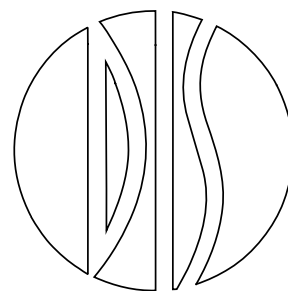


# CDS 4000 COMMANDER

*User Manual*



Microphone Control Software

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## Introduction

This software is used to control the CDS4000 microphone systems by DIS (Danish Interpretation Systems). The program is distributed as a DEMO-version free of charge where the actual control of the microphone system is not implemented, but only simulated, and as a full featured version to control microphone systems of up to 100 or 1000 microphones.

The software is used to display information of the microphone system to the user - who is currently speaking and in request, how much speaking time have the individual delegates used. To control the microphone system - switching microphones on/off, controlling the volume and mode of the system. To generate log files of microphone activity for printing out, and to display fully customizable screens containing information for display on monitors/projectors.

The software supports international character sets for entering delegate data.

### Normal Version

To use this software with a RS4232 card the key code<sup>1</sup> for the individual key of the RS4232 card is needed. This code can be obtained from DIS. The key of the RS4232 card can be read from the label placed on the RS4232 card. First time the software is started with a new RS4232 card connected, the program will display the key of the RS4232 card and prompt the user for the key code.

This software will work with microphone systems of up to 100 microphones or up to 1000 microphones depending on the key code.

### Demo Version

This software is for DEMO-purposes only and can not be used to control a DIS CDS4000 microphone system. To simulate activity in the microphone system please use the CDS4000 **Demo Microphone Simulator Window**.

In order to use the software with a microphone system You need a CU4005 or CU4010 Central Unit equipped with a RS4232 interface card (sold separately/or preinstalled). You also need the full version of this software together with a key code for the RS4232 card You want to use. The software is sold for use with microphone systems up to 100 microphones, and for use with microphone systems up to 1000 microphones.

To order a copy of the software contact your local DIS-dealer or **DIS Denmark Sales Department**.

## Contacting DIS

To order a copy of the software contact your local DIS-dealer or DIS Denmark Sales Department.

Danish Interpretation Systems A/S  
Vestre Teglade 8A-D  
2450 Copenhagen SV  
Denmark  
Fax: +45 33854040  
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<sup>1</sup>The **Key Code** enables the software to run with a specific RS4232 Card with the corresponding key. The **Key Code** enables the software for up to 100 or 1000 microphones. Find the **Key Code** on the disk labels.

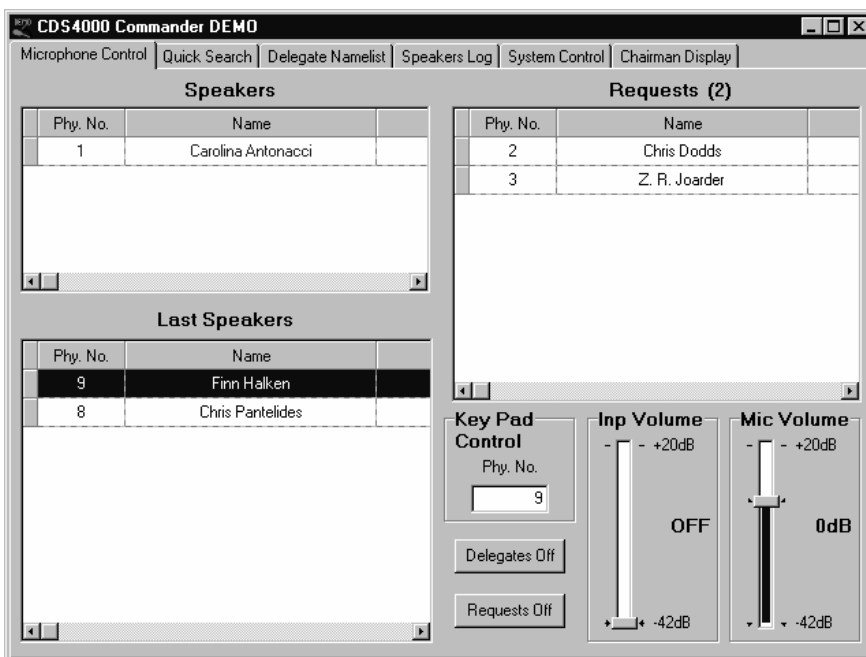
Please submit support questions, bug-reports, comments and suggestions to this software to the above address  
 ATT: Jesper Kring Jespersen:  
 or by e-mail: jkj@dis-dk.com

When submitting comments, please always include the file versions of the command.exe and comdisp.dll files found in the CDS4000 DEMO directory. If the comments refer to this help file please also include the file version of the command.hlp file. To see the file version use the Windows Explorer and right-click on the appropriate files, select properties and view the version page, where the file version is listed.

## Main Window

The CDS4000 Commander **Main Window** contains a tabbed notebook with 6 pages, each giving access to different controls for displaying system information as well as controlling the microphone system from the computer. The basic operation and set-up of the microphone system is described in the CDS4000 Manual - this help file only describes how to access the features of the microphone system from a computer. Many of the functions of the CDS4000 Commander will be disabled until communication with a powered microphone system has been established and the key code for the microphone system has been validated. Pressing <F1> will launch the context sensitive help system.

## Microphone Control Page



The **Microphone Control Page** is the most commonly used page for controlling the microphone system. This page contains the **Speakers Box**, **Requests Box** and **Last Speakers Box**, displaying microphones currently in speak, in request and a recent speakers list.

The **Input Volume** and **Microphone Volume** of the central unit can also be controlled from this page.

There is an edit box for controlling the microphone system using the keypad and microphone numbers.

