

InteliVision 5, InteliVision 5 RD

InteliVision 5 Display

Controller Display Unit for InteliGen-NT, InteliSys-NT, InteliMains-NT

SW version 1.2, February 2014

Reference Guide



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Introduction

InteliVision 5 is the **5,7” colour display** unit for ComAp InteliGen-NT, InteliSys-NT and InteliMains-NT controllers. It is designed as a Plug and Play solution and it presents a simple solution with high visibility of all engine and gen-set data, monitoring information in colourful direction.

The new screens correspond to wide variety of daily usage and offer significant step ahead. The compact size, robustness and user-friendly design of InteliVision 5 introduce the valuable solution for every day usage where more information on the screen and display size is preferred alternative.

The same cut-out across all Comaps' products helps InteliVision 5 to be easily used as a replacement of or alternative to IG-Display. Regardless of the size it can be also used as an alternative to IS-Display or InteliVision8.

InteliVision **5** is designed to be connected to **the single controller only**.

InteliVision 5 is offered in **two hardware modifications**:

- a local display unit (InteliVision 5)
- a remote version (InteliVision 5 RD) - unit with the galvanic separated RS-485, the analogue input and the binary output and the internal buzzer.

InteliVision 5 and InteliVision 5 RD **differ only by HW**. All SW features, setting and programming **are the same** for the both versions.

Firmware and PC Software Supporting IntelliVision 5

Firmware – IntelliVision 5 SW 1.1 – 1.2 are supported from following versions:

<i>Mhx file</i>	<i>Currently available Mhx file</i>
IS-NT-2.6	IS-NT-3.0
IG-NT-2.6	IG-NT-3.0
IM-NT-2.9	IM-NT-3.0.2

PC Software – IntelliVision 5 SW 1.1 – 1.2 is supported from following versions:

<i>PC Software</i>
GenConfig-2.6 - 3.0
InteliMonitor-2.6 - 3.0

Installation Package – IntelliVision 5 SW 1.1 – 1.2 is supported from following versions:

<i>Installation Package</i>
IGS-NT-Install-Suite-2.6 - 3.0

Available Related Documentation

<u>PDF files</u>	<u>Description</u>
InteliVision5-1.2 New Features.pdf	New Features list of IntelliVision 5 version 1.2
IGS-NT-3.0-Installation Guide.pdf	Installation guide for IG-NT(C), IS-NT, IM-NT, IG-NT(C)-BB, IS-NT(C)-BB, IM-NT-BB, IV5, IV8
IGS-NT-SPTM-3.0-Reference Guide.pdf	Reference Guide for IGS-NT controllers-SPTM application
IGS-NT-SPI-3.0-Reference Guide.pdf	Reference Guide for IGS-NT-SPI application
IGS-NT-MINT-3.0-Reference Guide.pdf	Reference Guide for IGS-NT-MINT application
IGS-NT-COMBI-3.0-Reference Guide.pdf	Reference Guide for IGS-NT-COMBI application
IGS-NT-COX-3.0-Reference Guide.pdf	Reference Guide for IGS-NT-COX application
IGS-NT-3.0-New Features.pdf	New Features List of IGS-NT application
IM-NT-BTB/FDR/MGCB-MCB-3.0 Reference Guide.pdf"	Reference Guide for IM-NT – BTB/FDR/MGCB-MCB application version 3.0
IM-NT-3.0.2-New Features_r1	New Features List of IM-NT version 3.0.2 revision 1

Fast Navigation

This chapter provides information how to connect IntelliVision 5 and quickly find important data. To be more familiar with IntelliVision 5 menu, see [Operator Interface](#) chapter.

Hint : IntelliVision 5 and IntelliVision 5 RD differ only by HW modification (see chapter [HW Modification](#)). All below described features, setting and programming

How to Connect IntelliVision 5 to IGS-NT?

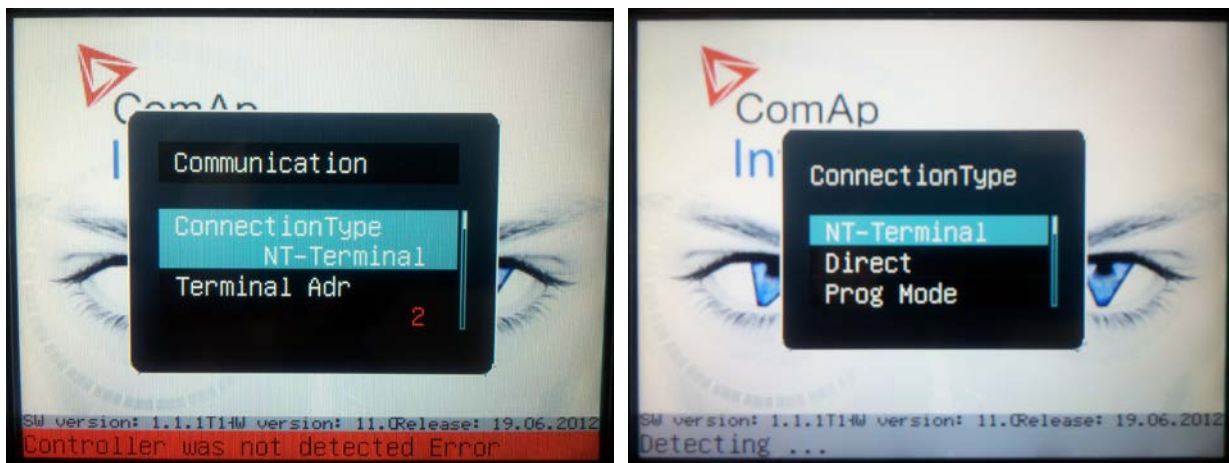
With version 1.1.1 or higher IntelliVision 5 can be connected to the controller via RS-485 or RS-232 line. A user can choose between NT-Terminal connection and direct connection.

