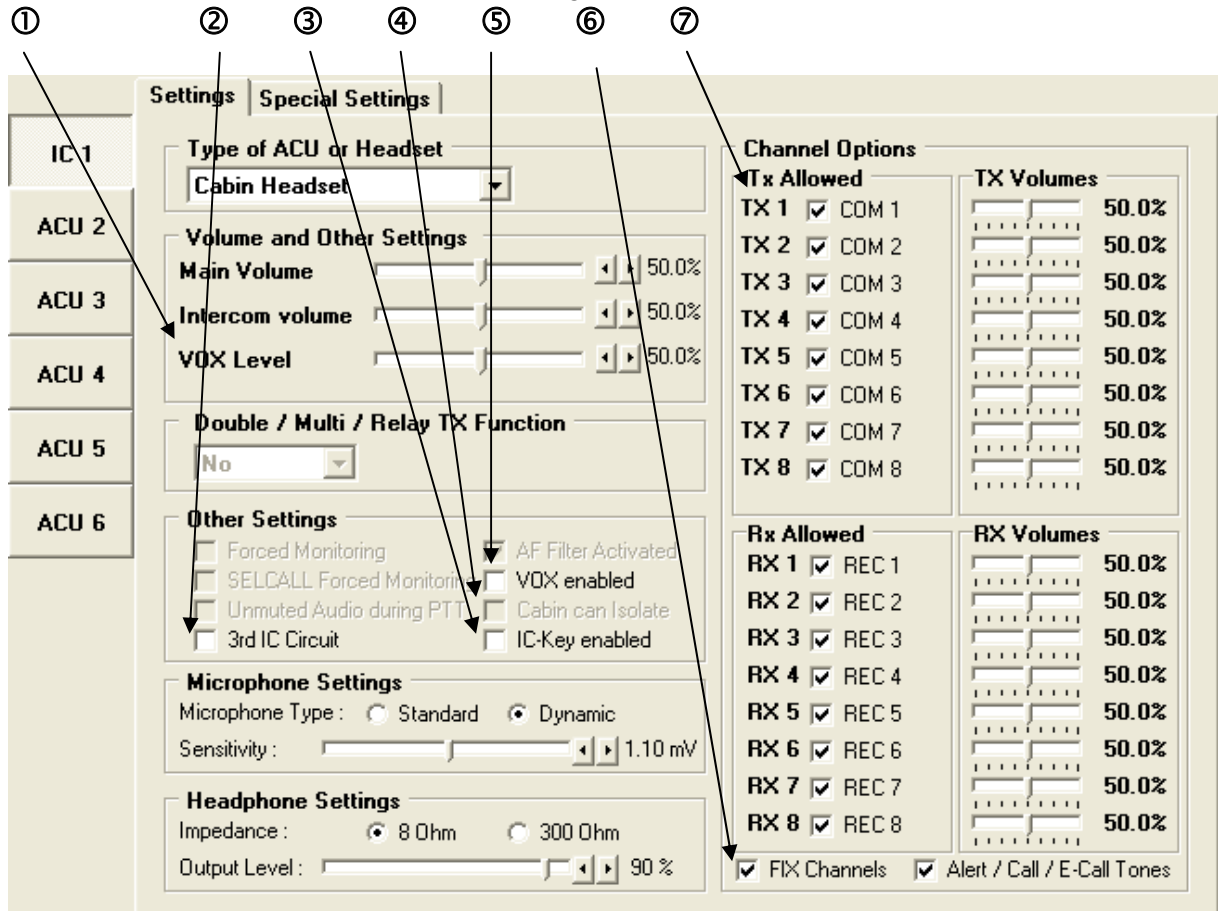


Figure 23 Data Screen “ACU Settings for Headset”

- ① Set main volume, Intercom volume and VOX level (These levels are set by poti for real ACU)
- ② This setting is used to place the ACU in a virtual 3rd Circuit.
- ③ IC-Key is HotMike functionality for headset. Alert tones activation lines are used as alternate function. This function will automatically cancel the corresponding Alert Tone activation line (see chapter 8.7). Activates the IC-Key function for the Headset without ACU. The corresponding alert tone is no longer available.
- ④ Give Cabin ACU possibility to isolate.
- ⑤ VOX functionality enabling or disabling. Enable/disable the function voice controlled mike for the headset without ACU.
- ⑥ These boxes handle audio routing of FIX Inputs and Tones for the ACU. Audio is audible when the checkbox is checked (default).
- ⑦ RX and TX volumes. (These levels are set by potentiometer for real ACU)

8.2.3 “ACU Special Settings”

For each ACU the volumes can be set individual. This can be made by using this sheet.

