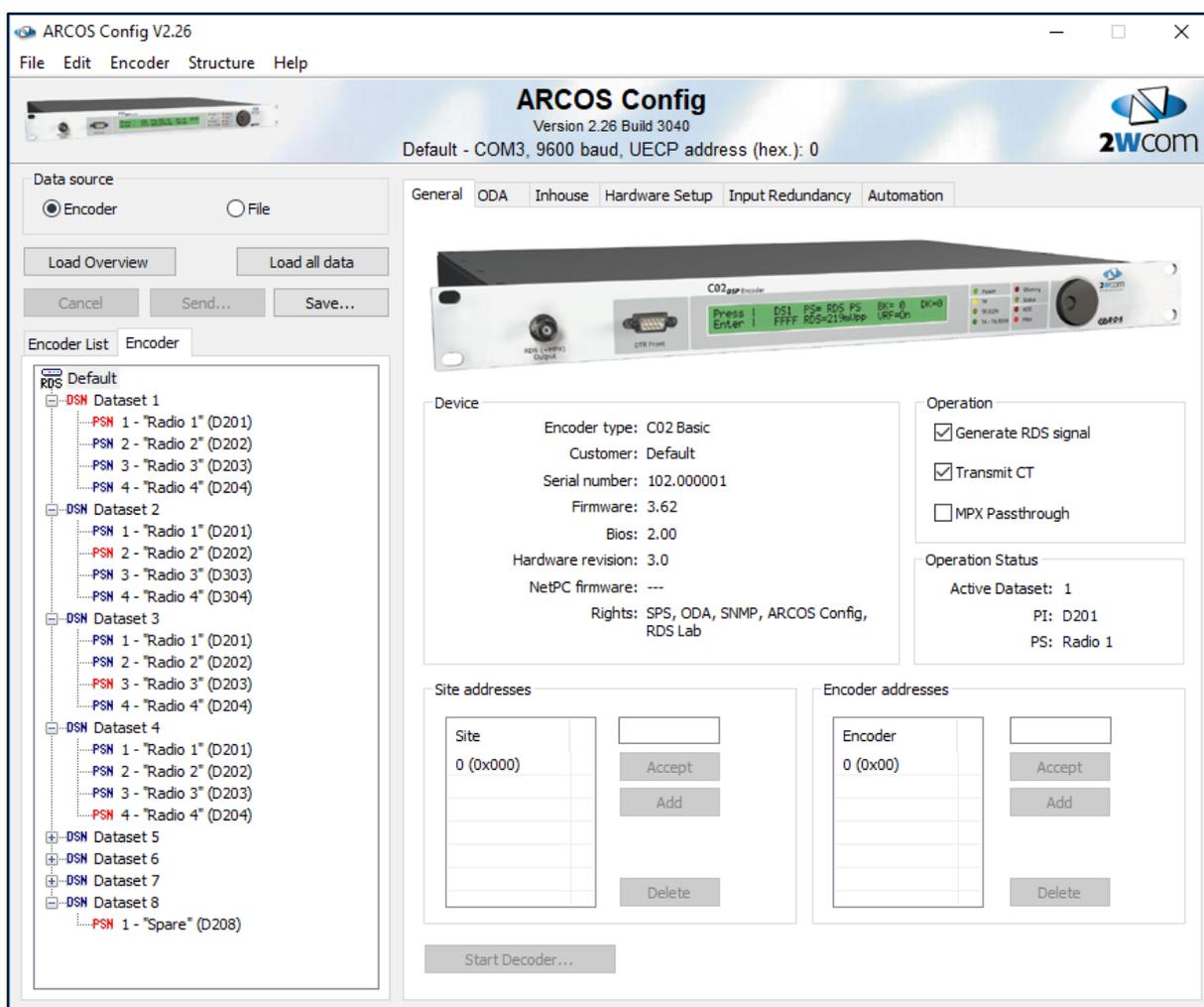# ARCOS Config

Configuration Tool for the RDS Encoder
C02$_{DSP}$ / C04$_{DSP}$

User Manual

ARCOS Config User Manual V1.25

February 2018

Content

1. Introduction

ARCOS Config is a PC software (Win 2000/XP/Vista/7/10) for the configuration and operation of 2wcom $C02_{DSP}$ and $C04_{DSP}$ RDS Encoder. An IP Ethernet connection or serial RS-232 connection can be used for the data connection between the PC and the encoder.

> **NOTE:**
> To work with the software, please read the entire manual. Keep this manual for future use.
>
> This manual explains the operation of the Software "ARCOS Config" and does not replace the manual of the hardware device. For details of C02DSP or C04DSP functions please consult the corresponding manual.
>
> To understand all functions of the software, it is necessary to have a good knowledge of the RDS specification IEC 62106:1999 (or newer) and the RDS UECP specification.

1.1. Explicit definitions

This software is developed for the use with the MS Windows operating system. Its usage is similar to MS Windows. Please see your MS Windows manual for details of windows operations. For necessary mouse operations please place the mouse pointer on the specified display area and execute one of the following corresponding actions.

Double-click	Quickly push left mouse button twice
Mouse-click	Single push on left mouse button
Right-click	Single push on right mouse button

> **NOTE:** The figures in the manual may differ from the actual screen display.
> Configurations, functions and specifications may change due to technical development without notice.

