Compact Controller for Stand-by and Parallel Operating Gen-sets





Software version IG-6.2, IS-3.4, August 2005

Troubleshooting guide





Table of Contents

able of Contents	
Froubles	
Interference and over voltage transient protections	
Power supply input could be damaged, if	5
Binary Output could be overloaded, if	
Binary Input could be burned, if	
Analogue Output could be overloaded, if	
Analogue Input could be disturbed, if	
RPM Input could be disturbed, if	5
Load sharing line is not working	5
CAN-Bus line is not working	
General	
IG controller works but displays fix "strange code"	
Often IG display refreshing	6
The controller display is dark	
Supply is OK, display is still dark	6
IG screens returns to the Main measure screen	
Controller works properly but display is empty	
IS screen is dark	6
Unexpected behavior after firmware upgrade	6
Controller remains in the "Init" state	6
How to check the configuration of IG	
How to check the configuration of IS	6
Controller Mode cannot be changed from OFF	7
Controller mode changes itself	7
Controller doesn't stop the engine on any alarm although it reports it in the Alarm list	7
No response on Start/Stop keys	
Controller is in the "Not ready" state and Alarm list is empty	
MCB fail is reported although the MCB feedback is OK	
Controller does not close GCB in MAN or AUT mode	7
Some setpoints cannot be changed	
No "Time stamp" history record is written in the IG history	
IG front panel red LED on the gen-set side lights or blinks	
When power cut comes, gen-set does not start	7
I have lost the IG Password and/or Access code	
It is not possible to remove catches to take controller out from switchboard	
RPM measuring	
Pickup signal	
RPM measuring	
Controller detects RPM on no running gen-set	8
Analog measuring	8
IG does not measure analog value	8
Why the Pt100 sensor cannot be used	
Any of analog inputs does not measure correctly	. B
Sensor failure is detected	
Analogue input value is XXXX	
Current output sensor influences resistor sensor measuring	
Controller measures wrong values from current output sensor	
Power measuring	
Active and reactive power measurement shows unlikely values	
Wrong mains or bus voltage and frequency measuring Controller does not measure generator current	უ ი
Maximal current of the analog output on IG-IOM cannot reach 20 mA	
I cannot find a neutral current measurement in SPtM	
Generator overcurrent protection does not react	
IG Starter kit	9



After MCB closes MCB fail is detected	9 -
Although maximal current is adjust by pot, IG displays low power value	9 -
Multiple gen-set applications	
Temporary generator voltage increasing or decreasing	9 -
The IG and/or IS and /or InteliMains are reset continuously	9 -
What is the sequence of GCB closing when more engines starts at once to the dead bus	10 -
The system reserve does not correspond to the number of running engines	10 -
Power and PF sharing does not operate well	
Two or more engines starts and stops at the same time	
Setpoint replication does not work	
Binary outputs SYSTEM READY and SYSTEM RES OK do not operate	
How to check proper CAN bus connection	
How to check actual IG-MU sw version	
CAN bus connection problems	
Sync/load control	
IG-PC(LS)M does not operate properly	
InteliSys Sync/Load control does not operate	
Speed regulation does not hold the speed on the nominal speed level	
IG-PC(LS)M speed governor output is at the end position –10V or 10V not only during the transic	
(SPtM or MINT only)	11 -
Synchronizing operates well (synchroscope indicates proper slip and angle), but GCB (or MCB)	
not close	11 -
InteliMains doesn't start synchronizing after MCB is pressed	
Volt/PF control	
IG-AVRi connection	
Voltage regulation does not hold the voltage on the nominal voltage level	
Voltage regulation is at 0% position (MINT)	
AVR output is at the end position 0 or 100 % not only during the transients (SPtM or MINT only).	
PF or PFS control does not operate well	
Controller setting and configuration	
IS configuration import	
What means InteliSys message SD BINx, SD BOUTx, SD AINx	
It is not possible to change setpoint	
Not enough memory for InteliSys external modules configuration	
Some set points groups have a yellow background	12 -
How find out the setpoints limits	
It is not possible to configure IS Programmable functions	
Controller malfunction after a new application download	
WinEdit – MultiEdit	
Before the first direct connection	
Communication via RS232 does not work	
Controller looks dead after interruption during reprogramming	
Unsuccessful IS programming	
History stops recording	
Unsuccessful programming message	
How to open default archive in OFF line connection	13 -
How to change PC COM port before opening connection	
How to open default archive in ON line connection	
I can't open communication to gensets group	
When WinEdit is started from MultiEdit with entered password, the password symbol is gray and	
protected functions are enabled.	
In WinEdit - Open connection window there are no sites visible	
WinEdit History in on-line connection does not correspond to the history in controller	
The display shows: Configuration table error	
DDE server messages	
Timeout (continuous)	
Timeout (continuous)	
TAPI: requested modem (#) not found	
TAPI: unavailable modem	
TAPI: Line unexpectedly closed	
TAPI: Can't create connection	
Connected Modem does not operate	