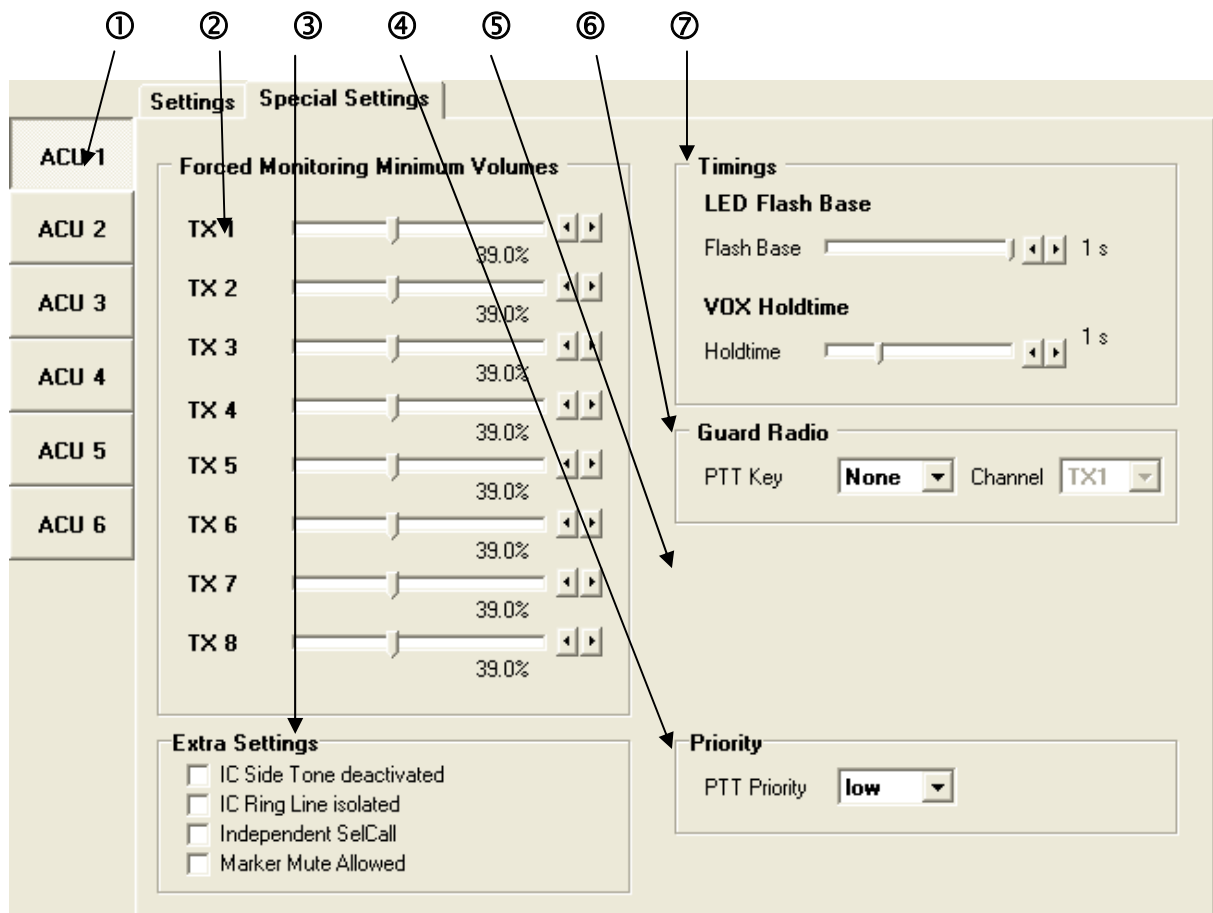


Figure 24 Data Screen “ACU Special Settings”

- ① Those are the buttons for the selection of the ACU you want to configure or see.
- ② In this area the values for the “Forced Monitoring Minimum Volumes” can be set.
- ③ Side Tone can be deactivated for IC (activated by default).
 Isolate the ACU from the IC ring line (not isolated by default).
 Activate independent Selective Call functionality.
 Activate Marker Mute functionality.
- ④ Set the priority of the ACU to low (default) or high.
- ⑤ A headset only operator can be allocated to any ACU. All control functions of the ACU are parallel valid for this headset operator, except VOX functions, mike sensitivity and phone output.
 PTT-Key allows transmit functionality using an alert tone activation line. Enabling this function automatically disables the corresponding alert tone.
 If the PTT Key is enabled without an Allocated ACU, this enables the transmit feature for Headset only operators and the pre-defined Tx Channel has to be selected in the associated drop-down list.
- ⑥ A headset or an ACU can be assigned to a pre-defined guard radio channel and a PTT Key input. This PTT Key has higher priority and can be selected between Sel Call activation or Alert Tone 1 input, automatically disabling the alternative function
- ⑦ LED flashing timing and VOX Holdtime can be set here.

8.3 Data Screen “TX Devices”

Since different transceivers with individual input and output signal levels are able to be connected to the DVCS6100 system, for each TX channel special settings have to be done. For these settings the “TX Devices” page is responsible.