If the connection has not been set up yet, after start up IntelliVision 5 will shows “Communication window” with two parameters:

- ConnectionType – indicates last connection type which was selected, press “**Enter**” button to go to menu for selection between options:
 - NT-Terminal
 - Direct
- Terminal Adr./ Controller Adr.

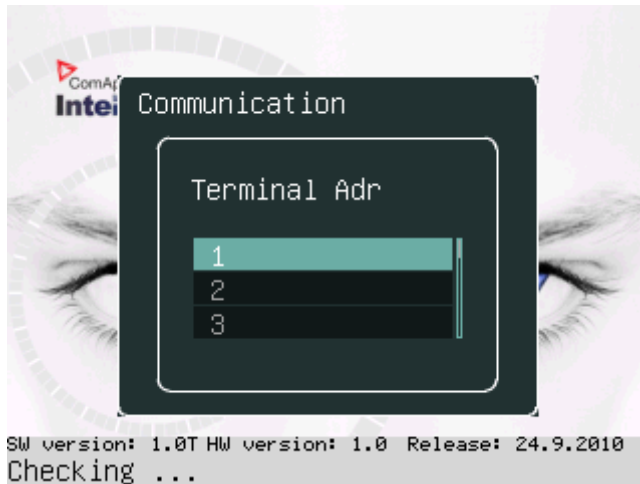
If *NT-Terminal* as a connection type is selected then second parameter is:

Terminal Adr – indicates which terminal addresses are available (**green text**) and which are occupied (**red text**). It is possible to connect up to 2 terminals to IG-NT-(BB) and up to 3 terminals to IS-NT-(BB) controllers.



When terminal address has to be changed:

1. Press **Menu** button and choose **Help/Others** menu
2. Use **↑** or **↓** for **Communication** item and press **Enter**
3. Use **↑** or **↓** to get **Terminal Adr** (in the case *ConnectionType* = *NT-Terminal*) and press **Enter** (in the case *ConnectionType* = *Direct*, firstly *ConnectionType* = *NT-Terminal* has to be set)
4. Use **↑** or **↓** and choose appropriate **Terminal Adr** and press **Enter**, see picture below



Intelivision 5 will reboot and the new terminal address will be used. Loss of communication is presented with the first screen, with SW version, HW version and release date. [Communication timeout error](#) is displayed with terminal address dialogue.

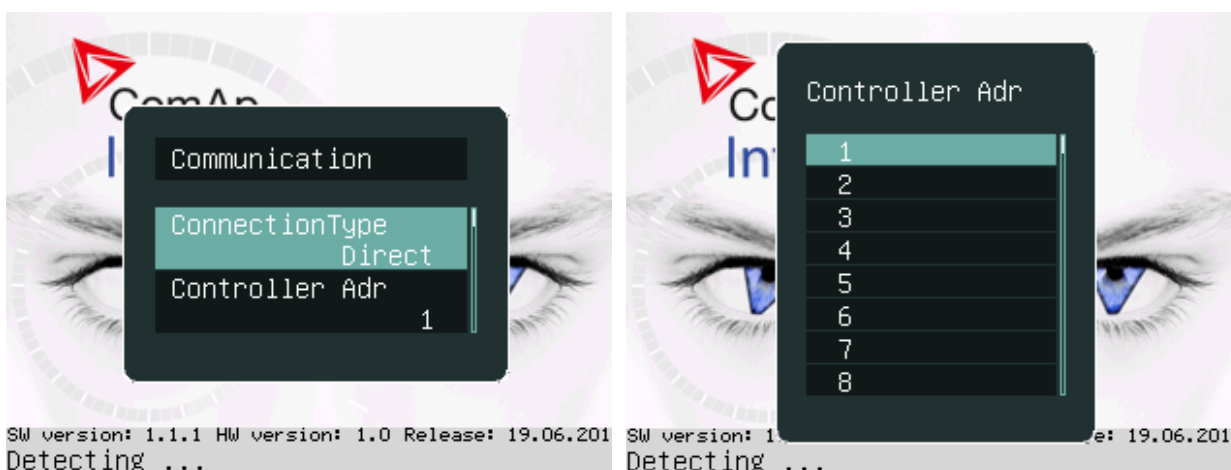
If *Direct* as a connection type is selected then second parameter is:

Controller Adr – address of the controller to which this Intelivision 5 should be connected (it is always possible to connect one Intelivision 5 to only one controller)

Intelivision 5 always tries to detect automatically connected controllers so it is possible to wait until the controller address is detected (scanning of all 32 addresses takes approximately 30 seconds).

When controller address has to be changed for:

1. Press **Menu** button and choose **Help/Others** menu
2. Use ↑ or ↓ for **Communication** item and press **Enter**
3. Use ↑ or ↓ to get **Controller Adr** (in the case *ConnectionType = Direct*) item and press **Enter** (in the case *ConnectionType = NT-Terminal*, firstly *ConnectionType = Direct* has to be set)
4. Use ↑ or ↓ and choose appropriate **Terminal Adr** and press **Enter**, see picture below.



Intelivision 5 will reboot and the new controller address will be used. Loss of communication is presented with the first screen, with SW version, HW version and release date. [Communication timeout error](#) is displayed with terminal address dialogue.

Hint

For the information how to connect IntelliVision 5 to the controller go to the Installation guide or [Terminals and dimension chapter](#). RS 485 terminators have to be used to assure proper functionality. To avoid electrical disturbances on long distances or where electrical disturbance is present use IntelliVision 5 RD.

How many IntelliVisions 5 can be used?