	Connected Terminal does not operate	- 1	5 -
	Wrong Access code	- 1	5 -
	Multiple IG controllers connection	- 1	5 -
	NV RAM error	- 1	5 -
	It is not possible to open Active call connection	- 1	5 -
G	SM Modem connection – SMS	- 1	5 -
	It is not possible to get any connection (data, SMS) with controller through GSM modem	- 1	5 -
	How to set the telephone number and the Gen-set name	- 1	5 -
	GSM modem connected, warning call (shut down, slow down) enabled, Act calls enabled, SMS		
	enabled. SMS function properly, but modem data call (to WE) is not performed	- 1	6 -
	Controller does not respond to SMS messages	- 1	6 -



Troubles

Term Controller in following text means InteliGen or InteliSys controller.

Interference and over voltage transient protections

Protection is always an issue for sensitive electronic devices. InteliGen and InteliSys controller has various protections against interferences according to to international standards. If interferences are too high then the controller could be damaged. Following chapter describes some of possible reasons on Power supply, Binary Output, Binary Input, Analog Output and Analog Input controller terminals.

Power supply input could be damaged, if ...

- Relays without antiparallel protection diode over the coil are used. When the inductive voltage is to high
 during switch over from on to off then the high inductive voltage peak could disturb/damage the controller
 power supply protections.
- Jump load situation (start the engine with a additional battery)
 this is not recommended to do due the voltage peak is to high
- Engine is running without battery but with alternator for battery charging
 - In this situation the voltage increase and could disturb/damage the controller. Do not disconnect battery cable when the engine is running
- Input voltage is higher than 36 Vdc
 - Take care to this situation and avoid situation
- Lightning strikes
 - Use a galvanic separated power supply source
- · High harmonics distortion are induced
 - Install IG-MTU transformer sets to separate mains- and genset voltage inputs
- Voltage peaks are disturbing the controller

Install Schaffner Filter FN660-10/06

Binary Output could be overloaded, if ...

 Relays without antiparallel diode over the coil are used. When the inductive voltage is to high during switch over from on to off then the high inductive voltage peak could disturb/damage the output transistors.

Binary Input could be burned, if ...

- The voltage quantity is out of range/tolerance as shown in the specs
- 220 Vac voltage is appled directly to the terminals.

Analogue Output could be overloaded, if ...

 External voltage supply to the analogue output is connected. Please refer to the manual, the output load must be resistive.

Analogue Input could be disturbed, if ...

Please refer to the manual, the signal source must be a resistive or current sensor only.

RPM Input could be disturbed, if ...

 Induced interferences through RPM input coming from pickup signal. Use RPM ISO or signal doubler MSP 6732. Please refer to the manual.

Load sharing line is not working ...

- Use shielded and twisted wire as recommended in the specs.
- Connect only one shield from one cable to the terminals.
- Separate signal cable from power cable.



CAN-Bus line is not working ...

- Use shielded and twisted data cable as recommended in the specs.
- Connect CAN bus shielding in one point only.
- Terminate both ends with 120 Ohm resistors.
- Separate signal and data cables from power cables.

General

IG controller works but displays fix "strange code"

Front panel buttons are not active. Upgrade IG firmware to version at least 5.3 or higher.

Often IG display refreshing

The bar graph limits and displayed values are refreshed due to active Power derating function.

The controller display is dark

Check the controller supply voltage connection, level and polarity.

Supply is OK, display is still dark

Previous loading of firmware was aborted.

Start WinEdit, Open the connection and follow instructions in WinEdit manual, chapter Firmware upgrade, Unsuccessful programming – Low-level programming. When Low level programming does not work - see Controller looks dead after interruption during reprogramming

IG screens returns to the Main measure screen

It is O.K.; IG screen auto switch function activates 15 minutes after the last key press.