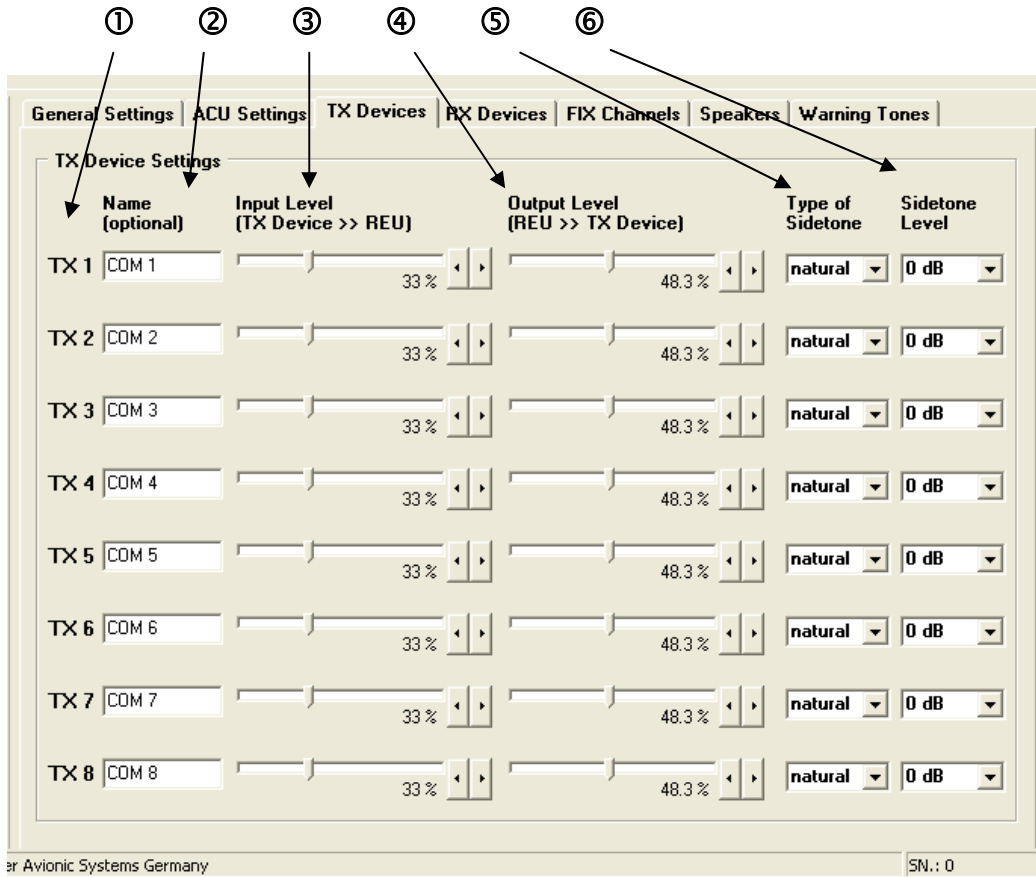


Figure 25 Data Screen “TX Devices Settings”

- ① This column shows the standard name for the TX channels.
- ② For each TX channel you can define a special name for a better identification on the different pages. Those names are stored in the REU6100 and the data files you can create!
- ③ The 3rd column is responsible for the input level setting. The value can be changed by using the sliders or the up/down keys. Higher values means, a necessity of lower levels at the input for reaching the standard level at the headphone.
- ④ The 4th column is responsible for the output level setting. The value can be changed by using the sliders or the up/down keys. Higher values means, a higher level for the modulation of the transmitter.
- ⑤ In this column you can select the kind of the sidetone for each TX channel. Some transmitters are not able to deliver a naturally sidetone. For this case the DVCS6100 can create an artificial sidetone by itself and the signal is routed from the microphone line direct to the headphone line. Additionally a duplex mode is available. In this mode both, the naturally and the artificial sidetone are used.
- ⑥ In the last column the sidetone level can be defined separately for each TX channel. The values are selectable between 0dB and –15dB in steps of 3dB. In case of duplex mode this value handles the artificial sidetone. The naturally sidetone then is not under attenuation.

8.4 Data Screen “RX Devices”

Since different receivers with individual output signal levels are able to be connected to the DVCS6100, for each RX channel special settings have to be done. For these settings the “RX Devices” page is responsible.