The **Delegates Off Button** allow chairman microphone functionality to be implemented from the computer and **Requests Off Button** facilitates removing all requests from the request queue.

If any one of the controls on the microphone control page has focus pressing a number on the numerical keypad will clear the **Key Pad Control Edit Box**, shift focus to the edit box and enter the number pressed in the edit box - to facilitate fast and easy operation of microphone system.

If any one of the controls on the **Microphone Control Page** has focus pressing the <F2> key will toggle to the **Quick Search Page**.

Pressing <F5>..<F10> will move to the **Quick Search Page**, clear all **Delegate Filter Edit Boxes** and position the cursor in the **Delegate Filter Edit Box** that corresponds to the F key pressed. <F5>=Field1 .. <F10>=Field6.

Pressing <F11> will move to the **Quick Search Page** and toggle the enable state of the filter on the **Quick Search Page**.

Pressing <F12> will move to the **Quick Search Page** and clear the filter on the **Quick Search Page**.

## Speakers Box

The **Speakers Box** has an entry for each microphone currently on - The microphone number as well as the selected fields from the name list. and possibly the time is displayed for each microphone.

A microphone is added to the top of the speakers list when the microphone is switched on - but delegate microphones are always displayed on top of chairmen microphones.

A microphone in the speakers box can be switched off by:

- Dragging the microphone to the **Last Speakers Box**. (On the **Quick Search Page** the microphone can be dragged to the **Delegates Box**)
- Double clicking with the mouse positioned over the microphone entry.
- Right clicking with the mouse positioned over the microphone entry.
- Pressing the <-> key while the microphone is selected.

See the **Microphone Boxes** for more information on the **Speakers Box**.

The **Speakers Box** is located on the **Microphone Control Page** and the **Quick Search Page**.

## Requests Box

The delegate microphones are added to the bottom of the request list, and the title of the **Requests Box** displays the number of microphones currently in request.

A microphone in the **Requests Box** can be put in speak by:

- Dragging the microphone to the **Speakers Box**.
- Double clicking with the mouse positioned over the microphone entry.
- Pressing the <ENTER> key while the microphone is selected.

A microphone can be removed from the **Requests Box** by:

- Dragging the microphone to the last **Delegates Box**. (Only on the **Quick Search Page**)
- Right clicking with the mouse positioned over the microphone entry.
- Pressing the <-> key while the microphone is selected.

See the **Microphone Boxes** for more information on the **Requests Box**.

The **Request Box** is located on the **Microphone Control Page** and the **Quick Search Page**.

## Last Speakers Box

When a microphone is turned off the microphone will be entered at the topmost position of the **Last Speakers Box**. Switching the microphone back on will remove the entry in the **Last Speakers Box**.

A microphone in the **Last Speakers Box** can be put in speak by

- Dragging the microphone to the **Speakers Box**.
- Double clicking with the mouse positioned over the microphone entry.
- Pressing the <ENTER> key while the microphone is selected.

A microphone in the **Last Speakers Box** can be put in request by:

- Dragging the microphone to the **Requests Box**.
- Right clicking with the mouse positioned over the microphone entry.
- Pressing the <+> key while the microphone is selected.

See the **Microphone Boxes** for more information on the **Last Speakers Box**.

The **Last Speakers Box** is located on the **Microphone Control Page**.

## Microphone Boxes

The **Speakers Box**, **Requests Box** and **Last Speakers Box** have a number of similarities described here.

To change the display format for the **Microphone Boxes** select the **Delegate Name List Page/Display Delegate Name List, Select Fields To Display Speed Button**.

Delegate microphones are displayed with black text on a white background - if the microphone is highlighted (selected) white text on a blue background is used. Chairmen microphones are displayed using blue text on a white background - if the microphone is highlighted (selected) yellow text on a blue background is used.

If the microphone has timed out and the alarm on timeout option is selected (**System Control Page**) the delegate microphone is displayed with black text on a red background - if the microphone is highlighted (selected) white text on a purple background is used. Chairmen microphones do not display time out alarm information.

To change the selected microphone use the mouse and click on the microphone entry or use the up/down arrows when the microphone box has focus to change selected microphone and scroll the microphone box vertically.

To change the visible fields (columns) use the horizontal slider or if the table has focus the left/right arrows. To change the horizontal size of a field (column) drag the dividing lines on the title bar to make the field smaller or larger - if a field has been made larger than the size of the containing box then a mouse click on the title bar (header) of the field will shrink it to the maximum size of the containing box.

If the size of the fields in one of the boxes has been changed, the user will be prompted to save the current display widths with the delegate data when closing the program - select yes to save the new display settings or no to maintain the settings that existed when the program was opened.

## Key Pad Control Edit Box

The label next to this edit box displays what numbers are currently displayed/used to control the microphone system. Look in the CDS4000 Manual for a thorough explanation of logical/physical numbers.

Hitting a number on the numerical keypad while any control on the **Microphone Control Page/Quick Search Page** has focus will shift focus to the **Key Pad Control Edit Box**, flush the current content of the edit box and insert the number pressed. The **Delegate filter** will be disabled, and as the number is entered the current microphone of the **Delegates Box** will change to the microphone closest to the number entered.

When a number has been entered in the control:

- <ENTER>: will put the corresponding microphone in speak.
- <+>: will put the corresponding microphone in request.
- <->: will switch the corresponding microphone off (if in speak or request).

The **Key Pad Control Edit Box** is located on the **Microphone Control Page** and the **Quick Search Page**.

## Input Volume/Microphone Volume Track bars

These track bars are used to display and control the current volume settings of the microphone system. The track bar position displays the last level sent to the microphone system from the computer while the blue bar displays the feedback from the microphone system.