Controller works properly but display is empty

When controller display is back-illuminated, the display contrast might be very low.

Wait at least 15 min from the last touch of any front panel button to be sure that controller returns to the Main measure screen. Then press ENTER together with Λ button until you reach required contrast.

IS screen is dark

Display back light is automatically switched off after 15 minutes after the last key press to prolong light source live. Touch any button to light the display.

Unexpected behavior after firmware upgrade

Check if firmware version, application and SW configuration correspond to real Switchboard connection. Check proper setpoints adjusting.

Controller remains in the "Init" state

Setpoints checksum error was detected after switch on.

- Change at least one setpoint (e.g. Mode) and switch IG off and on again
- Select WinEdit menu: Controller -> Reset .

How to check the configuration of IG

- In measurement, press ENTER together with PAGE to select the Info screen.
- Detail IG inputs and outputs configurations see in WinEdit:
 - Select WinEdit menu: Controller->Software configuration->Modify.
 - The other way is to export data (Controller->Export data). You can store the configuration as a Microsoft Excel (*.XLS) file.

How to check the configuration of IS

- In measurement, press ENTER together with ALARM LIST buttons to select the Info screen.



Controller Mode cannot be changed from OFF

Check the binary input REMOTE OFF. If closed, the mode cannot be changed using buttons MODE< or MODE>.

Controller mode changes itself

When only one common speed pickup is used for speed governor and controller, take care of interference signal not disturbing IG functions.

When some problems occur:

- Check ground connection from pick-up to the governor and controller, alternatively disconnect ground connection of the governor or controller
- When Cummins EFC speed governor is used, connect 4u7/50V capacitor to EFC power supply terminals 1,2
- Galvanically separate IG RPM input using separation transformer (1:1)
- Use separate pick-up for the speed governor and IG.

Controller doesn't stop the engine on any alarm although it reports it in the Alarm list

Check the binary input SPRINKLER. If closed, no alarms except Overspeed and Emergency stop will stop the engine.

No response on Start/Stop keys

Check if controller is in the "Ready state" in MAN mode. In AUT or OFF modes controller does not respond to Start/Stop keys.

Controller is in the "Not ready" state and Alarm list is empty

- Check RPM value on the main measure screen. If the value is different from zero, IG is in "Not ready" state.
- Check IG mode. If you select the OFF mode, IG is in the "Not ready" state.

MCB fail is reported although the MCB feedback is OK

Check the setpoint AutoMains fail: MCB logic - your MCB logic can be converted.

Controller does not close GCB in MAN or AUT mode

SPM application: IG detects a voltage on the Mains terminals MINT application: Measured bus voltage does not correspond to MCB feedback signal. When MCB feedback is closed and the bus is dead, IG wants to synchronize but cannot.

Some setpoints cannot be changed

Password is not entered.

No "Time stamp" history record is written in the IG history

IG, IS "Time stamp" history record is written only when the engine is running. InteliMains "Time stamp" record is written only when MCB is closed or bus voltage is present.

IG front panel red LED on the gen-set side lights or blinks

This LED indicates common gen-set and engine alarms. Check the Alarm list and history file for Alarm reason.

When power cut comes, gen-set does not start

Check if AUT mode is selected.

Check if REMOTE OFF binary input is activated (close or open according to the configuration).

I have lost the IG Password and/or Access code

Read on WinEdit - Values group "IG info" the values of "PasswordDecode" and "AccessCdDecode". Please send these two values and the serial number of the unit to ComAp.



It is not possible to remove catches to take controller out from switchboard

Carefully remove front panel rubber seal to extend the gap.

RPM measuring

Pickup signal

Controller indicates "Sd Underspeed" + "Pickup fault" after engine start when the pickup signal is good for start and low speed but too big for higher speed (lost of signal due to RPM input saturation). Increase gap between pickup and engine flywheel or change type of pickup.

RPM measuring

RPM input does not work, IG displays RPM value "0"

- For RPM measuring from the speed pickup must be the setpoint **Basic setting**: *Gear teeth* greater than "0"
- The distance between the RPM sensor and teeth must not be too large, follow the pickup specification.
- Check the speed pickup wiring.

Controller detects RPM on no running gen-set

- RPM is measured from the generator voltage (Gear teeth = 0)
- Generator voltage terminals are opened (e.g. due to opening of fuse switch)

For proper voltage measuring should not be generator or mains voltage terminals unconnected. Generator and/or mains voltage terminals are to be connected to significant impedance.