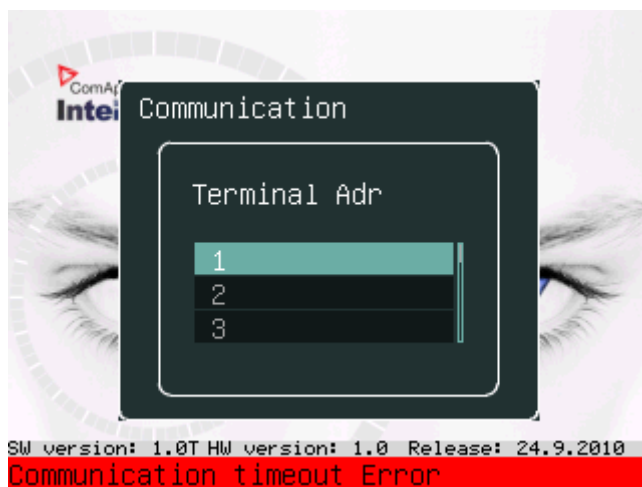
Unit	Number of displays	Display address
IG-NT(C) –BB	2	1 and 2
IS-NTC – BB	3	1, 2, 3
IM-NT-BB	2	1 and 2
IG-NT(C)	1	2
IS-NT-BB	3	1, 2 ,3
IM-NT	1	2

Hint

For how to set up IntelliVision 5 address see [How to Connect IntelliVision 5 to IGS-NT?](#)

Communication Error

Communication error occurs when no control unit is connected to the display or communication is interrupted. In that case the following screen appears:



When the communication between unit and display is fixed, the red stripe disappears and IntelliVision 5 initializes communication with the unit.

Hint:

The control unit is identified by IntelliVision 5 and only valid numbers of terminal addresses are displayed. For the maximum number of connected IntelliVision 5 see [How many IntelliVisions 5 can be used?](#)

How to View a Controller Status

Controller status is displayed in the left bottom part of the screen. Status depends on the external conditions and it is updated immediately when any condition is changed.



Hint:

For more information about controller status see relevant Reference guide e.g. IGS-NT-SPtM-2.5.pdf

How to View a Breaker Status

Breakers status is present in all default controller screens. Single line diagram defines Mains and gen-set condition.



Status is represented with following colours:

- represent breaker failure e.g. MCB fail
- represents closed breaker
- represents opened breaker

Pressing corresponding button results in following actions:

Open MCB (GCB) – command *Open MCB (GCB)*

Close MCB (GCB) – command *Close MCB (GCB)*

Hint:

Mode button and command buttons are disabled when active lock is active. SW button link has gray link around (when no colour background is used) and dark green or dark red when breaker status is highlighted.

How to Control Circuits Breakers?

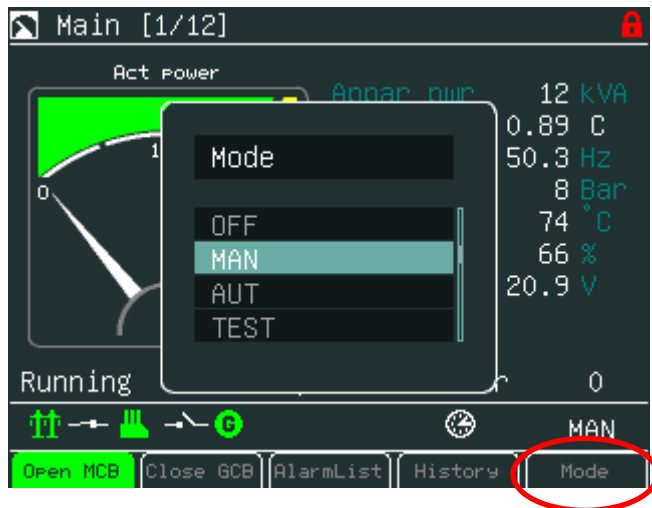
Breakers can be controlled in MAN mode only. Breaker control button is placed in bottom part of IntelliVision 5 display. See picture below:



How to Change a Gen-set Mode?

To Change a Gen-set Mode:

1. Press **Mode** context button (See the picture).
2. Use ↑ or ↓ to choose menu item and press **Enter**



How to Log in?

To enter a controller user:

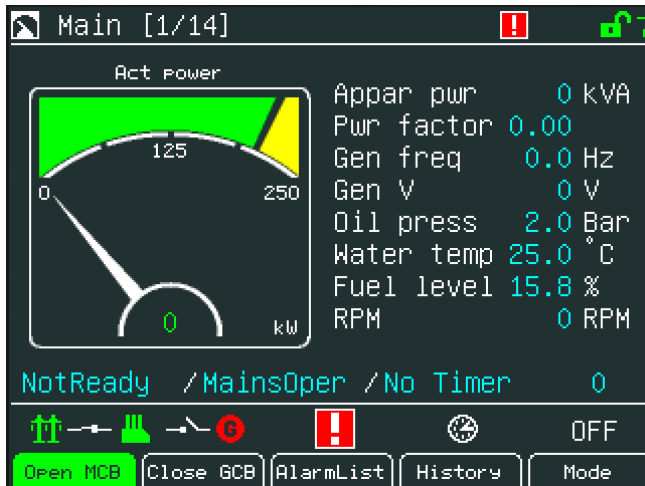
1. Press Menu button.
2. Use ↑ or ↓ to choose **Help/Others** and press **Enter**
3. Use ↑ or ↓ to choose **Users/Password** menu item
4. Use ↑ or ↓ to go to **Users** field and press **Enter**.
5. Use ↑ or ↓ to set the correct user and press **Enter**. See the picture below:



Hint

The controller is unlocked only when proper password is inserted.

When user is log in. Green lock is displayed in the right upper corner and appropriate access level is indicated. See figure below.



How to Enter a Password?