To change the current volume level, the track bar can be controlled by mouse. If the control has focus, the keyboard can be used to control the level.

- <Up Arrow>, <Left Arrow>: increments the volume by 1dB.
- <Down Arrow>, <Right Arrow>: decrements the volume by 1dB.
- <Page Up>, Mouse Click above current position: increments by 5dB.
- <Page Down>, Mouse Click below current position: decrements by 5dB.
- <Home>: Sets the level to 0dB.
- <End>: Sets the level to OFF.

The **Input Volume/Microphone Volume Track Bars** are located on the **Microphone Control Page** and the **System Control Page**.

## Delegate Off/Request Off Buttons

The **Delegate Off Button** has the same functionality as the Delegate Off button of any chairmen microphones connected to the microphone system. Pressing the **Delegate Off Button** will switch off delegate microphones presently in speak.

The **Delegate Off Button** is only available when the microphone system is in Automatic<sup>2</sup> or Manual<sup>3</sup> mode - the button is disabled in FIFO<sup>4</sup> mode.

Pressing the **Requests Off** button will empty the current request list.

The **Delegate Off/Request Off Buttons** are located on the **Microphone Control Page**.

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<sup>2</sup>In **Automatic Mode** delegate microphones are put in speak by pressing the ON/OFF button if the maximum allowed number of speakers is not exceeded.

<sup>3</sup>In **Manual Mode** delegate microphones are put in the **Request List**, when the microphone ON/OFF button is pressed. An operator must put the delegate microphones in Speak using the CDS4000 Commander Software or a MC4000 Microphone Control Unit. Delegates can still turn the microphone off using the ON/OFF button.

<sup>4</sup>In **FIFO Mode** the delegate microphones are put in speak when the ON/OFF button is pressed until the maximum number of speakers is reached, then the microphones will be put in the request list. When a microphone is turned off the first microphone in the request list will be turned on. Usually the maximum number of speakers is limited to one when **FIFO mode** is used.

## Quick Search Page

The **Quick Search Page** is used for controlling the microphones, when fast and easy access to individual delegates by data from the name list, is needed. This page contains the **Speakers Box** and **Requests Box** displaying microphones currently in speak or in request.

The **Delegates Box** displays all data for each delegate in the name list. The contents of the **Delegates Box** may be altered by use of the **Delegate Filter Group Box**, where filter criteria's may be entered to narrow number of delegates being displayed in the **Delegates Box**.

### Delegates Box

The delegates box displays the current delegate name list.

If an entry in the delegate name list, does not correspond to a microphone present in the system the entry is displayed in gray text on a white background - if the microphone is highlighted (selected) dark gray text on a light blue background is used. Delegate microphones are displayed with black text on white background - if the microphone is highlighted (selected) white text on a blue background is used.

Chairmen microphones are displayed using blue text on a white background - if the microphone is highlighted (selected) yellow text on a blue background is used.

The contents of the **Delegates Box** can be sorted according to a specific field by clicking on the header of the field with the mouse.

The **Delegates Box** is located on the **Quick Search Page**.

### Delegate Filter

The **Delegate Filter Group Box** has an Edit Box for each field in the delegate name list. Entering a value in one

of these edit boxes when the **Apply Filter Check box** is not checked will move the current microphone in the **Delegates Box** to the delegate entry closest matching the content of the Edit Box.

When the **Apply Filter Check box** is checked the contents of all **Filter Edit Boxes** will be used to narrow the displayed entries in the **delegates box**. If the letter 'A' is entered in a filter edit box only delegate entries with the corresponding field starting with the letter 'A' will be displayed in the delegate box.

Use of the wild card character '\*' is supported in the delegate filter - Entering '\*a' in a filter edit box will display only entries with the letter in the corresponding field in the delegate box - but not necessarily as the first letter. (e.g. 'Allan' and 'Patrick' are both valid since both names contains the letter 'A').

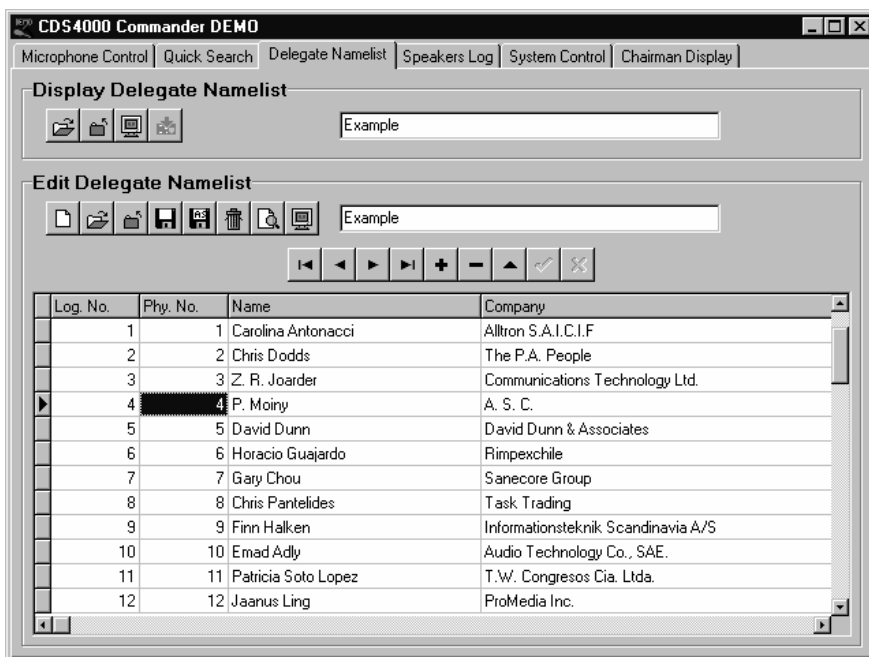
The **Clear Filter Button** will clear all edit boxes - <F12> has the same function.