1.2. Software Producer

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1.3. Installation

To install ARCOS Config please open the file "Setup.exe", contained in the folder "ARCOS" Config" on the delivered CD-ROM, and follow the instructions on the screen.

2. First Steps

ARCOS Config enables an easy access to all encoder configuration data and makes it possible to load all data from the encoder, to save this data in an XML file, and to restore these settings in the encoder from the file.

For the correct operation of ARCOS Config, a minimum encoder firmware version of 1.29 is required.

Initially ARCOS Config starts with the following screen (encoder list tab with "Default Network" already opened).
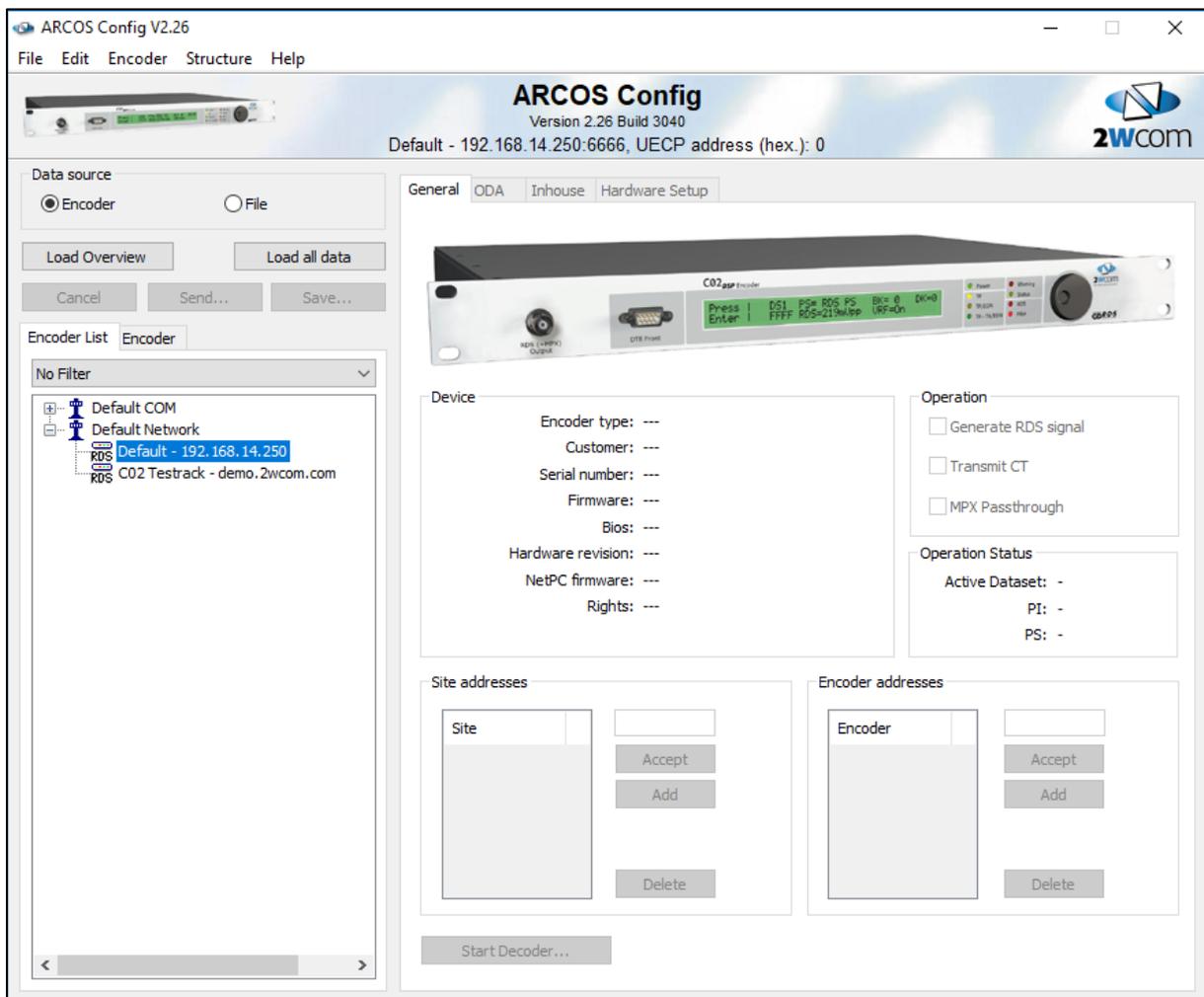
The program window has three sections. The graphical section at the top shows the program name, a detailed version information, and a selected encoder / encoder activity status information.

2.1. Data Source, Encoder List/Encoder Structure and Data Connection

The area in the upper left shows the selection of the "Data Source" (read the data from an [Encoder] or from a data [File]). Below this, there are two tabs with the "Encoder List" and the "Encoder" DSNs/PSNs. The "Encoder List" tab is selected by default and shows the configured networks/locations (tower symbols) with the corresponding RDS encoder in a tree view (to establish new entries: Right-click on "New location" or "New Encoder"). This gives a good overview of small and large structures.

The encoder list is only for the configuration of the connection settings for the different encoder.

1. Click with the right mouse key on an encoder symbol.

2. Click the "Properties…" button.

   ⇒ ARCOS Config uses these settings for the data connection.