To enter a controller password:

1. Press **Menu** button.
2. Use ↑ or ↓ to choose **Help/Others** and press **Enter**
3. Use ↑ or ↓ to choose **Users/Password** menu item
4. Use ↑ or ↓ to go to **EnterPassword** field and press **Enter**.
5. Use → or ← to select the digit and use ↑ or ↓ to set the number you need to enter. See the picture below:



It is possible to set Password protection feature.

Hint:

Password protection features should be activated in IntelliMonitor in Password Menu. In default the feature is **inactive**.

In the case when Password protection choice is activated and a user inserts wrong password for six times (the number of attempts can change according to a new controller SW version) to log into the controller, the controller is automatically locked for next login. When the controller is locked and user tries to login into the controller, the message (see figure below).

"Controller is locked. Try entering correct password after X min"

is displayed.

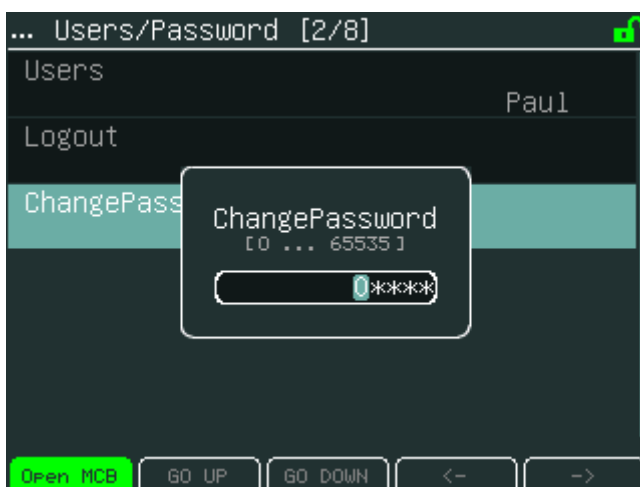
Message informs about time remaining for unlocking of the controller. The time in message is not actualized. For actual time a user should open login dialog again.



How to Change a Password?

To change a controller password:

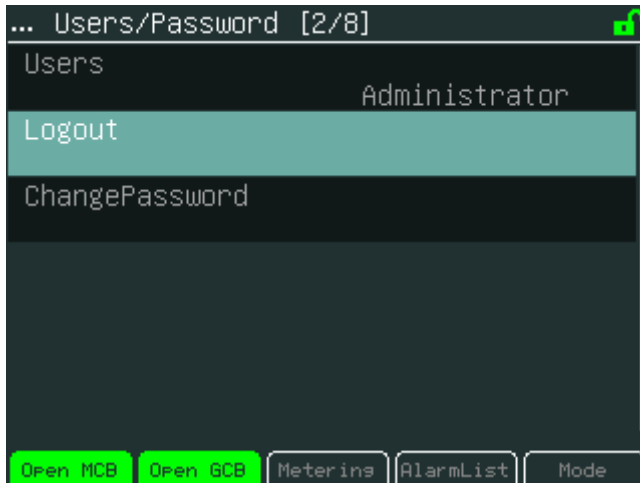
1. Log in, see the chapter [How to log in](#) and [How to enter a password](#).
2. Press **Menu** button.
3. Use \uparrow or \downarrow to choose **ChangePassword** and press **Enter** button
4. Use \rightarrow or \leftarrow to select the digit and use \uparrow or \downarrow to set the number you need to enter. See the picture below:



How to Log out?

To log out:

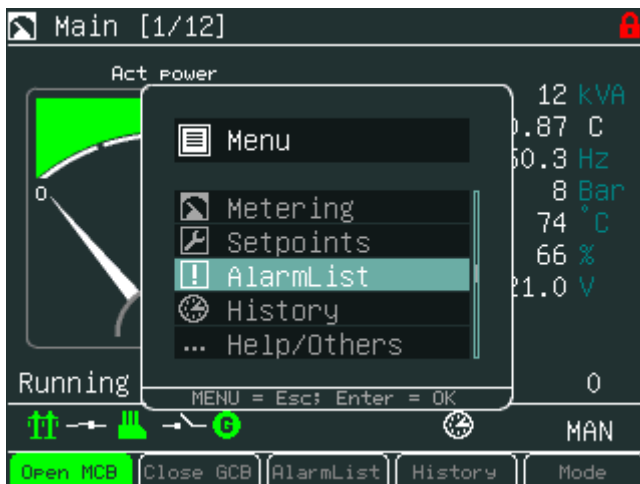
1. Press **Menu** button.
2. Use ↑ or ↓ to choose **Help/Others**, press **Enter**
3. Use ↑ or ↓ to choose **Users/Password** menu item and press **Enter**
4. Use ↑ or ↓ to choose **Logout** and press **Enter**.



How to Find Alarms?

To find alarms:

1. Press **Menu** button
2. Use ↑ or ↓ to choose menu item **AlarmList** and press **Enter**.
3. Or use context button **AlarmList** to jump directly to Alarm list.



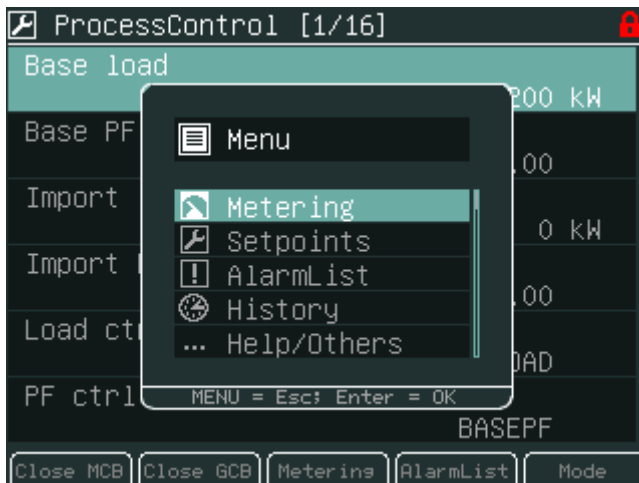
Hint:

In the first measurement screen controller will jump to the alarm list immediately when any alarms occurs.