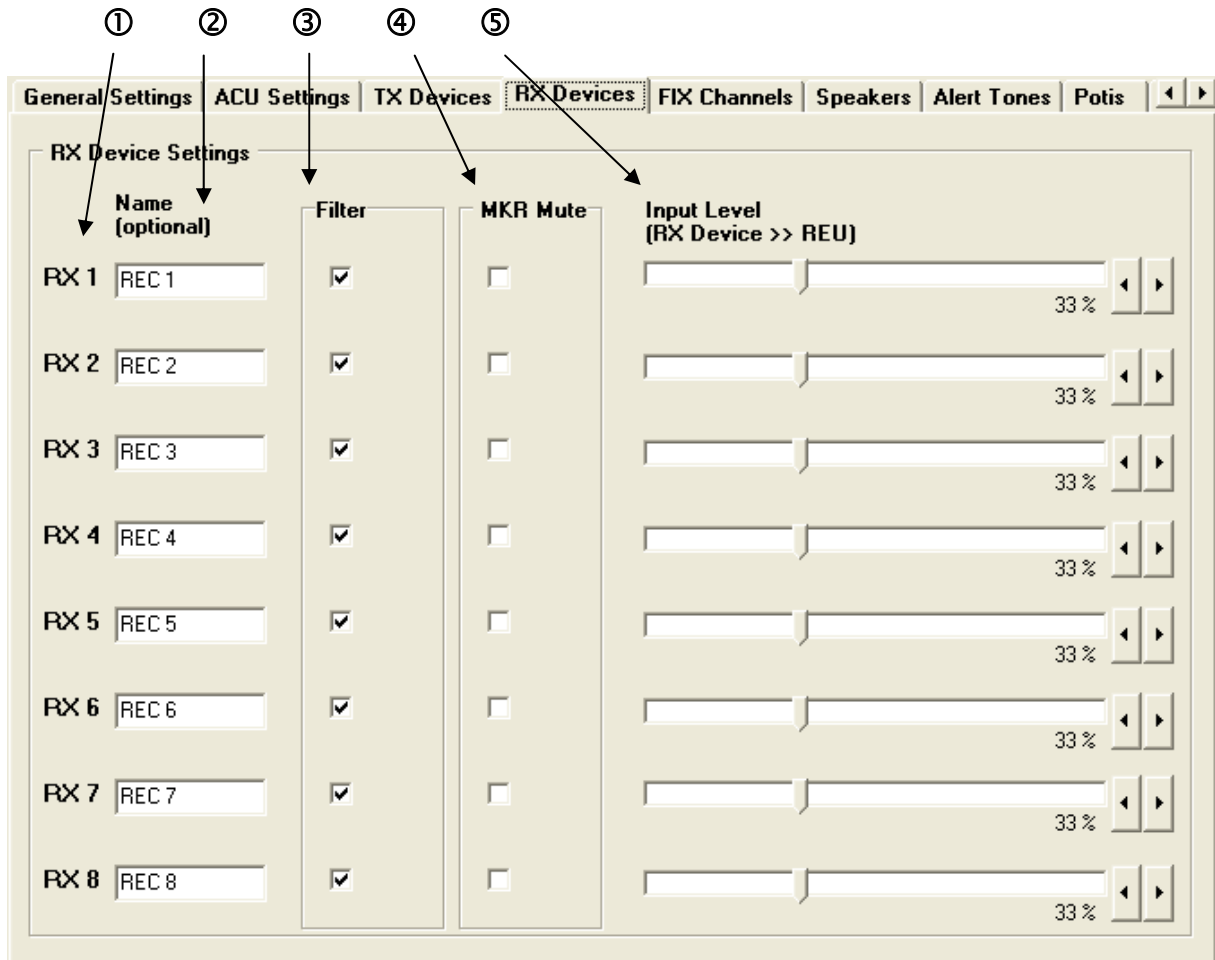


Figure 26 Data Screen “RX device settings”

- ① This column shows the standard name for the RX channels.
- ② For each RX channel you can define a special name for a better identification on the different pages. Those names are stored in the REU6100 and the data files you can create!
- ③ In this column you can activate or deactivate the availability of the VOICE filter for each RX channel.
 Navigation receivers are delivering an audio signal with different messages. For suppressing of the 1020Hz Morse code identifiers in the audio signal the user of the DVCS6100 can activate a voice filter by pressing the VOICE key on the ACU6100 panel. This filter is active for the RX channels with activated filter availability only.
- ④ This column activates the Marker Mute functionality for each RX channel.
- ⑤ The 5th column is responsible for the input level setting. The value can be changed by using the sliders or the up/down keys. Higher values means, a necessity of lower levels at the input for reaching the standard level at the headphone

8.5 Data Screen “FIX Channels”

Up to 6 fixed channels can be used for supplying the intercommunication system with special audio signals. The volume of this signals can't be changed by the user while operation. For the setting of the volume for the fixed signals the “FIX Devices” page is responsible.