3. Select between a TCP/IP and a serial RS-232 connection.

4. Enter the IP address/hostname and the TCP port of the encoder or select the RS-232 COM port that is used on the PC.

5. Enter the UECP address of the encoder (enter 0 if UECP addressing is not used).

2.2. Load the encoder data

If an encoder is selected in the encoder list, it is possible to use the buttons "Load Overview" or "Load all data" to read the configuration of the encoder. Then the data structure of the encoder is shown instead of the encoder list. ARCOS Config connects to the encoder and builds up the data structure. You can see a screen like shown below:
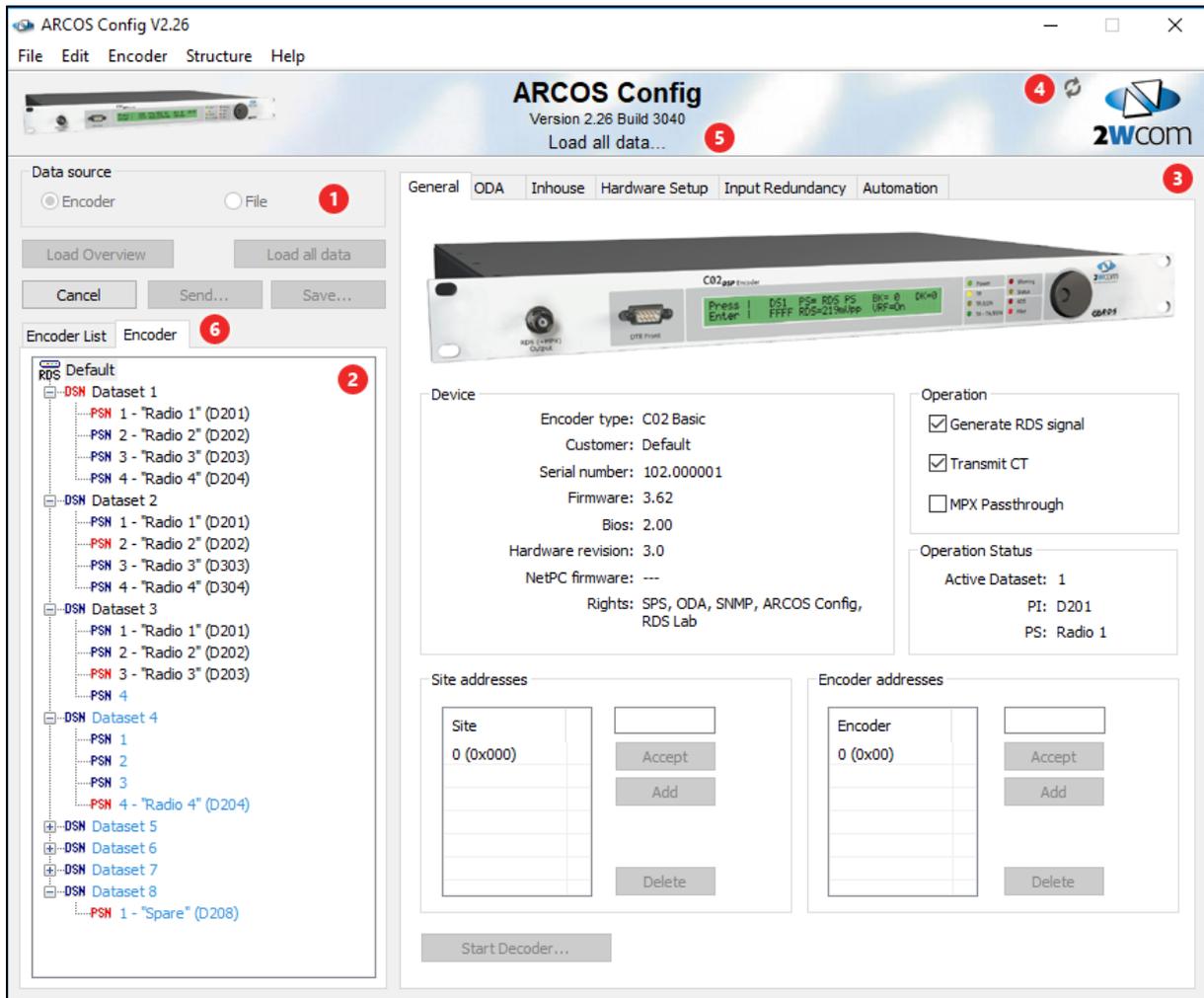
1:   Selection of the data source

(passive, because loading is in progress; see no. 4).

2:   Data structure view of the encoder

The 8 datasets of the encoder with the corresponding PSNs are shown in a tree view menu. If the PI of a main PSN is FFFF, it is assumed that this dataset is not in use. Then its PSNs are not shown by default. In the other case the PI and the PS of each Main PSN of the datasets is loaded and shown in the encoder structure view. Later, when loading the other data, the PI and PS of already loaded PSNs are shown as well.

The selected dataset, as well as the MainPSNs are shown in red color (similar to the ARCOS Network software).

Content displayed in black color means that all corresponding data is loaded, content displayed in blue color means that the corresponding data is not loaded. So the encoder structure view is also used as a progress display while loading all data.

3:   Data that belongs to the entry that is selected in the data structure.

If the element at the top of the data structure is selected (the encoder, in this example a C02), all global data of the encoder is displayed. This is, beside the ODA and inhouse data, the complete hardware configuration (serial RS-232 interfaces, TCP/IP settings, SNMP, MEC access rights, real-time clock, RDS reference tables, timer settings, settings of the LEDs/Relays/Optos).

