LiteEdit 2.0
Configuration and Monitoring Tool

SW version 2.0, August 2004

User guide
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General guidelines

What describes this manual?
This manual describes PC software LiteEdit – a configuration and monitoring tool for InteliLite controllers.

What is LiteEdit?
LiteEdit is Windows 95/98/NT/2000 based software.
LiteEdit provides following functions:
- Direct, off-line or modem communication
- Controller configuration
- Software download
- Read / write / adjust all setpoints
- Read all quantities
- Export/Import data

Hint:
LiteEdit supports InteliLite controllers only.

How to install LiteEdit?
Insert a CD.
Start Setup.exe file.
When installation is completed, a new folder “LiteEdit” is created.

LiteEdit directories
Default directory is: C:\…Program Files \ ComAp \ LiteEdit \n
<table>
<thead>
<tr>
<th>Directory</th>
<th>Executable and aux. files</th>
<th>File</th>
</tr>
</thead>
<tbody>
<tr>
<td>LiteEdit</td>
<td></td>
<td>LiteEdit.exe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IntelliDDE.exe</td>
</tr>
<tr>
<td>App</td>
<td>Firmware</td>
<td>*.mhx</td>
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<td>Curves</td>
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<td>Archives</td>
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<td>Default</td>
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</tr>
<tr>
<td>Database</td>
<td>Configuration files for</td>
<td>Modules.xml</td>
</tr>
<tr>
<td></td>
<td>peripheries/ECU interface</td>
<td>*.esl, *.esf</td>
</tr>
</tbody>
</table>

Application directory contains separate mhx files for all InteliLite applications.

PC Hardware requirements
LiteEdit is based on Windows 95/98/NT/2000 or higher platform. Use PC suitable for this platform. No other special requirements are necessary.
LiteEdit requires 10 Mbyte of hard disc free space.
Standard modem without special requirements can be used.
How to check LiteEdit version?

Use Help – About to display current LiteEdit version window.
See an example:

![LiteEdit Version Window](image)

*LiteEdit*

Version 1.1

Copyright (C) 2002 ComAp Ltd.

Release date: 24.9.2002

[www.comap.cz](http://www.comap.cz)

[info@comap.cz](mailto:info@comap.cz)

About ZIP&UNZIP utility

[OK]
Open and close the communication

There is only one common Archive directory for all archives. It is possible to open connection to one controller only, because multiple applications are not supported by InteliLite controllers.

**Open direct**

Connect RS232 cable between InteliLite and PC.
Use **Connection | Open direct** to open the communication with the controller.

**Open modem**

Use **Connection | Open modem** to open the modem communication with the controller.
Set the phone number and access code.
Open offline

Select any archive from current or another directory.

Close connection

Use Connection | Close to close the communication with the controller. When connection is closed, you are prompted by a “Save project Data?” question. Answer yes, if you want to store all setpoints and configuration into an AIL archive file.

Following dialog box appears during closing of connection.

Archive file is saved under automatic name:

Name of the file is Gen-set nameYYYYMMDDVV.AIL.
Gen-set name…Basic settings: Gen-set name
YYYY...year
MM...month
DD...day
VV...ordinal number

SAVE AS command enables change the name of AIL file.
DDE Server

DDE Server provides the communication interface between PC and Controller. Use ALT-TAB (or click on the Communication status), select “DDE Server” and see message box.

Click on “Last errors”… to see report of the last error message.
Click on “Stop”… to pause the communication (not to close the connection).

DDE server must be running in direct or modem connection.

LiteEdit status

Bottom line shows the following communication status:

Connection:
Type of connection (Direct / Off line / Modem)

IntelliLite application:
MRS10, MRS11, MRS15, MRS16, AMF20, AMF25, ….

DDE Server Status
Status of the DDE Server (Running / Preparing / Error). Double click or use Connection | Information to get the detailed communication status.

DDE server messages

Window with a message: “Can’t open COM”
The selected COM port is occupied by other program or is not installed. Check if there is other program using the COM port running or select different COM port.
Red bottom LiteEdit line with a message “Error”
Use ALT-TAB, select DDE Server and have a look at the status. If selected controller channel is red with message “Error”, check if the Controller is switched on, or cable properly connected between COM port and Controller. Click on “Last errors” button to see more information:

Possible DDE server error messages

Timeout (continuous)
Connected IL controller does not answer to DDE server request. Probable reasons:
- IL controller is not connected
- Wrong communication cable
- IL controller failure
- Wrong PC COM port adjusting
- Wrong Basic settings: RS232 mode setpoint (Standard, Modbus)
- Damaged IG RS232 port – check PC–IL ground connection.

Timeout (sometimes)
Occasional timeouts can be caused by your operating system. It is recommended to use Windows NT instead of Windows 9x for industrial purposes.