A group of radio buttons selects which field is currently the default field.

Pressing a character when one of the other boxes on the **microphone control page** or **quick search page** has focus will clear all edit boxes in the delegate filter, insert the character in the default field and check the apply filter check box to enable the filter.

Entering one or more characters in one of the filter edit boxes when the **Apply Filter Check box** is not checked will move the position in the **Delegates Box** to the delegate entry most closely matching the characters entered. The **Delegates Filter** is located on the **Quick Search Page**.

## Delegate Name List Page



Name lists are used to identify microphones not only by numbers but by the name and other information on the delegate using the microphone.

The **Delegate Name List Page** is used to control which name list is currently displayed using the **Display Delegate Name List Box** and which fields from the displayed name list are visible, as well as editing existing or new name lists using the **Edit Delegate Name List Box**.

### Display Delegate Name List Box

This box contains an edit box showing the name of the name list. currently displayed - (if any).

Speed buttons are used to **Open** or **Close** name lists for display and a speed button is used to open the **Displayed Delegate Fields Dialog Box** for selection of displayed fields in the open name list.

If a MC4000 Microphone Control unit is present in the system a speed button can be used to **download** the logical number/physical number conversion table from the PC to the MC, to ensure that the same numbers are used in both systems.

The **Display Delegate Name List Box** is located on the **Delegate Name List Page**.

### Edit Delegate Name List Box

This box contains an edit box showing the name of the name list. currently edited - (if any).

Speed buttons are available for standard file operations **New, Open, Close, Save, Save As, Delete**.

When New is used the **Delegate Name List Format Dialog Box** is opened for the user to specify the format of the delegate name list. to be created. The **Preview Print Speed Button** opens a dialog to create a print-out of selected fields in the current delegate name list. The **Set Up Display Format on Delegate Name List Speed Button** opens the **Delegate Name List Format Dialog Box** with buttons to change the definition of the fields in the current name list. Also included are speed buttons to navigate an open delegate name lists.

The **Edit Delegate Name List Box** is located on the **Delegate Name List Page**.

### Displayed Delegate Fields Dialog Box

This dialog box contains radio buttons for the physical number/logical number fields that may be pressed to select which one is to be displayed. The display will always include one and only one of these numbers.

The user defined fields and the time field each have a check box that selects if the corresponding field will be displayed or not

The **Displayed Delegate Fields Dialog Box** is accessed from the **Display Delegate Name List Box**.

### Delegate Name List Report Creation Dialog Box

The Delegate Name list report creation dialog box contains two list boxes with available fields and report fields.

The **Available Fields List Box** shows all available fields not currently used in the print-out, and the **Report Fields List Box** shows all fields used in the print-out in the order at which they will appear on paper.

Fields may be moved between the available fields and report fields list boxes using the mouse or arrows to select a field and the **<move left>** **<move right>** buttons in the center of the dialog box to include/exclude the field from the print. The order of the fields included in print may be changed by selecting a field in the **Report Fields List Box** and using the **<move up>** **<move down>** buttons to switch positions. If the first field in the report fields list box is a user defined field then the **Group By Field Check Box** will be enabled. If the **Group By Field Check Box** is checked then the print will include phonebook like letter headers for the entries in the print. The name list print is always sorted by the first field in the report fields list box.

The print may be previewed by pressing the **Preview Button**. From the preview page it is possible to do the actual print-out.

The **Delegate Name List Report Creation Dialog Box** is accessed from the **Edit Delegate Name List Box**.

### Delegate Name List Format dialog box

This dialog box is opened when a new delegate name list is created or if the format of an existing delegate name

list is to be changed.

### When a new delegate name list is created

The Dialog box contains the **Number Of Fields Group Box** with radio buttons to select the number of user defined fields in the new delegate name list. The delegate name list always contains fields for the logical number and the physical number of the microphone as well as the calculated time field for display. Setting the **Number Of Fields Radio Button** enables the corresponding fields in the **Field Titles And Length Group Box**.

The **Field Titles And Length Group Box** contains **Title Edit Boxes** for all fields, where names for all fields user defined as well as predefined can be entered in any language. This title will be present in the headers on the various display boxes using the name list data.

Each of the user defined fields also contains a **Numerical Field Edit Box** with attached spinner to set the length of the field (maximum number of characters that can be entered in the name list in this particular field).

When the form is filled the creation of a new delegate name list may be initiated by pressing the **Ok Button** or canceled by pressing the **Cancel Button**.

### When the format of an existing delegate name list is changed

The number of fields radio buttons and field titles and length edit boxes show the current format of the name list and can not be used to change the format. Instead the buttons below must be used to change field titles or sizes and add or delete fields.

The **Change Title Button/Resize Field Button/Delete Field Button** opens the **Select Field Dialog Box**.

The **Add Field Button** opens the **Insert New Field Dialog Box**.

When fields are deleted they will be removed from the field titles and length group box and the number of fields radio buttons will be adjusted accordingly. Added fields will show up in the field titles and length group box with blue text in the edit boxes.

The **Delegate Name List Format Dialog Box** is accessed from the **Edit Delegate Name List Box**.

### Select Field Dialog Box

A list box shows the available fields. The mouse or arrow-keys can be used to select the field that is to be renamed, resized or deleted.

### Insert New Field Dialog Box

The insert new field dialog box contains a list box showing all available user defined fields plus a new field appended to the list. This new field may be moved up or down the list by pressing the **Up/Down** buttons. Pressing the ok button initiates the creation of the new field at the corresponding position in the name list.

### Title Change Dialog Box

The title change dialog box contains a single edit box where the title for this field may be entered.