If a dataset is selected, the corresponding data is shown (amongst others: the group sequence, slow labeling codes, radio text, scrolling PS).

If a PSN is selected, the corresponding data is shown (amongst others the PI, PS, PTY, TP/TA, PIN, (DI, MS), AF- or EON-AF list).

4:	Activity symbol, indicates a data connection in progress or an active data loading process.
5:	Status display, activity or connection parameter of the selected encoder.
6:	Tabs for activating the encoder list of the encoder/location structure or the structure view of the encoder (DSN/PSN list).

„Load Overview" builds up the data structure view and includes only the loading of the "General" screen data as shown above (encoder device data, operating status, site address and encoder address). All other data is loaded on demand, at the moment when another screen is selected.

„Load all data" loads the entire data of the encoder. When the data structure view is shown, it is already possible to operate the software. The ongoing loading process works in the background. This means that it possible to switch to other tabs. If already loaded, the corresponding data is shown immediately or, if not loaded, this is done with high priority. The entire loading process may take a few minutes.

Next to these two methods, it is possible to load all data of a single dataset (after performing "Load Overview"). To do this, right-click on the corresponding dataset and select "Load Dataset". This can be useful if you want to add or delete individual PSNs to a dataset or if you want to change PSN numbers. These changes mean that all dataset data in the encoder is reset. To avoid a loss of data it is necessary to make sure that all dataset data is already read-out from the encoder. So ARCOS Config blocks these changes until all dataset data is loaded. All dataset data is send back to the encoder while sending the changes.

3. Operation Notes

3.1. Marking of changes
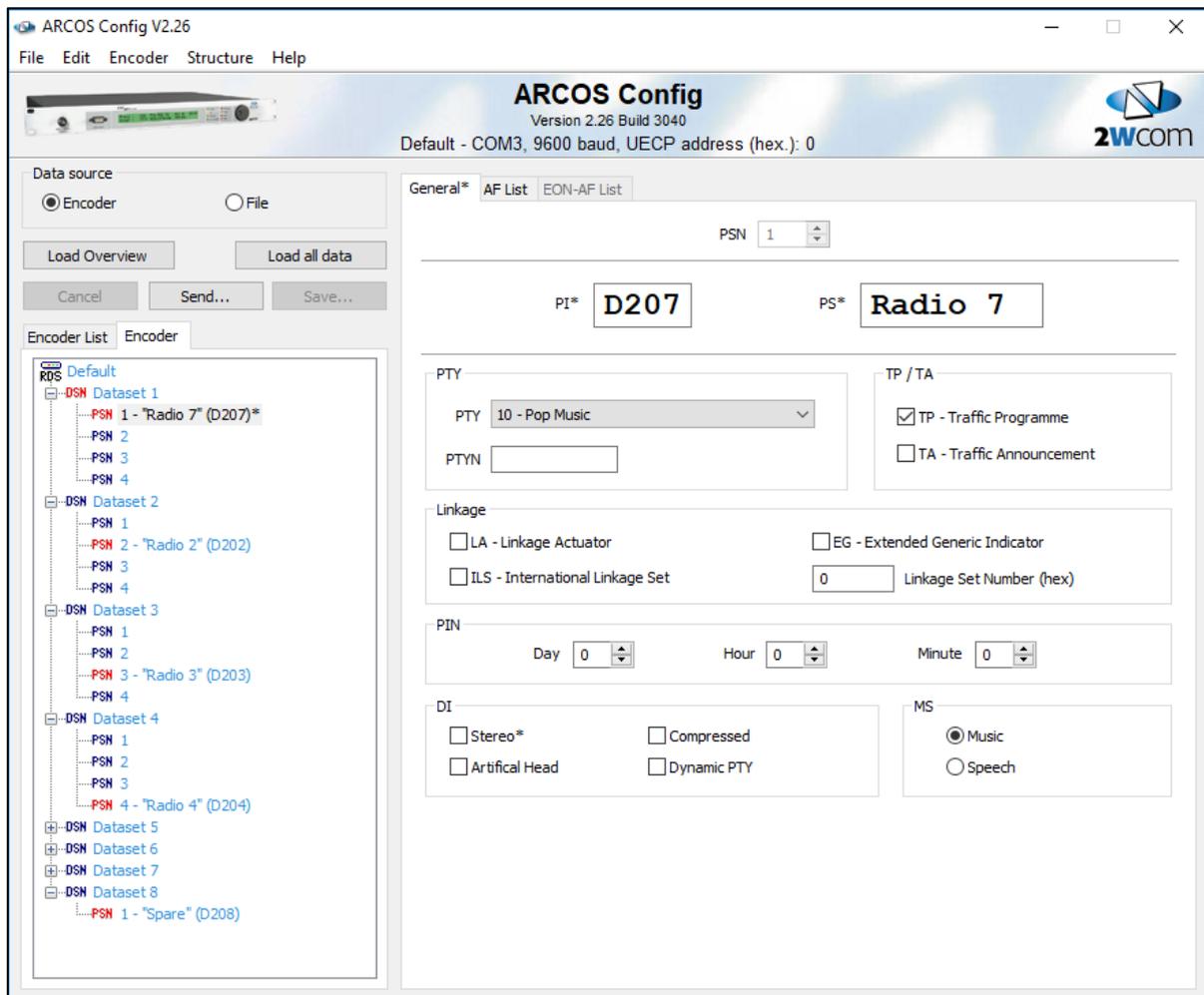
ARCOS Config marks all changes compared to the last known encoder state or the loaded data file with an asterisk *.