Note: No zero RPM causes controller Not ready state and engine start is blocked.

Analog measuring

IG does not measure analog value

Check proper sensor characteristic configuration and adjusting.

Why the Pt100 sensor cannot be used

The analog input resolution is from 0 to 2400 ohms in one-ohm steps. Because of the Pt100 conversion ratio $(0,385\Omega/^{\circ}C)$ is the temperature resolution very low (1 ohm = 2.5°C steps). Use Pt 1000 $(3,85 \Omega/^{\circ}C)$ or other type of higher conversion ratio sensor instead

Any of analog inputs does not measure correctly

Check appropriate setpoints **Sensors spec**: Calibr Al x.

Sensor failure is detected

The measured value is out of range, check the sensor characteristic.

Change the **Sensor spec**: Calibr An ... to "one" (Enter) and back to "zero" (Enter).

Analogue input value is XXXX

The measured value is out of range, check the sensor characteristic, or the input is set as Unused.

Current output sensor influences resistor sensor measuring

When both resistor and current sensors are used, connect Analog input COM terminal to IG-Minus power supply terminal.

Controller measures wrong values from current output sensor

IG-CU, IS-CU and IG-IOM analog inputs are mainly designed for resistor sensors. In special case transducers to 4-20mA output can be used for various measuring. Some types of transducers are not suitable for connection to resistive analog inputs because of influencing by analog input.



In this case modify default 4-20mA/60 or 4-20mA/100 sensor characteristic to get proper reading.

Power measuring

Active and reactive power measurement shows unlikely values

Check the voltage and CT connection in all phases exactly according the drawings in Application manual. Output leads from current transformers has to be shortened when disconnected from controller !!!

Wrong mains or bus voltage and frequency measuring

Check neutral connection between mains (bus) and generator. When it is required neutral separation – use IG-MTU separation transformers.

For proper voltage measuring should not be generator or mains voltage terminals unconnected. Generator and/or mains voltage terminals are to be connected to significant impedance.

Controller does not measure generator current

Generator current is measured only when GCB is closed.

Maximal current of the analog output on IG-IOM cannot reach 20 mA

Check the supply voltage for IG-IOM. It must be in the range 8 to 36 Volts. Check **Basic settings**: *AnOut-kW/20mA* setpoint, which defines conversion ratio from kW to mA.

I cannot find a neutral current measurement in SPtM

The neutral current terminals are used for import/export mains current measurement.

Generator overcurrent protection does not react

Maximal measured current is 10A on the IG CT terminals. Please check used CTs and CT ratio setting.

IG Starter kit

After MCB closes MCB fail is detected

The setpoint **AutoMains fail:** MCB logic has to be set to CLOSE-ON, because of direct wire connection between binary output MCB CLOSE/OPEN and input MCB FEEDBACK.

Although maximal current is adjust by pot, IG displays low power value

Setpoint Basic settings: CT ratio has to be set to value higher than 3000 A/5A.

Multiple gen-set applications

Temporary generator voltage increasing or decreasing

MINT application, island mode (Var Sharing), single genset running loaded. If a high load jump comes, the AVR control loop may respond incorrectly by increasing or decreasing its output. This leads to temporary increasing or decreasing of the generator voltage. If the load changes are frequent (periodic), the result may be unstable voltage regulation.

Can occur in IG-5.0 - 6.0, IS-2.0 - 2.7.

The IG and/or IS and /or InteliMains are reset continuously

The software in controllers and/or InteliMains is not compatible. In standard software branch the compatible versions are IG 5.6 and later, IS 2.7 and later IM5.1 and later. For other sw branch, please contact your distributor.



What is the sequence of GCB closing when more engines starts at once to the dead bus

The generator which reaches adjusted generator setpoints at first connects GCB to the dead bus. Other gen-sets have to synchronize to the bus.

The system reserve does not correspond to the number of running engines

Check whether all IGs are in AUT mode and have the setpoint **Pwr management**: *Pwr management* is set to "ENABLED" or "EXTERNAL".

Power and PF sharing does not operate well

Check the proper MCB feedback configuration (must not be configured twice). MCB feedback switches between parallel to the mains and isolated mode of the controller.