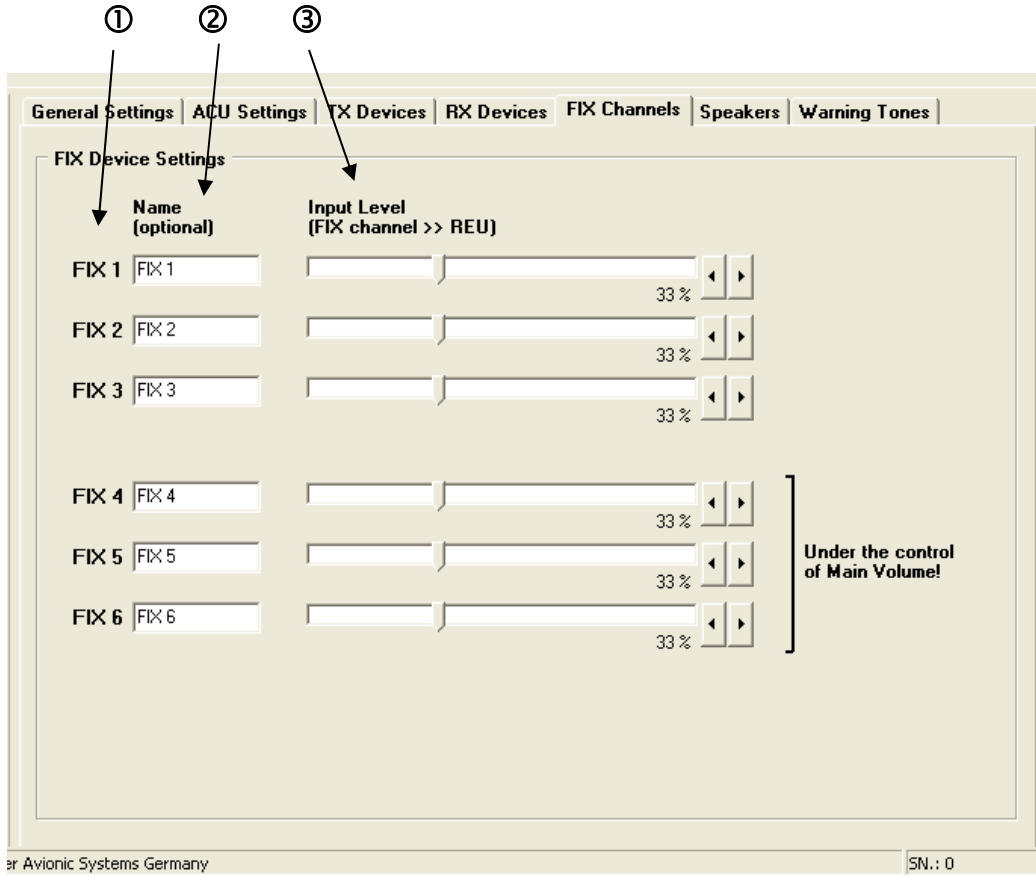


Figure 27 Data Screen “FIX channel settings”

- ① This column shows the standard name for the FIX channels.
- ② For each FIX channel you can define a special name for a better identification on the different pages. Those names are stored in the REU6100 and the data files you can create!
- ③ The 3rd column is responsible for the input level setting. The value can be changed by using the sliders or the up/down keys. Higher values means, a necessity of lower levels at the input for reaching the standard level at the headphone.

8.6 Data Screen “Speakers Settings”

The DVCS6100 has the ability to connect in total 2 independent speaker systems. One of this 2 speaker lines at a time can be controlled by ACU1 or ACU2. The unity is defined before delivering the REU6100 by BECKER.

On this page you can set the rated power for the speaker lines.