### Size Change Dialog Box

The Size Change Dialog box contains a single numerical edit box with attached spinner where the size of the selected field may be entered.

## Speakers Log Page

Time	Phy no.	Action
13:41:01	2	SpkOn
13:41:08	3	ReqOn
13:41:19	2	SpkOff
13:41:21	3	SpkOn
13:41:48	4	ReqOn
13:41:54	1	ReqOn
13:41:57	3	SpkOff
13:41:58	1	SpkOn
13:41:59	4	SpkOn
13:42:01	3	SpkOn
13:42:06	3	SpkOff
13:42:09	1	SpkOff

The **Speakers Log Page** is used for creating detailed information on microphone activity during meetings. A log contains entries for all microphone activity speak on/off and request on/off including the number of the microphone and the time of the event.

A log that is created can later be printed out in a number of different formats each tailored to a specific use of the log - these print-outs will include user selected data from the delegate name list.

The **Speakers Log Page** contains the **Speakers Log Group Box**, where a log may be assigned for the current session, and the **View Speakers Log Group Box** where a speakers log for previous or current sessions may be viewed.

### Speakers Log Group Box

The **Speakers Log Group Box** contains speed buttons to create a new speakers log or append microphone activity to an existing speakers log as well as ending the log creation. The edit box contains the name of the speakers log currently in use.

The **Speakers Log Group Box** is located on the **Speakers Log Page**.

### View Speakers Log Group Box

The **View Speakers Log Group Box** contains speed buttons to **open, close, delete, print** delegate log files. The edit box contains the name of the delegate log files currently selected in the viewer. If a speakers log is open in the viewer the time/physical number/microphone activity fields for each entry in the log will be displayed in the grid. Speed buttons to navigate and refresh the open speakers log file are supported. When a new speakers log

file is opened all entries in the log will be displayed in the grid, however if the opened file is the one currently being updated by system activity new entries will not be displayed unless the file is reopened or refreshed. If a delegate name list is currently opened for display then this name list will be used to display delegate details for the current entry in the speakers log grid. Pressing the print delegate log file speed button will display the **Delegate Log Report Creation Dialog Box**.

The **View Speakers Log Group Box** is located on the **Speakers Log Page**.

### **Delegate Log Report Creation Dialog Box**

The **Delegate Log Report Creation Dialog Box** contains two list boxes with available fields and report fields.

The **Available Fields List Box** shows all available fields not currently used in the print-out, and the **Report Fields List Box** shows all fields used in the print-out in the order at which they will appear on paper.

Fields may be moved between the available fields and report fields list boxes using the mouse or arrows to select a field and the **<move left>** **<move right>** buttons in the center of the dialog box to include/exclude the field from the print.

The order of the fields included in print may be changed by selecting a field in the report fields list box and using the **<move up>** **<move down>** buttons to switch position.

The **Sort By Group Box** contains radio buttons to select if the delegate log should be printed using chronological order (**Sort By Time**) or using alphabetical order (**Sort By Delegate Data**).

If **Sort By Time** is selected then each microphone activity will get an entry in the log print-out and microphones not used during the session will have no entries in the log. If **Sort By Delegate Data** is selected then each delegate will get a separate entry in the log print-out and below this entry will be subentries in chronological order for microphone activity by this delegate.

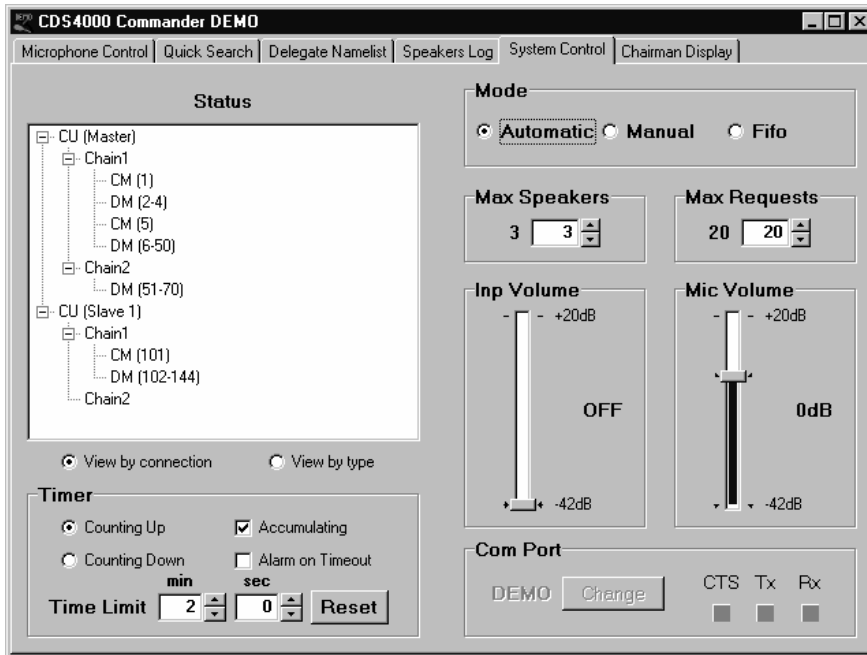
If **Sort By Delegate Data** is selected and the first field in the list is a user defined field then the **Group By Field Check box** will be enabled. If the **Group By Field Check Box** is checked then the print will include phonebook like letter headers for the entries in the print - the list will be sorted by the first delegate data field in the list.

The check boxes to include entries for requests and speakers allows the user to include or exclude entries for request on/request off and entries for the chairman in the print-out.

The print may be previewed by pressing the **Preview Button**. From the preview page it is possible to do the actual print-out.

The **Delegate Log Report Creation Dialog Box** is accessed from the **View Speakers Log Group Box**.