Two or more engines starts and stops at the same time

They behave as one big engine. Check the **Pwr mangement**: *Priority* setpoints of these engines. Priorities are probably set to the same value.

Setpoint replication does not work

Check the CAN BUS STATUS status on IG measuring menu screen. Each connected IG must have "1" on position of its address.

E.g. CAN BUS STATUS 10100000000000000 means that only IG's with controller addresses 1 and 3 are connected.

Binary outputs SYSTEM READY and SYSTEM RES OK do not operate

Check whether all the IG's are in AUT mode and CAN bus is properly interconnected.

How to check proper CAN bus connection

Check the CAN BUS STATUS status on IG measuring menu, screen. Each connected IG must have "1" on position of its address.

E.g. CAN BUS STATUS 101000000000000000 means that only IG's with controller addresses 1 and 3 are connected.

How to check actual IG-MU sw version

Open MultiEdit direct or modem connection and select Help | About item to open info panel.

CAN bus connection problems

- Check the CAN bus connection, cable type and terminating 120Ω resistors.
- The CAN address of each IG must be unique throughout the system.
- Right CAN bus structure: in-line.
- Can bus length is max. 200m.

Sync/load control

IG-PC(LS)M does not operate properly

- Check if IG-PC(LS)M power supply terminals are connected to IG-CU.
- Check if there is no mechanical obstacle to proper connector contact between IG-CU and IG-PC(LS)M module.

InteliSys Sync/Load control does not operate

Check if proper type of IS DONGLE (hw key) is connected.

Speed regulation does not hold the speed on the nominal speed level

• SPM, SSB, MEXT: No regulation is performed from IG. Check your speed governor setting.

Troubleshooting Guide, ©ComAp – August 2005



• SPtM, MINT: Start the set in MAN mode and follow the instructions in user manual for proper setting.

IG-PC(LS)M speed governor output is at the end position –10V or 10V not only during the transients (SPtM or MINT only)

- Start the gen-set in MAN mode, follow the instructions for speed governor output setting in user manual.
- Check the setpoint **Sync/load ctrl**: SpeedReg char "POSITIVE" or "NEGATIVE".

Synchronizing operates well (synchroscope indicates proper slip and angle), but GCB (or MCB) does not close

- Setpoint **Sync/load ctrl:** *PhaseWindow* is set to zero. Set another value (2-5 is recommended).
- Check voltage difference in all three phases L12, L2, L3 and adjust properly **Sync/load ctrl**: *Voltage window* setpoint.

InteliMains doesn't start synchronizing after MCB is pressed

Check the binary input SYNC DISABLE. If closed, InteliMains doesn't allow the synchronizing even if both mains and bus voltage are within limits.

Volt/PF control

IG-AVRi connection

When is IG-AVRi is connected instead an external AVR resistor: connect IG-PC(LS)M AVRi outputs OUT1-GND or OUT2-GND.

When AVR module has a voltage input for the generator voltage adjusting: connect floating IG-PC(LS)M AVRi outputs OUT1-OUT2. Follow AVR documentation.

Use IG-AVRi trim to adapt proper control range. Follow IG SPtM or MINT documentation.

Voltage regulation does not hold the voltage on the nominal voltage level.

- SPM, SSB, MEXT: No voltage regulation is performed from IG.
- SPtM, MINT: Start the set in MAN mode, follow the instructions in user manual for proper setting.

Voltage regulation is at 0% position (MINT)

• CAN bus between InteliGen/InteliSys and InteliMains is interrupted: check CAN status bits

AVR output is at the end position 0 or 100 % not only during the transients (SPtM or MINT only).

- Start the set in MAN mode, follow the instructions for AVR output setting in user manual.
- Check the setpoint AVR characteristics. Check the setpoint **Volt/PF ctrl**: AVR*Reg char* "POSITIVE" or "NEGATIVE".

PF or PFS control does not operate well

Increase PF or PFS gain.

Controller setting and configuration

IS configuration import

Use CfgImport software to import configuration between different archives (include programmable functions) from e.g. IS-MINT to default IS-SPtM archive. CfgImport is part of WinEdit installation: Start-Programs-WinEdit-CfgImport and can be used for IS controller only.

Check what from following can be removed from default IS archive configuration when there is insufficient memory to import configuration from another IS archive:

Troubleshooting Guide, ©ComAp – August 2005



Removing of 1x BIN address saves 170B.

1x BOUT address saves 160B.