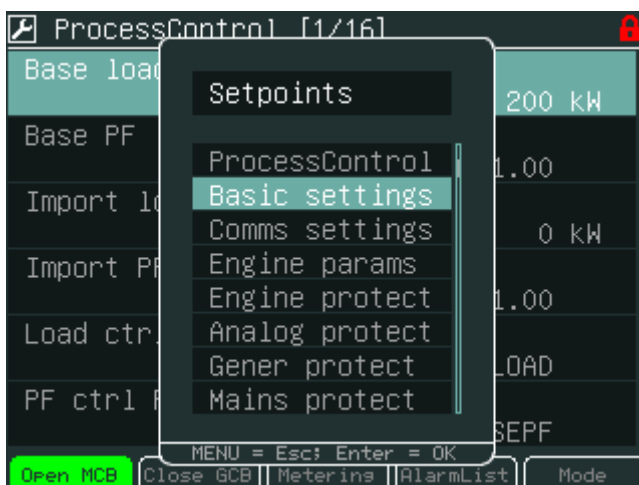
How to Change Setpoints?

To change setpoints:

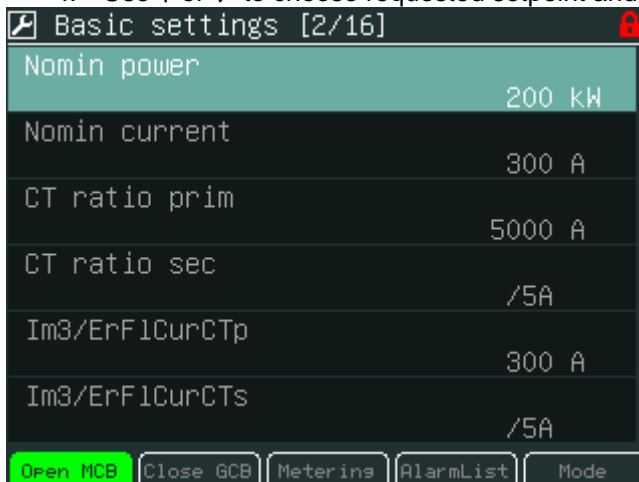
1. Press **Menu** button.
2. Use \uparrow or \downarrow to choose **Setpoints** item, press **Enter**



3. Use \uparrow or \downarrow to choose required setpoints group and press **Enter**.



4. Use \uparrow or \downarrow to choose requested setpoint and press **Enter**.



How to edit setpoints see [Setpoints Screens chapter](#).

How to Reprogram IntelliVision 5?

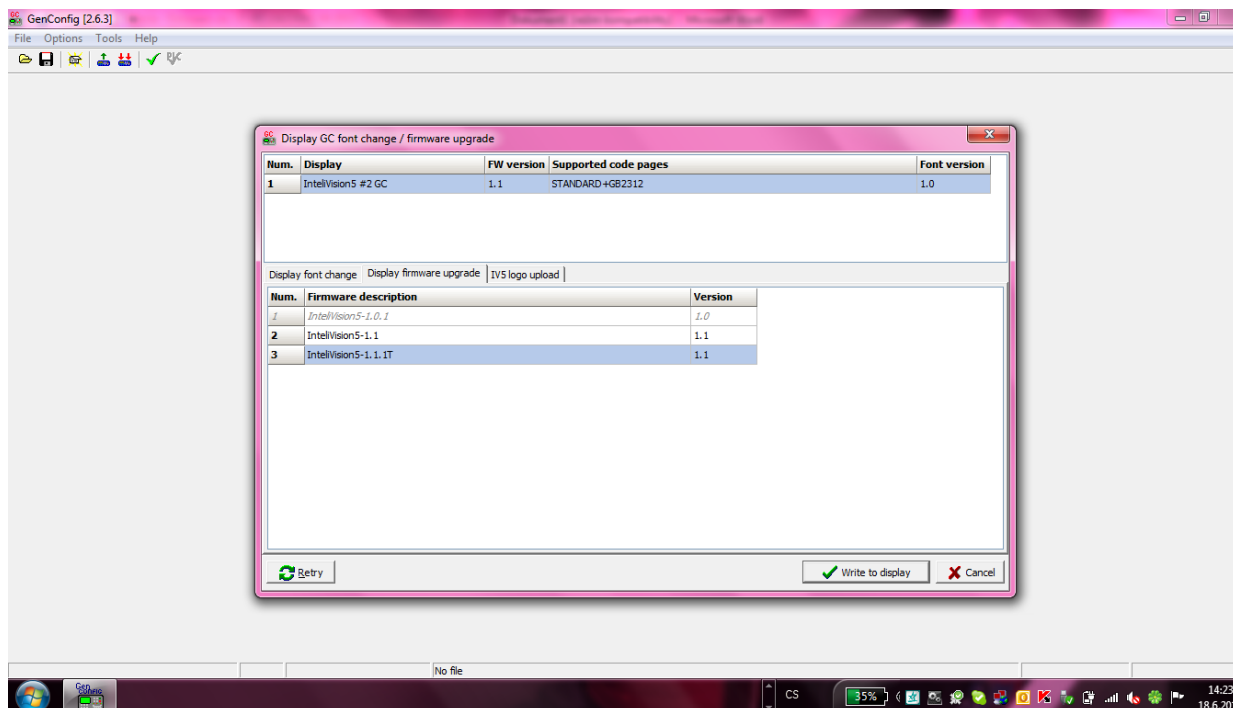
For programming of a new firmware, upgrade of fonts and logo download the IntelliVision 5 has to be connected to any IG/IS-NT-(BB) controller to it's NT-terminal interface, i.e. RS485(1)/display port.