The example above shows that the PI, PS, and the DI-stereo are changed, marked by an asterisk. The tab "General" and the PSN 1 of the dataset 1 are also marked by an asterisk because the corresponding data is changed. So it is always possible to see the data that was changed.

3.2. „Unlimited" Undo/Redo

It is possible to undo the previous changes (CTRL-"Z" or program menu: Edit→Undo) or redo the changes (CTRL-"Y" or program menu: Edit→Redo).

In the example above, the asterisks that mark the changes would be cleared step-by-step.

3.3. Input and editing simplifications

To make the operation of inputs more comfortable, the following simplifications are included:

3.3.1. Drag & Drop

You can change the order of AF and EON-AF lists, the list for adding AF lists, the timers, and the list in the UECP-Terminal by drag and drop. Simply click on an entry, hold the left mouse button, move the entry to the new position and release the left mouse button.

3.3.2. Refresh tab data

To read-out the encoder data of a shown tab again, just push F5 of the PC keyboard or click on the menu entry "Encoder→Refresh Page".

3.3.3. Encoder data, General

If the input of the site address or the encoder address is selected, it is possible to add the new data input to the list by hitting the Return key (if no list entry is selected). If a list entry is selected, the entry is replaced by the new data.

3.3.4. Encoder data, Inhouse

If the input for Block3 or Block4 is selected and a list entry is selected, a hit on the Return key replaces the old data with the new data and the next list entry is selected. So the next channel number can be directly edited.

3.3.5. Encoder data, Hardware-Setup: RDS Settings

If the input for the RDS level or the RDS phase is selected and an entry of the reference table is selected, a hit on the Return key replaces the old data with the new data.

3.3.6. Encoder data, Hardware-Setup: RDS Timer

Copy & Paste - Alternatively to Drag & Drop you can use shortcuts to copy entries with Ctrl-"C" and to insert these entries at another row with Ctrl-"V".

Edit multiple entries - You can select multiple entries while pushing the Shift or the Ctrl button of the PC keyboard. Only the common settings are then shown when editing these entries. So it is possible to configure the common settings of the selected entries simultaneously. If you change a non common setting, the existing settings are overwritten with the new setting.

3.3.7. DSN, General

If the input for the slow labeling code data is selected and a slow labeling code list entry is selected, a hit on the Return key replaces the old data by the new data.

3.3.8. Dialog to edit AF/EON-AF lists

If the input for an alternative frequency or ON (other network) frequency is selected, a hit on the Return key replaces a selected entry with the new data or adds a new entry to the list if no list entry is selected.

Sorting of the AF list - By a mouse-click on the column header, it is possible to correspondingly change the list order to ascending. If you push the Ctrl button of the PC keyboard during the mouse-click, the list order is changed to descending. If you do not want to change the list order in the encoder, you can undo the changes via the menu or by using the keyboard shortcut Ctrl-"Z" before sending data.

3.4. HTML Export

If all data is loaded from the encoder, it is possible to generate an HTML export document of the entire encoder settings (program menu: "File>HTML Export"). This report is then stored as "encoder.html" in the sub folder "HTML-Report" of the program folder and is instantly opened in the default web browser of the PC.

3.5. Send Log

If "Encoder" is selected as data source, the send button is only active if a setting was changed (only the changes are sent to the encoder).

If "File" is selected as data source, the send button is permanently active because the program then always sends all data.

Upon a push on the send button, the following send log appears:
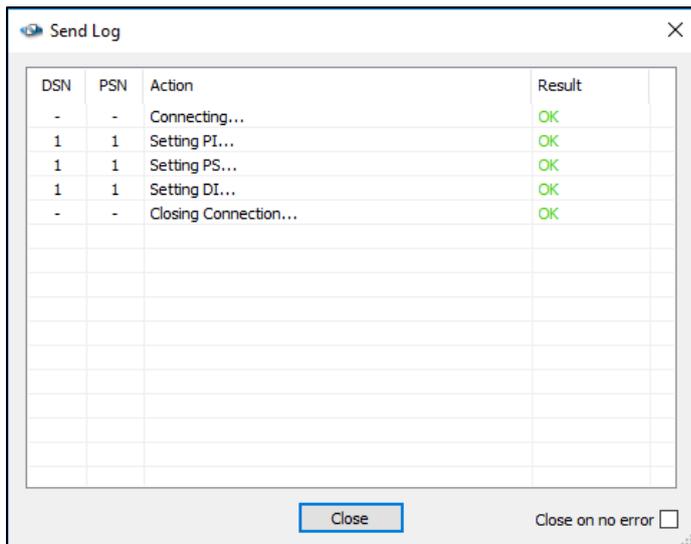
All sent changes are listed as plain text. In case of an error the sending is aborted. It may also happen that the encoder rejects changes (missing encoder rights or deactivated MEC access rights). In this case the sending is not aborted, but a corresponding error message appears at the end of the log.

3.6. Port Log

The port log (Menu: Help→Port Log…) can be used to view the data communication between program and encoder in detail (complete UECP frame or only user data selectable).

If a row starts with "←", it contains incoming data to the program (row is also blue colored); if a row starts with "→" it contains outgoing data to the encoder. The data fragment can be copied to the clipboard and also saved as a file.