1x complete IS-ANA8 (Cylinders) unit saves 450B,

1x complete IS-ANA8 unit saves 1000B,

One History item saves 10B,

One sensor curve saves 125B (Configuration - Analog inputs - Sensors (button) - VDO Press

IS-CU - Remove).

What means InteliSys message SD BINx, SD BOUTx, SD AINx

Error message (e.g. SD BOUT2) appears on InteliSys screen when Binary input or output Address x is configured but no corresponding message is received. Check IS configuration and corresponding external unit address setting.

It is not possible to change setpoint

Setpoint is not password protected and it is not possible change it.

Some setpoints couples have consequent limits. It is not possible to adjust setpoint when the second one is out of limits (random value due to archive upgrade). Use WinEdit function "Setpoint - Import alternative setpoints" for default archive values import.

Not enough memory for InteliSys external modules configuration

Remove default (VDO) sensor characteristics, which are not used.

Some set points groups have a yellow background

Yellow background indicates the setpoints, which are out of limits. Change these values to be within limits.

How find out the setpoints limits

When cursor is placed on the setpoint value, the limits appear on the bottom of the setpoints window.

It is not possible to configure IS Programmable functions

Use PLUS application archive.

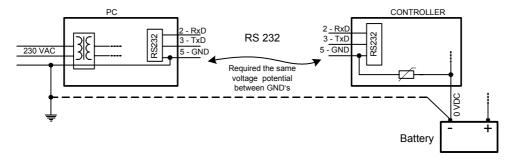
Controller malfunction after a new application download

Check new configuration, your configuration maybe differs from default archive. Always save your archive before upgrading to the new one.

WinEdit - MultiEdit

Before the first direct connection

Make sure the grounding system on controller and PC – COM port (negative of the PC DC supply) are identical – before the first direct connection. There must not be any voltage between these two points otherwise the internal PTC protection activates and interrupts RS232 communication (resistor in older types controller burns out). The simple solution is to assure, that the PC supply 240/20V is ground free (GND terminal is not connected) - see also the next point.



Troubleshooting Guide, ©ComAp – August 2005



Communication via RS232 does not work

Controller looks dead after interruption during reprogramming

The RS232 recoverable PTC ground protection is in InteliGen and InteliSys (InteliLite) controller. Activation of PTC ground protection causes communication interruption and "<u>Supply is OK, display is still dark</u>" (see in the chapter General) when it happens during firmware reprogramming.

Note the display gets a bit darker after controller supply switch on even if the firmware is not working due to previous download interruption.

In this case disconnect RS232 communication line and ensure one of following conditions for PC to controller connection:

- 1. PC and controller ground are identical (see Before the first direct connection)
- 2. PC power supply is separated (e.g. battery or insulated supply)
- 3. Use RS232 isolator (see in CommunicationGuide chapter Converters Isolator RS232) if item 1. or 2. is not possible.

PTC recovery time is at least 1 minute when RS232 line is disconnected. Start controller Boot programming procedure after this time.

Unsuccessful IS programming

InteliSys contains two firmware files: application mhx and display mhx. It is necessary to use corresponding files see ipt file.

When it is not possible to open direct communication use Boot load (jumper) programming. It is possible to download display firmware by standard programming procedure when DDE server is running even if the IS display is dark.

History stops recording

With WinEdit 5.3 and older (+DDE server 2.3 and older) sometimes can happen, that the history stops recording for some time (~ hours, days) and later on resumes again. In most cases, the "Read history" command helps to re-sync the controller and WinEdit history.

Workaround: Install the latest available version of WinEdit (5.4 or later).

Unsuccessful programming message

Check if controller is really switched to OFF mode. Binary inputs Remote TEST or Remote MAN can block programming when closed.

How to open default archive in OFF line connection

Select WinEdit menu: Open connection -> OFF line. Press Open archive button in Archives field and use standard Open file window. Default archives are in directory:

C:\ PROGRAM FILES \ COMAP \ WINEDIT \ APP \ DEFAULT

How to change PC COM port before opening connection

Select Connection – Open. In "Open connection" window select button.

How to open default archive in ON line connection

Selecting WinEdit menu: Controller -> Software configuration -> Select opens window containing default archives.

I can't open communication to gensets group

Is IG-MU proper connected ?

Is ticked Connection via IG-MU in Open connection window?