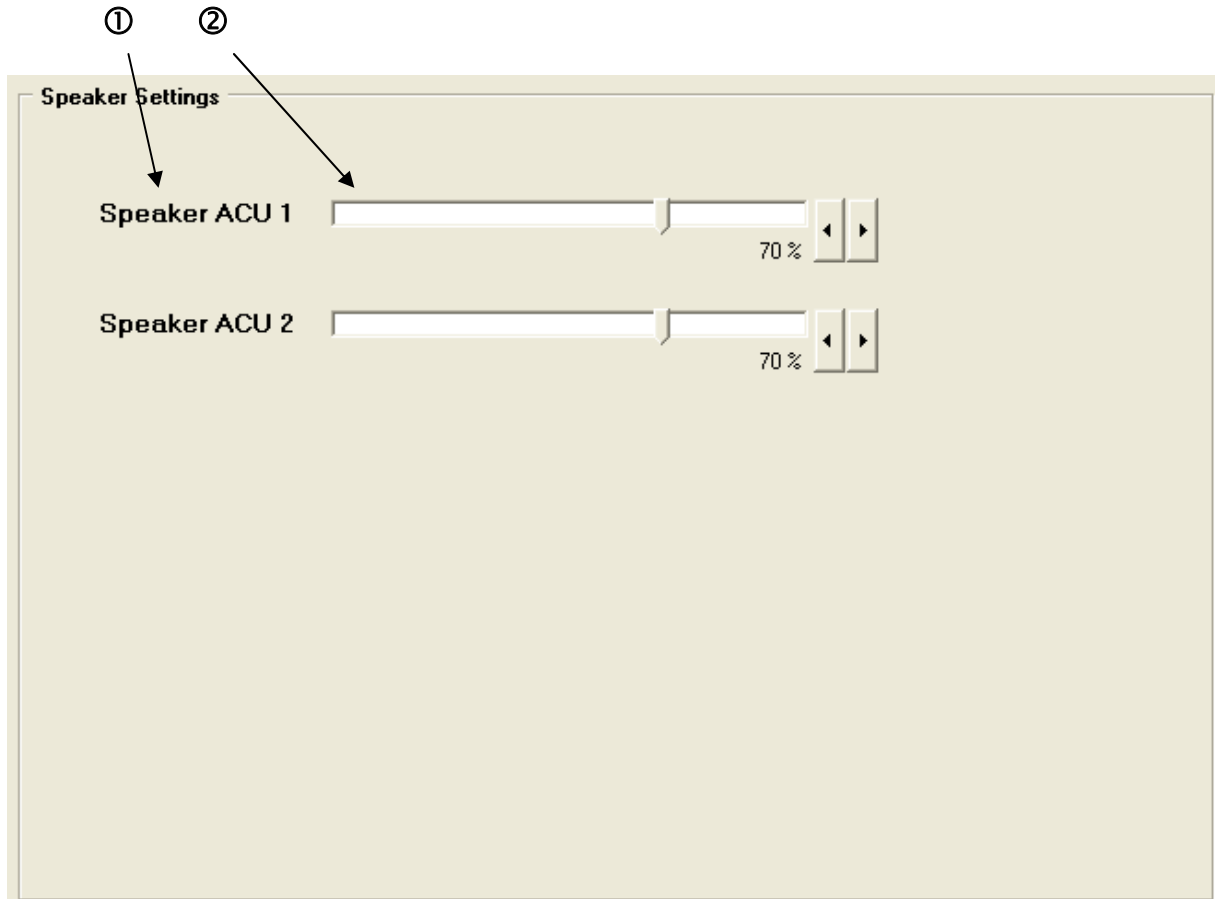


Figure 28 Data Screen “Speaker settings”

- ① This column shows the speaker channels.
- ② This column is responsible for the output level setting. The value can be changed by using the sliders or the up/down keys.

8.7 Data Screen “Alert Tones Settings”

The DVCS6100 has the ability to activate 8 different alert tones via discrete inputs. Those alert tones can be configured in some parameters on the “Alert Tones” page.

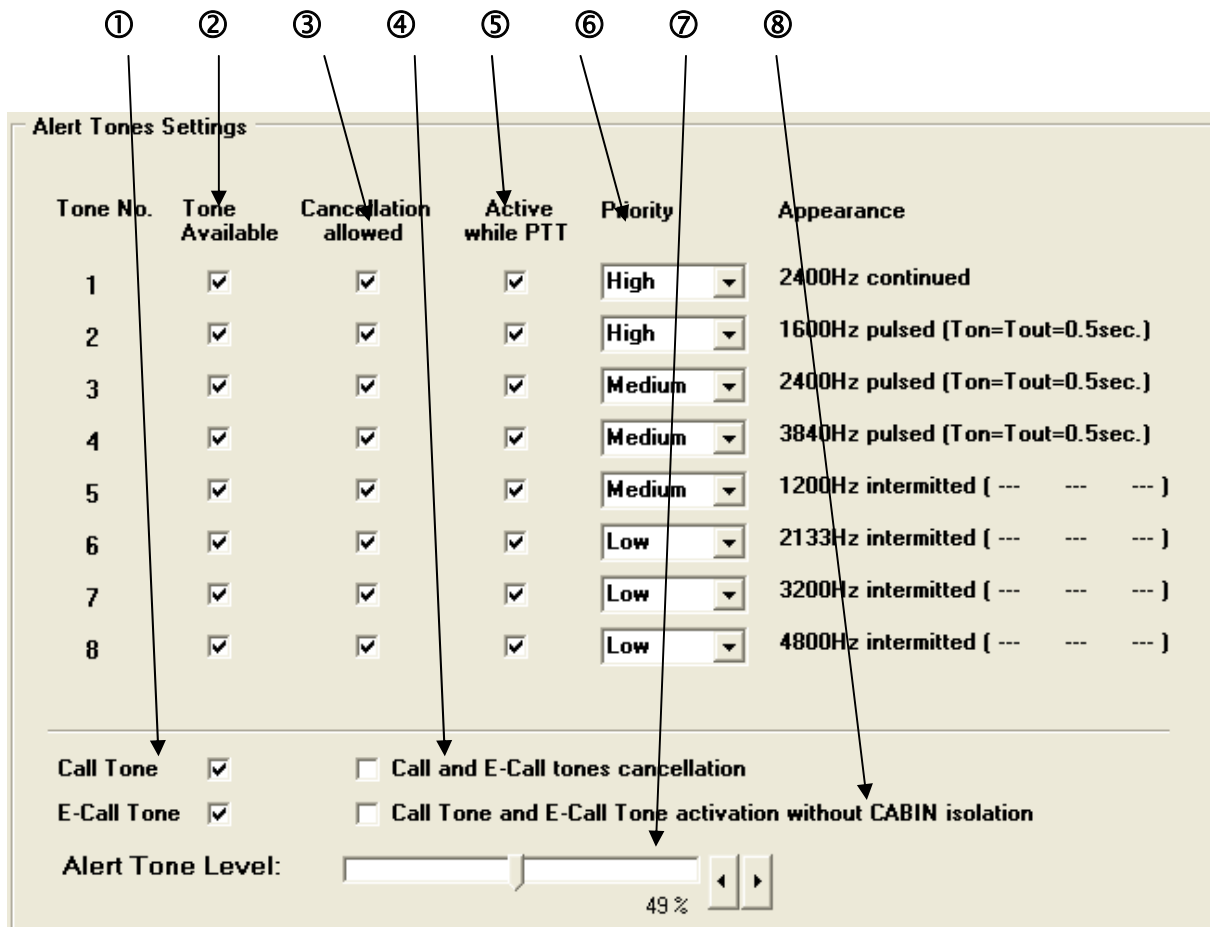


Figure 29 Data Screen “Alert tones settings”