3.7. UECP Terminal

In the UECP Terminal it is possible to add MEC commands with "Add…", to store these commands automatically, and to "Send" these to the encoder. Existing entries can be edited by a double-click on the corresponding entry or deleted by a click on "Delete". The function is comparable to the "MEC Edit" of "Arcos BASIC". For a comfortable migration from Arcos BASIC to ARCOS Config it is possible to "Import…" your old commands from the Arcos BASIC database file.

3.8. Communication Speed Mode

It is possible to switch between "Fast" (default) and "Normal" communication mode (program menu: Encoder→Communication Mode). In fast mode, "Multi UECP" is used for the communication to the device. This speeds up the communication in general. The setting "Normal" is only required if the other communication device does not support "Multi UECP" (e.g. 2wcom Octo Server).

3.9. Filter the encoder list

If you have large structures of encoder locations and encoders, it can be useful to filter the encoder list by using the "Filter" drop-down menu at the top of the encoder list. You can select between "Filter locations", "Filter encoder", "Filter locations and encoder", or "No filter". If you select a filter, it is possible to enter a filter string (wildcards ? and * allowed).

3.10. Retries on Communication Timeout

If the data connection to the device is not stable, it can be useful to allow communication retries instead of aborting the failed data communication instantly. Use the menu "Encoder→Retries on Timeout" to set the allowed amounts of retries to a value between 0 (default) and 9.

In the program window at the top right, numbers show the amount of retries for the present data packet, as well as the maximum number of retries (format: present/maximum).

3.11. Show the Error Protocol of the Encoder

It is possible to show the error protocol that is stored in the selected encoder.

1. To read-out the protocol, use the menu entry: "Encoder→Show Error Protocol…".
2. To delete the complete error protocol of the selected encoder, use the menu entry "Encoder→Delete Error Protocol".

3.12. Load Encoder (from export file)

If you have an export file with encoder settings from the 2wcom tool "Arcos Network", you can use the "Load Encoder (from Export File)" Function to load the contained settings to the selected encoder.

1. Select the menu entry "Encoder→Load Encoder (from export file)…".
2. You can optionally select a dataset number at the drop-down menu at the top of the appearing window.
3. Click the "Set DS Startup Default" to set it as the startup default dataset of the encoder.
4. Click the "Cold start" to initiate a cold start of the encoder.
5. To select an export file click the "…" button.
6. To start the loading process click the "Start" button.

3.13. Language Setting

It is possible to switch the displayed language of the program between English and German (program menu: Help→Language).

Because some program contents (e.g. the date selection calendar) depend on the Windows regional settings, it may be necessary to change these settings via the Windows control panel according to your needs.

3.14. User Authentication

It's possible to enable the need for a user authentication when connecting an encoder with ARCOS Config via TCP/IP. When trying to read an encoder configuration with "Load Overview" or "Load all data" or when trying to send a saved encoder configuration to an encoder, ARCOS Config will show the dialog to the right if user authentication is enabled.

Authentication can be enabled on the tab "Hardware Setup→Connection→Authentication". There are two different access levels: admin and guest. For both of them you can change the corresponding user name and password.
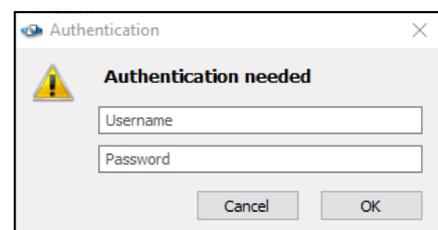
Delivery Status:

Access level	User name	Password	Remarks
admin	admin	admin	ARCOS Config will allow changes to the encoder configuration
guest	user	user	ARCOS Config will **NOT** allow changes to the encoder configuration; the user can only inspect the current encoder configuration

By default the user authentication is disabled.

> **NOTE**: No user authentication is required when connecting the encoder via one of the serial ports, so if you forgot e.g. your admin password you can always reset the password via a serial connection.

3.15. Command line parameters for software start

The software supports command line parameters to automatically initiate a data connect to an encoder at the start of the software:

/COM[:x[,baudrate]]	x: Serial COM port number of the PC; Default is 1 baudrate: The connection baud rate; Default is 9600
/IP:ipaddr[,port]	ipaddr: IP address of the encoder port: TCP port number of the encoder; Default is 6666
/T:connect[,read[,send]]	connect: Connect timeout in ms; Default is 3000 read: Read timeout in ms; Default is 3000.send: Send timeout in ms; Default is 3000
/U:uecpAddress	uecpAddress: UECP address(hex.); Default is 0.
/H	Shows a window with the parameters as listed above.

Example: "ArcosConfig.exe /IP:192.168.14.250"

4. Operation Examples

4.1. Minor Changes on Encoder Configuration (e.g. change PS)

To make minor changes of the encoder configuration you can:

1. Select the corresponding encoder in the encoder list
2. „Load Overview"
3. Change PS
4. Send…

If you have the encoder configuration stored in an XML file and would like to have the changes included in the file you can choose between two methods:

Safer method (but slower):

1. After sending the data click on "Load all data".
2. Save…

Alternative method

✓ If just a few changes have been made, like in the preceding example:

1. Load the saved XML encoder configuration file
2. Select the corresponding PSN in the data structure again
3. Change the PS again
4. Save…

4.2. Archive and Restore Encoder Configuration

It is always possible to archive an encoder configuration by loading all data of the encoder and saving the configuration.