## System Control Page



The **System Control Page** is used to control the **operating mode** of the microphone system, the **maximum number of requests/speakers** allowed in the system and to **view status** for the system and the **serial port connection** to the system. This page also includes **volume controls** and the set-up of the **timer** which is used in the time displays for the delegates.

### Status Tree View

The **Status Tree View** can be operated in two modes selected by the **View By Connection** and **View By Type** radio buttons located below the tree view. If the **View By Connection** radio button is selected then the windows explorer type tree view has an expandable node for each Central unit detected in the system. (Please note that microphones must be connected to a CU for the CU to be detected). To view detailed information on the CU use the mouse to expand the appropriate node (clicking on the + sign).

The CU's each have two expandable nodes for the two chains - when the node for the chain is expanded it is possible to see the configuration of the microphones in the system. Chairman microphones are identified by a CM entry and Delegate microphones are identified by a DM entry. The number's next to the DM or CM's indicate at which physical positions these microphones are located.

When the **View By Type** radio button is selected there are 3 entries in the tree view showing how many units (CU - Central unit, DM - Delegate Microphone, CM - Chairman Microphone) are connected in the system.

The **Status Tree View** is located on the **System Control Page**.

### Timer Group Box

The **Timer Group Box** is used to control the operation of the timer. Radio buttons can select if the timer

operates in counting up or counting down mode. When **Counting Up** is selected the speaking time of the microphones are displayed counting up from 0, when **Counting Down** is selected the speaking time of the microphones are displayed counting down from the time limit.

The time limit is set in minutes and seconds using the two numerical edit boxes with attached spinners.

The **Accumulating Check Box** if checked results in subsequent speaking times of the same delegate to be accumulated and the total displayed. If Accumulating is not checked then the speaking time is initiated each time the delegate turns on the microphone. **Alarm On Timeout** if checked results in a visible alarm on the display pages if a speaker has exceeded the time limit - a red bar showing in the **Speakers Box**, **Requests Box** or **Last Speakers Box** if the delegate is present in one of these lists. The Alarm may also be used on the **Chairman Display Window** controls depending on the settings of these controls.

The **Reset Button** is used to reset the speaking time of all delegates.

The **Timer Group Box** is located on the **System Control Page**.

### Mode Group Box

The **Mode Group Box** contains radio buttons for the 3 operating modes of the microphone system - Automatic, Manual and FIFO. The operating mode can be controlled by pressing the radio buttons. For a detailed description of these operating modes please refer to the CDS4000 Manual.

The **Mode Group Box** is located on the **System Control Page**.

### Max Speakers/Max Requests Group Box

These group boxes contains labels to show the current reported setting of the microphone system and numerical edit boxes with attached spinners for adjusting the settings of the microphone system. If the spinner is used the current setting will be incremented/decremented and transmitted to the central unit - the label will provide feedback from the microphone system when the new setting has been acknowledged. If the numerical keypad is used to enter a new setting in the numerical edit box then **<enter>** must be pressed in order for the new setting to be transmitted to the microphone system. For a detailed description of the Max Speakers/Max Requests settings please refer to the CDS4000 Manual.

The **Max Speakers/Max Requests Group Box** are located on the **System Control Page**.

### Com Port Group Box

The **Com Port Group Box** has a label showing which com port on the PC is currently used for the connection to the microphone system. The **CTS RX TX** lamps show the current status of the serial communications lines. A RS232 or RS422 connection with hardware handshake is used to the microphone system. A red light indicates that the corresponding line is active as opposed to a gray light indicating no activity - these lights can be useful in finding **communications problems**.

The **Change Button** will display the **Com Port Settings Window** from which it is possible to select which com port should be used for the communication.

The **Com Port Group Box** is located on the **System Control Page**.

### Com Port Settings Window

This window contains radio buttons for com ports 1 to 4 showing the current selected com port. To change the active com port press the appropriate radio-button, and then press ok. If a com port is not present on the computer or in use by another program then the corresponding radio button will be grayed out and not possible to select.

The **Com Port Settings Window** is accessed from the **Com Port Group Box**.

## Communications Problems

To achieve reliable communication with the RS4232 card it is necessary to adjust the WIN95 setting for the COM-port used to communicate with the RS4232 card.

- In Windows 95 Open the Control Panel by choosing: Start, Settings, Control Panel
- Double Click on the System Icon
- Choose the Device Manager Page
- Click Show devices by Type
- Expand the node: Ports
- Select the Communications Port connected to the microphone system (COM1 - COM4)
- Click Properties
- Choose the Port Settings Page
- Click Advanced
- Choose Use FIFO Buffers
- Set Receive Buffer to Low (1)
- Set Transmit Buffer to Low (1)
- Click OK, OK, OK

Some Windows95 versions OSR2 which come preinstalled on new computers contain a bug in the native serial driver. This bug results in the above settings not being used by the driver and thus communications will contain errors. To solve this problem a bug fix must be obtained from Microsoft or a replacement serial driver can be bought.

We have tested the communication using the TurboCom95 Pro serial driver from Pacific CommWare, and this driver achieves problem free communication.

## Chairman Display Window



The **Chairman Display Window** is used to display status from the microphone system in a window that can be configured in a very flexible way allowing the user to get exactly the type of display needed for large monitors view able by congress participants or to present only the required information to users not needing the advanced control functions of the software. The format of the display can be saved in a file allowing for the user to define a series of different display formats for different purposes and easily switching among these by means of loading the appropriate configuration file.

On a PC with dual monitor support it is possible to position the **Chairman Display Window** on one monitor and the CDS4000 Commander **Main Window** on the other monitor.