Then the programming is done from GenConfig PC SW tool:

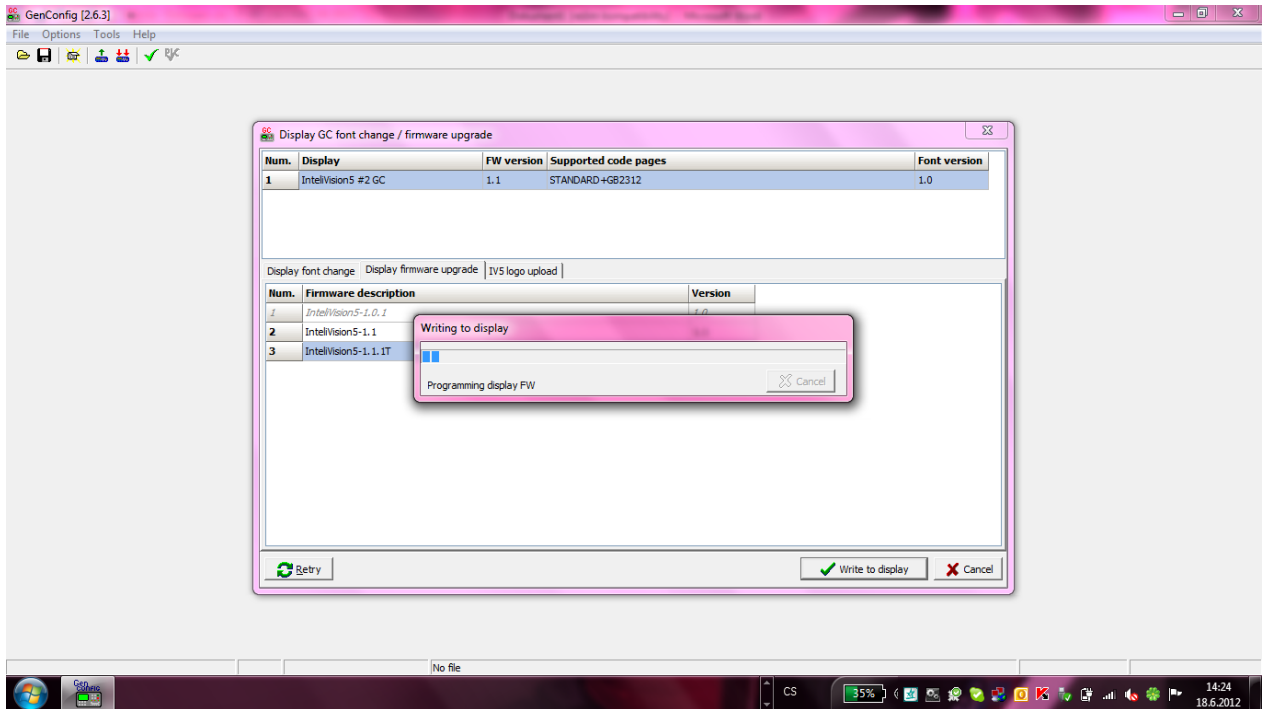
1. Run **GenConfig**
2. Go to menu **File -> Firmware upgrade and Cloning -> Display GC font change / FW upgrade**
3. Select tab according to desired operation, e.g. Display firmware upgrade
4. Select firmware to be programmed

Hint:

It is possible to choose only firmware already imported to GC.



5. Press **Write to display** button and wait until programming is complete



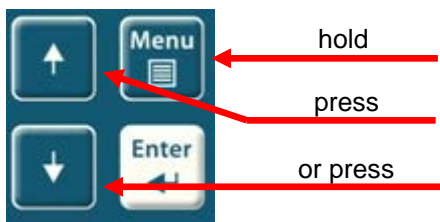
6. Disconnect IntelliVision 5 from the controller NT-terminal interface.

Hint:

It is **not possible** to program IntelliVision 5 through the direct communication interface.

How to Change Display Brightness?

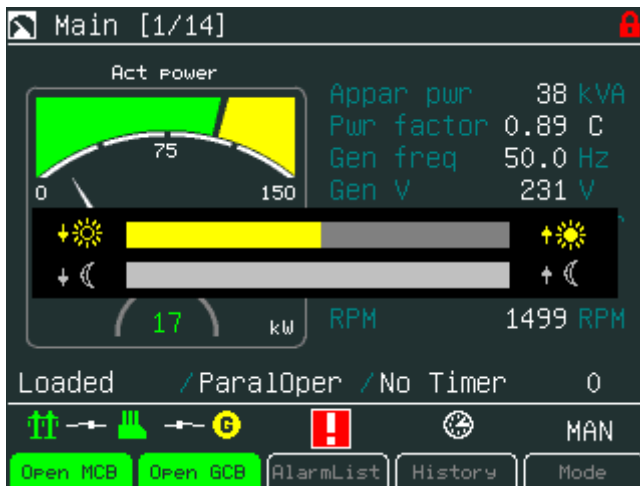
The brightness of display can be changed by holding **Menu** button and repeated pressing \uparrow or \downarrow . See the picture below:



Two modes are available in IntelliVision 5. To switch between **Day** or **Night** mode hold **Menu** button only. Pictogram for day or night appears on the screen.

To change day or night brightness intensity:

1. Hold **Menu** button until day / night mode on the screens appear
2. Press and hold Menu button with \uparrow or \downarrow to change brightness intensity







Hint:




Brightness setting has priority in this order: controller forced brightness IntelliVision's 5 analogue input, keyboard. When the analogue input is used, small pictograms in brightness sub-menu appears. Display backlight could be switched off (standby) due to Backlight Time. For recover any button has to be pressed (see IV5 Settings) or in case of new incoming alarm, the display awakes from standby mode and backlight of the display is activated.