- ① The alert tone for CALL and E-CALL are able to be individual activated or deactivated in the configuration of the system. If the corresponding box is checked, the tone will be audible while CALL mode is active.
- ② This column shows the availability of each alert tone. A tone is not available if the corresponding IC-Key input is enabled (see, page 24).
- ③ If alert tones are triggered the user can cancel the alert signal output by activation of “Control in 2” (REU6100; P2; Pin 6; Alert Tone Cancellation) if this is allowed by setting in this column.
- ④ Call and E-Call tones can be cancelled when calling.
- ⑤ Some alerts have to be inactive while transmit operation. In this column you can configure this function.
- ⑥ For the alert tones there are 3 priority levels: high, medium and low. Alerts with a higher priority are suppressing the output of alerts with lower priority. The 4th column is responsible to configure the priority setting.
- ⑦ The output level of the alert tones can be set in this section. Higher values means a higher signal level routed to the headphones
- ⑧ Call and E-Call can be activated even if the cabin is not isolated (deactivated by default)

8.8 Data Screen “Test Results”

The DVCS can records failures for REU and connected ACU in a failure history. Those errors can be read and erased from REU memory.

The screenshot shows a software interface titled "Test Results". It features a table with 10 rows and 8 columns: "Test Latch", "REU", "ACU 1", "ACU 2", "ACU 3", "ACU 4", "ACU 5", and "ACU 6". The first row is highlighted, with the REU value "00000028". To the right of the table are four buttons: "Read from REU", "Reset Memory", "Initiate BIT", and "Print Results". Below the table is a text prompt: "Please click on the field in the table you want to analyze." followed by a scrollable text area containing "REU IBIT Results:", "-CAN1 error", and "-ACU connection error".

Test Latch	REU	ACU 1	ACU 2	ACU 3	ACU 4	ACU 5	ACU 6
1	00000028	0000	0000	0000	0000	0000	0000
2	00000000	0000	0000	0000	0000	0000	0000
3	00000000	0000	0000	0000	0000	0000	0000
4	00000000	0000	0000	0000	0000	0000	0000
5	00000000	0000	0000	0000	0000	0000	0000
6	00000000	0000	0000	0000	0000	0000	0000
7	00000000	0000	0000	0000	0000	0000	0000
8	00000000	0000	0000	0000	0000	0000	0000
9	00000000	0000	0000	0000	0000	0000	0000
10	00000000	0000	0000	0000	0000	0000	0000

Please click on the field in the table you want to analyze.

REU IBIT Results:
 -CAN1 error
 -ACU connection error

- ① Short text description of the errors recorded in the selected entry.
- ② Hexadecimal code of the errors recorded in the selected entry.
- ③ Print results out
- ④ Initiate REU Build In Tests
- ⑤ Press this button will reset the failure history memory in the REU
- ⑥ Pressing this button will initiate a failure history reading in REU memory and display the results

8.8.1 REU Error Codes

Bit	Error	Description
2	CAN0	CAN0 bus malfunction, check CAN connectivity
3	CAN1	CAN1bus malfunction, check CAN connectivity
5	ACU connection	A configured ACU is not attached
6	DPRAM	Internal error, no user serviceable part
8	FLASH	Internal error, no user serviceable part
14	NOVRAM	EM not attached or Internal error, no user serviceable part
15	POTIAPP	Internal error, no user serviceable part

8.8.2 ACU Error Codes

Bit	Error	Description
0	ADC	Internal error, no user serviceable part
2	CAN0	CAN0 bus malfunction, check CAN connectivity
3	CAN1	CAN1bus malfunction, check CAN connectivity
5	ACU settings	ACU settings not received from REU
6	DIMMCTRL	Internal error, no user serviceable part
7	EEPROM	Internal error, no user serviceable part
8	FLASH	Internal error, no user serviceable part
12	IOE	Internal error, no user serviceable part

9 Config File Version

CSW can handle all versions of DVCS6100, but depending on REU version, some features can be accessible or not.

User can choose the set of features to enable depending on the used REUs, using menu Options/Config File Version.

Auto Detect button will automatically choose the native, optimal, config file version of the connected REU, if any.

It's possible to force usage of set of features lower than the REU's native one but CSW will not allow using a set of features higher than the REU's native one.

Upgrade of settings is always possible, downgrade of settings is not allowed.