Are all Controller addresses correctly adjusted = the same in WinEdit and in controllers. Any wrong adjusted address blocks group communication.

Troubleshooting Guide, @ComAp - August 2005



When WinEdit is started from MultiEdit with entered password, the password symbol is gray and no protected functions are enabled.

It can take up to one minute till the password is verified, especially when WinEdit is started in the DDE Server "Preparing" state.

In WinEdit - Open connection window there are no sites visible

Check sites directory settings: WinEdit – Options – Settings.

WinEdit History in on-line connection does not correspond to the history in controller

Open the WinEdit History window and force history re-reading by selecting WinEdit menu: History -> Read history.

The automatic history reading after opening connection can be activated by ticking check box "Always read history after opening connection" in WinEdit menu: Options -> Setings -> History.

The display shows: Configuration table error

Previous loading of Software configuration (application archive) was aborted, but IG controller is still able to communicate to DDE server.

Download application archive once more: open the connection, select WinEdit menu: Controller -> Software configuration -> Select -> Write to IG.

DDE server messages

Timeout (continuous)

Connected IG controller does not answer to DDE server request. Probable reasons:

- IG controller is not connected
- Wrong communication cable
- IG controller failure
- Different controller address in IG and DDE server is adjusted.
- Wrong PC COM port adjusting
- Wrong setting of **Basic settings**: RS232 mode setpoint (Standard, Modbus)
- Damaged IG RS232 port check PC–IG 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
 - o On the selected phone number is incompatible type of modem.
- When engaged tone is audible during start of connection
 - o Selected phone number is engaged.
 - o DDE server is connecting to itself (when call his own number)
- When no tone is audible

Troubleshooting Guide, ©ComAp – August 2005



o Phone line is not connected to the Modem

Connected Modem does not operate

DSR signal from Modem is not active. Using DSR signal, IG controller detects modem connection from terminal connection and uses appropriate protocol.

Activate DSR signal by AT&S0 command (see Modem documentation).

Connected Terminal does not operate

DSR signal from Modem is active. Using DSR signal, IG controller detects modem from terminal (or RS232/485 converter) and switches appropriate protocol.

Deactivate or disconnect DSR signal form terminal (or RS232/485 converter).

Wrong Access code

Check Access code or check connection between Controller and modem.

Multiple IG controllers connection

To accelerate software loading to selected controller, stop the communication to other controllers (if possible) in DDE server window.

NV RAM error

Checksum of statistic values is wrong.

In version IG SW V4.0 and previous select WinEdit command "Controller –Clear" statistic. From IG SW V4.2 is NV RAM checksum automatically repaired while updating of any statistic value (e.g.kWh).

It is not possible to open Active call connection

When any modem is connected to single controller the *Controller address* has to be set to 1!!! When *Controller address* has different value than 1 Active call is not activated.

GSM Modem connection - SMS

It is not possible to get any connection (data, SMS) with controller through GSM modem.

Controller has not found the modem due to wrong initial setting of the modem. Use the utility GM_SETUP.EXE, supported with WE, to configure GSM (only !!!) modem for operation with IG-CU, IS-CU or iL-CU.

Make sure the following GM setup tick is selected only when IG-MU version below 1.8 is used.

Modem will be used with	old version iG-MU	(below 1.8)
-------------------------	-------------------	-------------

After GSM setup check if baud rate was configured to 9600 bps in GSM Modem Setup window (=standard setting).

Modem communication of Inteli... controllers, IG-MU and IG-IB is based on full modem cable connection where all handshaking signal DCD, RTS, CTS are active and connected.

Inteli...controllers and IG-MU, IG-IB automatically detect modem connection via RS232 - DSR (Data Send Ready) signal. Controller detects modem when is DSR active and direct connection when passive or not connected.

Make sure all signals are connected and activated in modem when it is not possible to open connection.

How to set the telephone number and the Gen-set name

It is possible via WinEdit software only.

Troubleshooting Guide, ©ComAp – August 2005



GSM modem connected, warning call (shut down, slow down...) enabled, Act calls enabled, SMS enabled. SMS function properly, but modem data call (to WE) is not performed.

The phone number for data calls is not set correctly (must be in international format) or the SIM card in GSM modem has not allowed data transfer. This special feature must be mostly activated by the provider separately.

Controller does not respond to SMS messages

SMS commands are not available in IG software version 6.0.

On lover firmware version: Wrong access code was set or modem is not connected to controller.