TAPI: requested modem (#) not found
Modem is not configured in Windows or it has not required parameters.

TAPI: unavailable modem
Communication port is engaged by other communication device.

TAPI: Line unexpectedly closed
Modem is configured in Windows, but it is not connected or it is failed.

TAPI: Can’t create connection
It is not possible to open connection. Probable reasons:
- When ringing is audible during start of the connection
  - On the selected phone number is incompatible type of modem.
- When busy tone is audible during start of connection
  - Selected phone number is busy.
  - DDE server is connecting to itself (wrong phone number entered)
- When no tone is audible
  - Phone line is not connected to the Modem
LiteEdit functions

There are several functions available from LiteEdit. It is possible to open Control window, Setpoints window and Values window after connection is opened. It is possible to change or modify controller configuration.

List of available items

- Open direct connection
- Open modem connection
- Open off-line connection
- Close connection
- Save all archive
- Control window
- Setpoints adjustments
- Values window
- Password: closed, opened. One level only.
- Select configuration.
- Modify configuration.
- Text translator.

Control window

Control window has two basic functions

- Remote genset control
  - Controller mode change
  - Manual genset control via buttons like from controller front panel.
- Genset states indication and values reading
  - State machine indication.
  - Mains, genset and breaker states LED indication.
  - Alarm list, ECU Alarm list.
  - Reading of actual values measured from genset.

Control window is active for both Direct and Modem connection.
**Setpoints window**

It is possible to change setpoints values in Setpoints window. Password protected setpoints have Gray background and can’t be changed. Password has to be entered prior to change in direct connection.

It is possible to change any setpoint without password setting in Off line mode.

Setpoints limits and protection status is visible on mouse click on selected position in Off line mode.
Hint:
Password entering in LiteEdit enables to access Setpoints from LiteEdit only, not from controller front panel and vice versa.

**Values window**

It is possible to read all actual values from controller in values window. Values are separated into groups.

**IL info window**

TimerText and Value: displays active internal controller timer and its value.
SW version and SW branch: displays actual SW version, SW branch = 1 is standard
Application number: internal code of MRS10, 11, 15, 16, AMF20, 25
ControllerMode: 0=OFF, 1=MAN, 2=AUT, 3=TEST
DiagData: In case of software malfunction DiagData shows the value that enables to locate possible bug in software. Include this number when reporting a software problem.
Export data

Use Controller | Software configuration | Export data.
Dialog box Export data allow separately save to PC tables of Setpoints, Values or Software configuration in MS EXCEL, CSV or DOC format.

Statistics setup

Select Controller – Statistic setup.
Password has to be entered before access to this function is enabled.
Reset controller

Use Controller | Reset to reset controller.

If setpoints error occurs after new application downloading, the controller stays in Init state (visible on iL screen). Check all values of setpoints (at least one setpoint must be written to recalculate the checksum) and then use Reset command to start the controller.

Password has to be entered before access to this function is enabled.

Options

Option window enables selection of PC COM port, modem and Application and Controller fonts.

<table>
<thead>
<tr>
<th>COM port</th>
<th>PC COM port for selection for Direct connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application font</td>
<td>Application font defines font and script used in WinEdit itself (windows, functions, buttons, dialog etc. texts) e.g. Basic, Configuration, Fonts, History, ... see picture bellow.</td>
</tr>
<tr>
<td>Controller font</td>
<td>Defines font for all texts, which are downloaded from controller, e.g. Setpoint and Values names. This selection is active only when Auto-change charset is not ticked.</td>
</tr>
<tr>
<td>Auto-change charset</td>
<td>Controller font is set according controller setting (is the same like in controller)</td>
</tr>
<tr>
<td>Dictionary directory</td>
<td>In this directory the dictionary TRN files are stored.</td>
</tr>
</tbody>
</table>
Import firmware

Select required iwe pack and click import. Iwe pack contains new version of mhx and ail files, which are automatically copied to proper directories.
InteliLite configuration

**Hint:**
Only the same archive type, which corresponds to InteliLite hardware unit, can be downloaded. E.g. AMF25 archive can be downloaded to iL-AMF25 controller only not to e.g. iL-AMF-20 or another.

Select Controller – Configuration – Select or Modify from LiteEdit tool bar. Use Select to change all archive to different one. It is active in Direct connection only. Use Modify for modification of current archive.

**Configuration modify**
Modify window enables to modify configuration of Binary inputs, outputs and Analog inputs. For modification click on selected item.
Binary inputs configuration

*Hint:* A binary input can be configured for control or alarm function (not for both together).

**Control**
- Select Type = Control
- Select control function from the list

**Alarm**
- Select Type = Alarm
- Change Name of input (up to 14 characters)
- Select Contact type: Normally closed or Normally opened
- Select Alarm type
- Select Engine running only (when ticked) or All the time

Analog inputs configuration

The Analog inputs values assignment is configurable. Analog values can be read from analog inputs or from ECU:
If an engine equipped with ECU is connected, select the appropriate database file:
- Standard J1939 engine
- Scania engine
- Cummins engine
- ...