To restore an encoder configuration follow these steps:

1. Select "File" as the data source
2. Load the data file of an encoder configuration
3. Open the encoder list and select the corresponding encoder
4. Send…

5. Operation Tabs

These tabs contain the elements for controlling the encoder.

5.1. Encoder - Tab General

Device	Display of the encoder type, the encoder configuration, the serial number, the firmware version, and the available encoder rights.
Operation	Checkboxes for the encoder control: RDS signal on or off, CT on or off, MPX Bypass on or off (the MPX Bypass setting depends on the method of encoder operation. A wrong setting can result in an error of the transmitter signal. Read more details in the encoder manual.)
Operation Status	Display of the active dataset, PI, and PS, as currently activated in the encoder.
Site addresses	Configuration of the encoder site addresses.
Encoder addresses	Configuration of the encoder addresses.

5.2. Encoder - Tab ODA[1]

AID List	Configuration for ODA. It is possible to use "Add AID…" to enter the application ID, the group, the timeout, a short message, the transmission method, the "Spinning Wheel" configuration, and the "Burst mode" configuration. Use "Change AID…" and "Delete AID" to edit the list.

5.3. Encoder - Tab Inhouse

Table	Display of the configured inhouse channels including the data contained in block 3 and block 4. If the data contains ASCII characters, these are also displayed.
Input fields Block3 and Block4	Input for the IH data. By a click on "Accept" the data is added to the channel number entry that is selected in the table. You can use "Delete" to delete a single selected entry of the table. Use "Delete All" to delete all entries of the table.

5.4. Encoder – Tab Hardware Setup

5.4.1. Connection

Serial Ports	List of the serial RS-232 interfaces of the encoder with their configuration. These encoder interfaces can be used for the data communication. After selecting the corresponding interface entry in the table, it is possible to configure the speed (baud rate), the mode, the interface protocol (UECP/Link[1]), as well as the interface timeout.
TCP/IP Settings	Display/Input of the Ethernet IP interface of the encoder. This encoder interface can be used for the data communication. Configurable settings: IP address, TCP port, subnet mask, gateway.
Additional TCP and UDP ports[2]	3 for UECP, 1 for Automation
Multicast IPs[2,3]	list of configured Multicast IPs
IP Filtering[2]	list of allowed source IP addresses (empty list: no filtering)
Authentication[2]	user authentication

5.4.2. SNMP Settings

SNMP Traps/Events	Display and configuration of the enabled SNMP traps. Use the "Enabled" checkboxes to enable (checkbox ticked) or disable the individual SNMP traps.
IP addresses of the target SNMP managers	Display and configuration of the SNMP target IP addresses. It is possible to configure two target addresses. If you use just one SNMP target address, set the second address to 0.0.0.0
SNMP Agent[2,3]	Agent port, read and write community strings
SNMP 1. and 2. Manager[2,3]	Enable/Disable, manager IP address and port number, community string and SNMP version for the notifications sent by the encoder
SNMP System variables[2,3]	sysContact, sysName and sysLocation
Input Messages[2,3]	Message texts for the optical coupler input notifications

5.4.3. MEC Access Rights

🔒 Port	Drop down menu for the selection of the COM port to be configured regarding the MEC access rights (every COM port can be configured individually).
Command list	Display and configuration of the individual MEC commands that the encoder accepts at the selected RS-232 COM port (checkbox ticked). The checkbox "Allowed" can be used to enable or disable all possible MEC commands.

5.4.4. RDS Settings

RDS Reference Tables	After selecting a reference table in the list, it is possible to enter the RDS level and the RDS phase for this entry. Click on "Accept" to confirm the input. The "Selected" checkboxes are used to activate the corresponding reference table in the encoder.
Choose MPX Input/ Assign Default Reference Table	Select the MPX input of the encoder to be used. Additionally it is possible to select the reference table to be activated in the encoder after switching the input.
TA Control	Configuration of the TA function of the encoder. It is possible to configure the minimum number of groups between two 15B groups and the number of 15B groups at TA turn-on and TA turn-off.
EON-TA Control	Configuration of the EON-TA function of the encoder. It is possible to configure the minimum number of groups between two 14B groups and the number of 14B groups at EON-TA turn-on and EON-TA turn-off.

5.4.5. Real Time Clock

Set the Real Time Clock	Configuration of the real-time clock of the encoder.
Synchronization of the Real Time Clock via SNTP	Configuration of the real-time clock synchronization via an NTP time server of the IP network (SNTP).
	Please note that the SNTP update interval is only visible if an IP connection is used for the connection to the encoder!

5.4.6. Timer

Timer Configuration of the timer function of the encoder. This is to activate certain encoder functions at a defined weekday and time. Use "Add…" to configure the time (Day, Hour, Minute) and the encoder function. Use "Change…" to edit an existing entry or "Delete…" to delete it.

5.4.7. LEDs/Relay/Optos[4]

LEDs

Relays

Optos

Configuration of the function of the front panel LED indicators, switching outputs (Relays), and the switching inputs (Optocoupler Inputs).

Note: In case of assumed malfunction of the LED's, switching outputs, or switching inputs, please check if the configuration is correct.