The **Chairman Display Window** holds the following controls: **Display Speakers Box**, **Display Requests Box**, **Chairmen Box**, **Info Box** and **Graphic Box** - each of these controls may be hidden if not needed. The set-up of the window is done by accessing the **main pop-up menu** by right clicking with the mouse in the window outside any visible controls.

### Main Pop-up Menu

The **Main Pop-up Menu** is selected by right clicking with the mouse in the **Chairman Display Window** outside any visible controls.

Commander: will bring the **main window** of the commander in to the foreground and change focus to this window - this is especially useful when the **chairman display window** is used in full screen mode. However it

is always possible to use the standard Windows way of switching tasks (using <ALT><TAB>) as the chairman display is a separate task on the Windows task bar.

- Close Window:* Will close down the **chairman display window** and return focus to the CDS4000 Commander **Main Window**.
- Save Display:* Calls up a standard file save dialog box where the format of the chairman display can be saved.
- Load Display:* Calls up a standard file load dialog box for loading a new format for the **chairman display window**.
- Full Screen:* Toggle the format of the **chairman display window** between normal format and full screen format - same as clicking maximize/normalize on the window title bar.
- Border:* Toggle the format of the **chairman display window** between normal window format with a border, title bar and possible scroll bars and a format showing no surrounding window but only the application client area.
- Display Items:* Change the visible property of the following controls - **Display Speakers box, Display Requests Box, Chairmen Box, Info Box** and **Graphic Box**.
- Background Color:* Calls up a standard windows color dialog for changing the background color of the window.

## Info Box

The **Info Box** is used for displaying formatted text on screen (e.g. a meeting title or agenda for the meeting). The text can be entered and formatted right on screen or a word processor can be used and the text imported in rich text format. Right clicking on the info box brings up the menu:

- Move:* Brings up an outline of the control with the mouse positioned at the center. Moving the mouse around will move the outline around - pressing the left mouse button will position the control according to the position of the outline - pressing the right mouse button cancel the move operation.
- Resize:* Brings up an outline of the control with the top left position at the original position of the control and the mouse as the lower right corner of the control. Moving the mouse around will change the size of the outline - pressing the left mouse button will resize the control according to the outline - pressing the right mouse button will cancel the resize operation.
- Hide:* Hides the control. To redisplay the control select the control from the **main pop-up menu**.
- Send to back:* Sends this control to the background unhiding any controls positioned under this control.
- Bring to front:* Sends this control to the foreground hiding any controls positioned over this control.
- Open file:* Brings up an open file dialog box for loading new contents into the info box - text can be loaded in Rich Text Format (\*.RTF files).
- Save file/Save file As:* Standard windows file save functionality for saving contents in rich text format.
- Clear text:* Empties the info box.
- Font:* Displays the windows dialog box for selecting a new font. If a section of the text is selected (highlighted) then the font of this text is changed - else the font at the cursor position is changed when new text is inserted.
- Color:* Displays a color dialog box for changing the background color of the control.
- Border:* Hides/unhides a border around the control.

The **Info Box** located in the **Chairman Display Window**.

## Graphic Box

The **Graphic Box** can be used to display any graphics in the Windows bitmap format, Icon format or Windows metafile format on screen (e.g. a company logo). Right clicking on the graphic box brings up the menu.

- Move:* Brings up an outline of the control with the mouse positioned at the center. Moving the mouse around will move the outline around - pressing the left mouse button will position the control according to the position of the outline - pressing the right mouse button cancel the move operation.
- Resize:* Brings up an outline of the control with the top left position at the original position of the control and the mouse as the lower right corner of the control. Moving the mouse around will change the size of the outline - pressing the left mouse button will resize the control according to the outline - pressing the right mouse button will cancel the resize operation.
- Stretch:* Toggles the stretch mode of the graphic box. When the graphic box is in stretch mode the graphics contents of the control will be resized vertically and horizontally to fill the graphics box, with a possible change in aspect ratio.
- Auto size:* Sizes the graphic box according to the size of the graphic it contains.
- Hide:* Hides the control. To redisplay the control select the control from the **main pop-up menu**.
- Load from file:* Displays a file open dialog box for opening a graphics file in the standard \*.bmp, \*.ico, \*.emf and \*.wmf formats.
- Send to back:* Sends this control to the background un hiding any controls positioned under this control.
- Bring to front:* Sends this control to the foreground hiding any controls positioned over this control.

The **Graphic Box** is located in the **Chairman Display Window**.

## Display Speakers Box

The **Display Speakers Box** is used for displaying information on current speakers. As opposed to the **Speakers Box** in the main program the **Display Speakers Box** in the **Chairman Display Window** is highly configurable and can be customized to show the information in the way best suited for a given situation. The **Display Speakers Box** can show information on speaking delegates only or include information on chairmen microphones - the colors of the text displayed for the chairmen and the delegates can be selected to distinguish the two.

Right clicking on the **Display Speakers Box** brings up a pop-up menu common to all **Microphone Display Boxes**.

The **Display Speakers Box** is located in the **Chairman Display Window**.

## Display Requests Box

The **Display Requests Box** is used for displaying information on delegates currently in request. As opposed to the **Requests Box** in the **Main Window** the **Display Requests Box** in the **Chairman Display Window** is highly configurable and can be customized to show the information in the way best suited for a given situation. Right clicking on the requests box brings up a pop-up menu common to all **Microphone Display Boxes**.

The **Display Requests Box** is located in the **Chairman Display Window**.

## Chairmen Box

The **Chairmen Box** is used to always display information on chairmen in the system. The color of the text and background for the individual chairmen microphones can then be set to visually display the status of the

chairman microphone - speaking or non speaking. Usually information on the chairmen is either displayed using the **Chairmen Box** or if the **Chairmen Box** is hidden by including the chairmen in the **Display Speakers Box** - not both. Right clicking on the chairmen box brings up a pop up menu common to all **Microphone Display Boxes**.