Values will be read from ECU and all analog inputs remain free configurable for other quantities.

Configuration of analog inputs:
If the ECU is not connected, the first analog input is fixed to *Oil pressure* measurement. Other inputs are configurable.
Default configuration remains:
- AI1 - Oil press
- AI2 - Water temp
- AI3 - Fuel level

Analog input configuration when value is read from IL-CU terminals:
- Alarm or Not used input
- Name – up to 14 ASCII characters
- Select Configuration
- Select sensor characteristic from the list (curves A, B, C can be modified)
- Change Dimension (up to three characters)
- Set number of Decimal points for displayed value.

E.g. Value 100 is displayed like 10,0 when Decimals = 1.

Set Over, Over+Fls, Under or Under+Fls alarm activity (for fixed Oil press input only Under and Under+Fls)
IL-CU Analog input configuration for Binary or Tri state inputs.

Analog input configuration

<table>
<thead>
<tr>
<th>Type</th>
<th>Config</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog</td>
<td>Analog</td>
</tr>
<tr>
<td>Binary</td>
<td>Binary</td>
</tr>
<tr>
<td>Tri state</td>
<td>Tri state</td>
</tr>
<tr>
<td>ECU</td>
<td>ECU</td>
</tr>
</tbody>
</table>

Analog measuring is based on selected Sensor characteristic

Binary detects open/close contact - threshold level is 750 Ω.

Tri-state Detects open/close contact (threshold 750 Ω) and sensor fail for input resistance <10 Ω or > 2400 Ω

**Hint:**
For more details see InteliLite user guide.

**Binary outputs configuration**
Select required function from the binary outputs list.
Miscellaneous functions

- Setpoints password protection
- User sensor curves A, B, C modification
- Remote annunciator RA15 enable/disable and configuration
- IOM/PTM module enable/disable and configuration
- Selection of engine/ECU type connected

Necessary condition to receive RPM and Oil press, Water temp or Fuel level values from Engine Control Unit is active and connected CAN bus interface.

No RPM pickup and Oil, Water and Fuel analog sensors are needed for IL-CU when CAN bus interface to ECU is active and connected.

If the ECU is removed from configuration, it is necessary to check analog inputs configuration. First input is automatically configured to Oil pressure and LiteEdit shows following message:
Setpoints password protection
Tick items which are to be Password protected.

User sensor curves A, B, C modification
Change Sensor curve name
Click on Points button to curve modification.

Use Insert, Delete buttons to modify number of curve points.
Remote annunciator RA15 configuration

Enable the module in the checkbox “RA15 is connected” and then select required function from the list.

Hint:
Indication LED’s color and Horn timeout must be configured from RA15 panel.
Detail description of Remote annunciator RA15 see in IGL-RA15-1.2.pdf user guide.
IOM/PTM module configuration

Enable the module in the checkbox “IOM/PTM is connected” and then configure inputs and outputs like on the iL.

When modification is finished click on
Save as … to save modification to PC or
OK to download all archive to controller.
Controller texts Translator Dictionary

Following tools provide translations of all texts in controller (on line connection) or in archive (off line connection).

1-st step
Select: Controller | Software configuration | Translator

Texts are arranged in groups. Each group has separate text length limit. Untranslated Default texts are in Cyan background, translated texts changes to Gray background. Cyan Group of texts name background changes to Gray when all group items are translated. Green background indicates that translated text is shortened e.g. to 14 characters.

2-nd step
Load and select the dictionary.

3-rd step
Check translation. Translated items and groups are Gray back grounded.
Translate untranslated Items and Save the dictionary.

Names of dictionary buttons

- New dictionary
- Open dictionary
- Close dictionary
- Edit item or double click on selected item.
- Item to be translated.
- Item to be untranslated.
- Group to be translated.
- Group to be untranslated.
- Find text. (Ctrl-F)

Dictionary buttons

- Delete dictionary.
- Rename dictionary.
- Join dictionary. Create one dictionary from two.
- Revert dictionary. E.g. from English-German create German-English dictionary.
- Import dictionary.
- Export dictionary.
- Show dictionary. Dictionary list.
**Hint:**
Take care to respect the length of the names and check the result on controller screens.

Controller has not valid configuration if communication is interrupted during configuration download. Then it is necessary to reset the unit and write the configuration again.
Controller programming

Select Controller – Programming to open mhx Programming window. Select required file and click on OK button.

**Hint:**
Only firmware (mhx), which corresponds to InteliLite hardware unit, can be downloaded. E.g. iL-AMF25.mhx can be downloaded to iL-AMF25 controller only not to e.g. iL-AMF-20 or another.