Function	Opto	LED´s	Relay
TA	1=TA, 0=TA OFF	1=TA, 0=TA OFF	1=TA, 0=TA OFF
TP	1=TP, 0=TP OFF	1=TP, 0=TP OFF	1=TP, 0=TP OFF
MS	1=MS, 0=MS OFF	1=MS, 0=MS OFF	1=MS, 0=MS OFF
PTY	0-31	0-31	0-31
CT	1=CT, 0=CT OFF	1=CT, 0=CT OFF	1=CT, 0=CT OFF
RDS	1=RDS, 0=RDS OFF	1=RDS, 0=RDS OFF	1=RDS, 0=RDS OFF
VRF Status	1=VRF, 0=VRF OFF	1=VRF, 0=VRF OFF	1=VRF, 0=VRF OFF
Ref. Input	1-6	1-6	1-6
Dataset	1-n	1-n	1-n
COM timeout	---	Port 1-n, 0 all Ports	Port 1-n, 0 all Ports
Pilot	---	1=Pilot, 0=Pilot OFF	1=Pilot, 0=Pilot OFF
TP/EON	---	1=EON TP, 0=EON TP OFF	---
TA/EON	1=EON TA, 0=EON TA OFF	---	1=EON TA, 0=EON TA OFF
MPX input	1=MPX1, 2=MPX2	---	---
Cold start	1=Perform cold start	1=cold start, 0=no cold start	1=Cold start, 0=no cold start
Warm start	1=Perform warm start	---	---
SNMP warning	---	0=warning, 1=no warning	---
SNMP Reset	1=SNMP Reset	---	---
SNMP Trap	0=normal, 1=inverted		
TA Toggle	0=TA Toggle	---	---
Redundancy	0=normal, 1=enforce standard, 2=enforce redundancy		
DSP Error	---	---	1=DSP error, 0=no DSP error

5.5. Encoder – Tab ZIDEM[1]

IH Monitoring	Overview of the configured Inhouse monitoring
Add/Change/Delete IH Monitoring	Add, change, or delete the monitoring parameter:

- IH Channel

- IH Data (with configurable fault tolerance)

- Admissible time between IH frames

- Minimum time between IH frames of the encoder

- Number of incorrect IH frames that triggers an alarm

- Number of correct IH frames that resets an alarm

- Type of relay activation (inverted or non-inverted);
  The corresponding relay assignment is then also visible at the tab
  "Hardware Setup→LEDs/Relays/Optos".

5.6. Encoder – Tab Input Redundancy

See page 59 in C02 manual.

5.7. Encoder – Tab Automation

See page 54ff in C02 manual.

5.8. DSN – Tab General

General Group Sequence	Display and configuration of the RDS group sequence of the encoder (comma separated groups; e.g. 0A,2A,3A).
ODA 3A Group Sequence[1]	Display and configuration of the ODA 3A group sequence, which is individual for every data set (comma separated groups).
Extended Group Sequences	Configuration of the alternative group sequences.
Variant Code Sequences	Configuration of the variant code sequences of the groups 1A and 14A.
Slow labeling codes	Configuration of the individual slow labeling codes.

5.9. DSN – Tab Radiotext

Radiotext   Display and configuration of the 64 characters long radio texts
               of the encoder.

               Use "Add…" to add new texts (set number of transmissions, set
               A/B flag status, enter text).

               Use "Change…" to edit a selected entry or "Delete" to delete it.

5.10. DSN – Tab ScrollingPS

Scrolling PS   Display and configuration of the scrolling PS function[1] of the
               encoder.

               See page 53ff of the C0x manual.

5.11. PSN – Tab General

PSN   Display and configuration of the selected PSN number (for the
               configuration, the data set needs to be loaded completely).

Checkbox   Configuration to select if the corresponding PSN is used by the
„Enabled"   encoder (checkbox ticked) or not.

PI   Display and configuration of the PI (hexadecimal).

PS   Display and configuration of the PS (hexadecimal).

PTY   Display and configuration of the PTY setting (Program Type,
               0…31).

TP/TA   Display and configuration of the TP (Traffic Programme) and
               TA (Traffic Announcement) switch.

Linkage   Display and configuration of the LA (Linkage Actuator), EG
               (Extended Generic Indicator), ILS (International Linkage Set)
               and the Linkage Set Number.

PIN   Display and configuration of the PIN (Programme Item
               Number).

DI (Main PSN) Display and configuration of the DI – Decoder Identification
               (Stereo, Compressed, Artificial Head, Dynamic PTY).

MS (Main PSN) Display and configuration of the MS (Music / Speech) switch.

5.12. PSN – Tab AF List

Selection „Method" A/B	Displays/Select if method A or B is/will be used for the AF list.
Station frequency and Alternative Frequencies	Use "Add…" to add frequencies. Use "Change…" to modify existing list entries, or "Delete" to delete them.

5.13. PSN – Tab EON-AF List

Selection „Method" A/B	Displays / Select if method A or B is / will be used for the EON-AF list.
Station frequency and ON (Other Network) Frequencies	Use "Add…" to add frequencies. Use "Change…" to modify existing list entries, or "Delete" to delete them.

Footnotes of the section:

[1] Requires that the corresponding buyable optional right is available in the encoder.
[2] Depending on your firmware version.
[3] Can only be configured when connected via TCP/IP.
[4] Requires an encoder firmware version of V1.63 or higher.

V1.03 • SW V ≥ 2.22 • C0x Host FW ≥ 3.34 • RM/OW