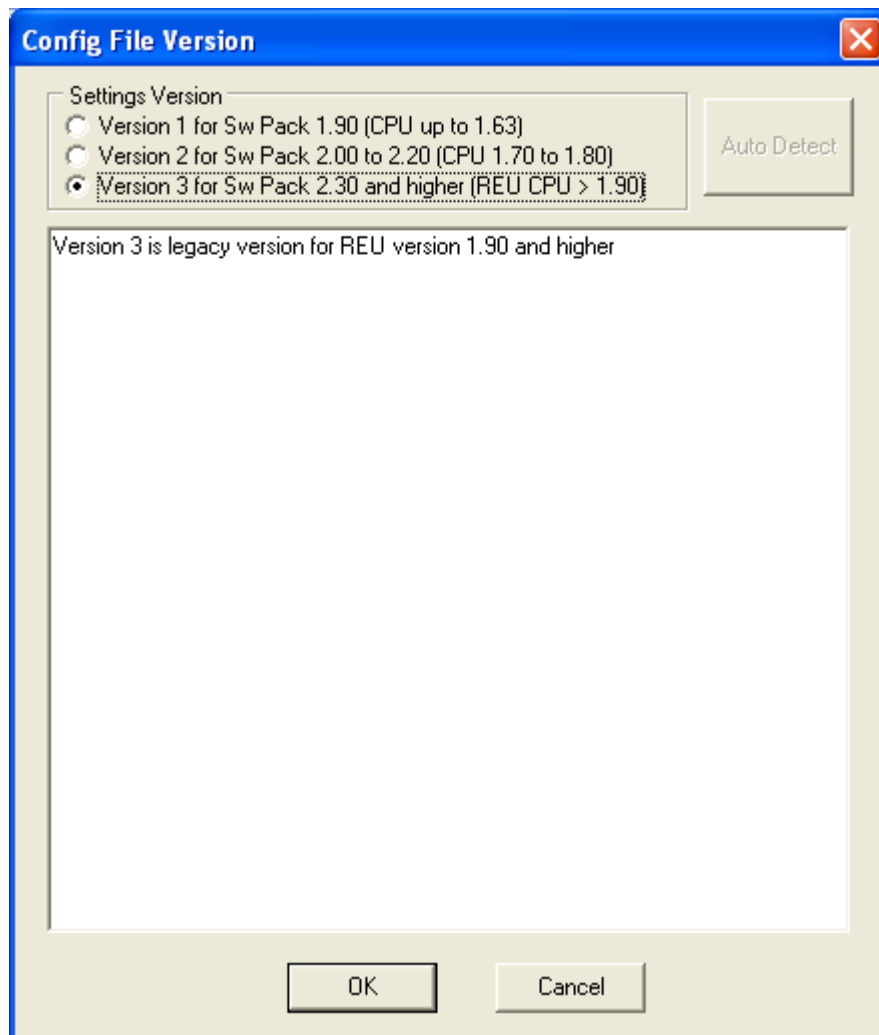


Figure 30 Config File Version dialog box

10 User Levels

The program is made to work with two different user levels (“Customer” and “System Integrator”).

The selection will be done by the settings dialog described at Menu Item “Settings”, page 15. After the first installation of the CSW6100 software on a computer, the user level is “Customer”. To change into the “System Integrator” user level you have to activate “Change User Level” in the dialog box. The user level “System Integrator” is selectable by entering a special code in the edit field only. Please contact “Becker Flugfunkwerk GmbH” to clarify the possibility for you to get this code. After entering the correct code you are able to select an user level different to “Customer”. Click “OK” to make the selection active. The data screens will be actualized immediately to show all data for the new user level.

10.1 User Level “Customer”

The user level “Customer” is made for end users, which want to configure the system for their own requirements. However it is not possible to change the general system configuration like addressing, TX/RX channel availability or filter availability. Some configuration fields in the CSW6100 software will be shown in gray color and are not editable. Those configurations can be done by system integrators only.

10.2 User Level “System Integrator”

The user level “System Integrator” is made for the people, which are implementing DVCS6100 in aircrafts. They have all possibilities to configure the system for the aircraft requirements.

Default password is 12348765

Note: Changes of settings inside user level “System Integrator” could affect airworthiness of the aircraft.

11 Configuration Data Files

For preparing configurations or a trace ability of the configurations you made, it is possible to create configuration files which are stored in individual folders on your computer or directly on the CodeMeter stick. For that the commands “Open Data File”, “Save Data to File” and “Save as ...” (see chapter 5.1) are available in the “File” menu. The data files can not be read by a standard editor because of its special format. The file name extension is “DV6” for a reliable identification. All configuration data, the date and time of storage and the content of the description field are stored in the file.

11.1 Predefinition of Configuration Data Sets

With the CSW6100 software you are able to predefine configurations without a connected DVCS6100.

After start of the configuration software select “>File >New Data Set” in the menu line (see chapter 5.1) and a complete configuration data set will attempt on screen. This data set based on a standard configuration can be edited without a connected device. If the configuration fits all your requirements, fill the description field on “General Settings” page and select “>File >Save as” in the menu line (see chapter 5.1). In the “Save as” dialog you are able to select your preferred data folder and to give in a filename.

For additional configuration data sets, repeat this procedure.

11.2 Use Predefined Configuration Data Sets

To load predefined configuration data sets in a plugged DVCS6100 select “>File >Open Data File” in the menu line (see chapter 5.1). In the attempting “Open file” dialog select the data file you want to use and click the “Open” button. The selected configuration data set will appear on screen. Press “Connect” in the button bar (see chapter 6.1) to create a data link with the connected DVCS6100. After a moment the “Bus Status” display (see chapter 7.1) shows a green bar (flashing with yellow color) for a correct data link. Now you are able to send the complete configuration data set to the REU6100 by using “Send configuration to REU” in the “Options” menu (see chapter 5.2).