The **Chairmen Box** is located in the **Chairman Display Window**.

## Microphone Display Boxes

When the right mouse button is clicked on the **Display Speakers Box**, **Display Requests Box** or the **Chairmen Box**, the following Pop-Up menu appears.

- Move:* Brings up an outline of the control with the mouse positioned at the center. Moving the mouse around will move the outline around - pressing the left mouse button will position the control according to the position of the outline - pressing the right mouse button cancel the move operation.
- Resize:* Displays the sub menu:
  - Resize:* Brings up an outline of the control with the top left position at the original position of the control and the mouse as the lower right corner of the control. Moving the mouse around will change the size of the outline - pressing the left mouse button will resize the control according to the outline - pressing the right mouse button will cancel the resize operation.
  - Fit width to columns:* Changes the width of the control so that all visible columns are shown entirely and no extra space is present.
  - Fit height to rows:* Changes the height of the control so that all visible rows are shown entirely and no extra space is present.
  - Fit columns to width:* Resizes the columns proportionally so that all columns fit in the control.
  - Fit rows to height:* Resizes the rows proportionally so that all rows fit in the control.
  - Resize rows:* Shows a header style on the first column making it possible to resize the rows by dragging the dividing line between rows. The header row and the top data row should be resized, all other rows are made the same size as the top data row.
- Hide:* Hides the control. To redisplay the control select the control from the **main pop-up menu**.
- Bring to front:* Sends this control to the foreground hiding any controls positioned over this control.
- Send to back:* Sends this control to the background unhiding any controls positioned under this control.
- Columns:* Displays a sub menu with an entry for each field in the delegate name list. The corresponding column can be hidden/made visible by toggling the check mark next to the entry.
- Rows:* Displays a sub menu where the number of data rows can be set from 1 to 6.
- Chairmen:* [**Display Speakers Box**] A check mark can be toggled indicating if chairmen microphones in speak should be displayed in the display speakers box or not.
- Content style:* Displays the sub menu:
  - Font:* [**Display Speakers Box, Display Requests Box**] The font for displaying the delegate data can be selected.  
[**Chairmen Box**] The font for displaying the chairman data can be selected.
  - Chairman text color:* [**Display Speakers Box**] The color for displaying data for chairmen microphones can be selected.
  - Time out text color:* [**Display Speakers Box, Display Requests Box**] the color for displaying data for delegate microphones that have timed out can be selected
  - Speak text color:* [**Chairmen Box**] the text color of the chairman data when the chairman is in speak can be selected.

<i>Color:</i>	Used to select the background color of the control.
<i>Time out color:</i>	[ <b>Display Speakers Box, Display Requests Box</b> ] used to select the background color for rows containing data from delegate microphones that are timed out.
<i>Speak color:</i>	[ <b>Chairmen Box</b> ] the background color of a row with chairman data when the chairman is in speak can be selected.
<i>Border:</i>	Toggles the visibility of the border around the control.
<i>Grid:</i>	Displays the sub menu where the type of grid can be selected to None, Vertical, Horizontal or Both. Also includes an entry for selecting the color of the grid
<i>Header style:</i>	Displays the sub menu
<i>Visible:</i>	Used to show/hide the header bar.
<i>Header font:</i>	Select a new font for the header text.
<i>Header color:</i>	Select the background color for the header.
<i>Header grid:</i>	Displays a sub menu where the type of grid can be selected to None, Vertical, Horizontal, Both and 3D. The color and 2'nd color of the grid can also be changed from this menu. The second color is only used with a 3D type of grid. Selecting a bright first color and a dark second color makes the 3D grid look like the headers are lowered as opposed to selecting a dark first color and a bright second color which makes the grid look like the headers are raised.
<i>Title style:</i>	Displays the sub menu
<i>Visible:</i>	Used to show/hide the title.
<i>Font:</i>	Select a new font for the title.
<i>Name:</i>	Change the text of the title.
<i>Move:</i>	Brings up an outline of the title field that moves vertically with the mouse position. The horizontal position is fixed to the center of the control, that the title field is attached to.

If columns are to be resized individually, then the header must be made visible. Click on the header with the mouse to make sure the control is selected and then move the mouse over the dividing line between columns and click on the left mouse button to drag the dividing line between to resize the column to the left of the dividing line. A splitting cursor is shown when the cursor is over the midpoint between columns - when the header grid is hidden then the cursor shape is the only indication of the dividing point between columns.

To change the order of appearance of the columns drag the column - a thick vertical line will show the insertion point of the column.

## Last Used Log Window

This window displays at program start to prompt the user for a possible continuation of the last used speakers log file.

The filename of the last used speakers log file is displayed in an edit box.

The Log Options radio buttons are used to select if the last used log file should be continued during this session, a new log created or no log created.

The **Always Show This Dialog On Start-Up Check box** will if checked cause this window to always show at start-up - if not checked the last used log window will only show if the speakers log was not closed prior to the last program termination.

## Demo Microphone Simulator Window

The **Demo Microphone Simulator Window** is only present in demo versions of the program. This window is used to simulate microphone activity in the system for evaluation purposes of the program. Enter a number in the **Microphone Number Numerical Edit Box** and press the **On/Off button** to simulate pressing the on/off button of the corresponding microphone in a real microphone system. The **On/Off Button** will be disabled if the corresponding microphone number is not present in the demo-version.

The rules of the microphone system are also followed in this DEMO-version. (e.g. no more than Max Speak delegate microphones can speak at the same time etc.)

The **Demo Microphone Simulator Window** can not be closed only minimized as the main program contains no way of reopening a closed simulator window.

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