Main Icons Description

Icons at the Top of IntelliVision 5 Display

-  - Terminal is locked; no user is logged in
-  - Terminal is NOT locked; user is logged in
-  - Access lock is active; display is locked for security reasons
-  - Remote communication; when any remote connection to controller is active

Icons at the Bottom of IntelliVision 5 Display

-  - Mains icon; green/red = voltage, frequency are/are not in the limits
-  - Load icon; green/grey = voltage, frequency are in the limits/no available power source
-  - Gen-set icon; green/grey = voltage, frequency are in the limits/out of the limits or not started



- Red exclamation mark; a new alarm occur in the alarm list



- Red button; breaker failure MCB/GCB fail



- Green button; closed breaker



- Button contour; opened breaker

Icons Referring to Specific Screens:



- Menu screen



- Measurement screens



- Setpoints screen



- Alarm list screen



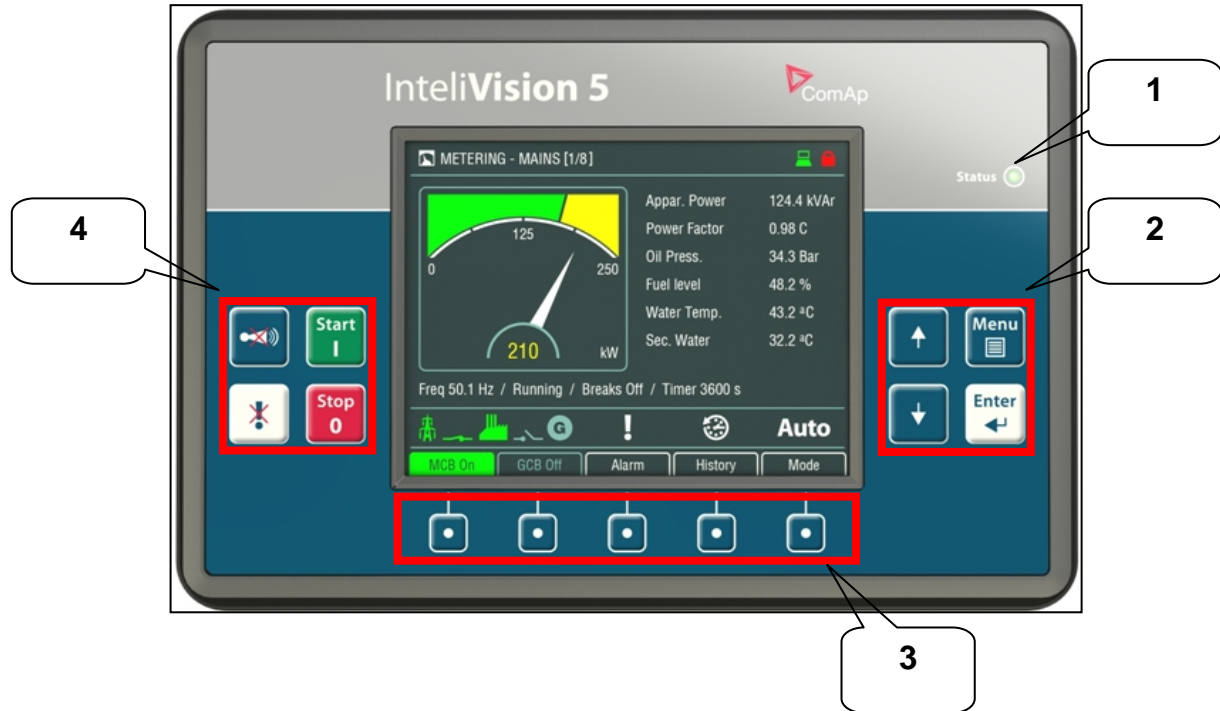
- History screen



- Help/Others screen

Operator Interface

This chapter provides general information on how to operate the IntelliVision 5 display. This manual is intended for everybody who is concerned with operation and controls of the gen-set.



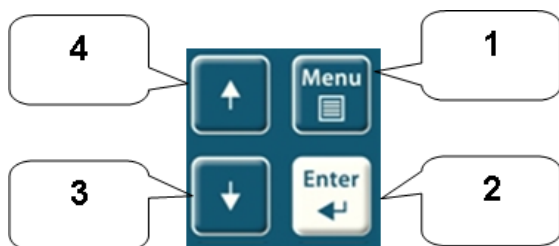
LED and Buttons

- 1. **Status** - Status LED indication (green = IntelliVision 5 is running)
- 2. **Navigation buttons** - Arrows for movement + Menu and Enter button
- 3. **Context buttons** - Control or select submenu/sub-options buttons
- 4. **Control buttons** - Horn reset, Fault reset, Stop and Start buttons

Navigation Buttons

There are four navigation buttons:

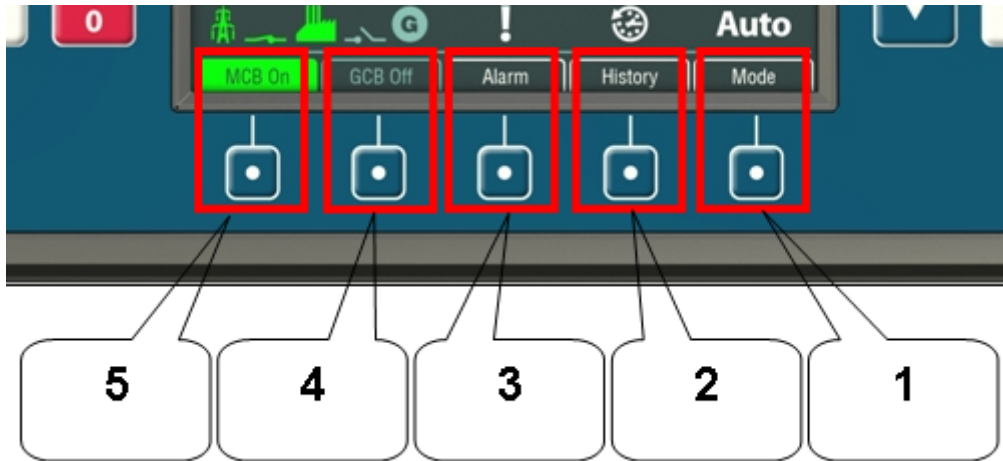
- 1. ↑ - Movement up
- 2. ↓ - Movement down
- 3. **Menu** - Jump to menu/sub-menu page or escape from any dialog window
- 4. **Enter** - Confirms a value or opens a value adjustment within setting dialogs



Hint:

To leave the menu, use Menu button.

Context Buttons



There are five context buttons with predefined meaning:

1. **Mode button** - Jump to the controller mode window
2. **History** - Jump to history screen
3. **Alarm** - Jump to Alarm list
4. **GCB control** - GCB control (close/open GCB)
5. **MCB control** - MCB control (close/open MCB)*

Hint:

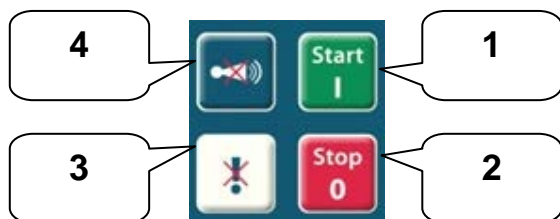
MCB control button is present only in application where MCB is controlled.

Context buttons may be modified by users to fulfill customer's requirements (see chapter User configurable soft keys buttons).

Control Buttons

There are four control buttons:

1. **Start** - Starts the gen-set
2. **Stop** - Stops the gen-set
3. **Fault reset** - Acknowledges faults and alarms (active only in Alarm screen)
4. **Horn reset** - Deactivates the horn (audible alarm)



Hint:

Start and Stop buttons work in MAN or SEM mode only. START and STOP buttons are independent on the IntelliVision 5 screen, menu or sub-menu.

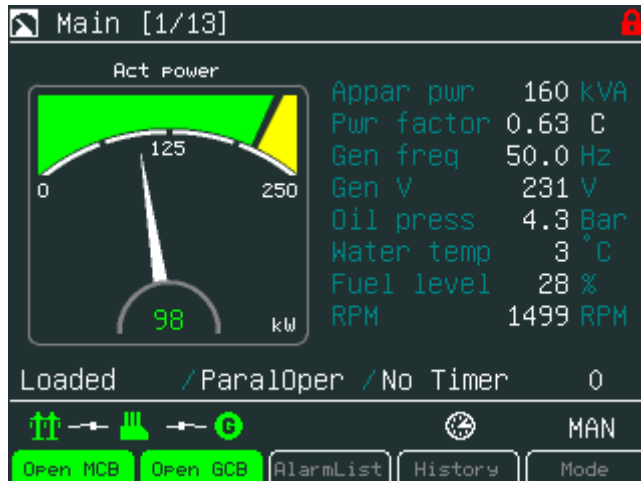
Measurement Screens

On Measurement screen you can see and check various values. Measurement screens appear after the IntelliVision 5 and controller are powered up and initialize sequence disappears. The first Measurement screen always appears when no user activity is captured during fifteen minutes.

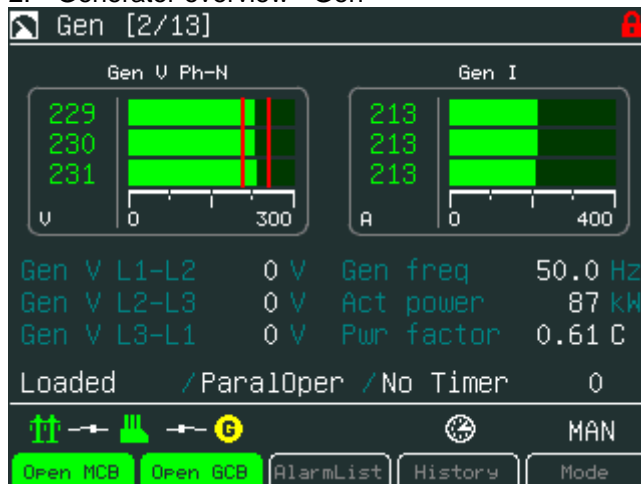
Arrows ↑ or ↓ are used for measurement screens browsing.

IGS-NT Measurement screens come after each other in following order:

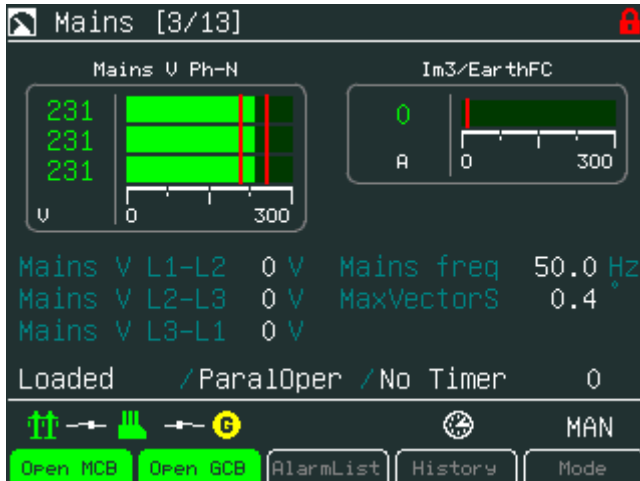
1. Main screen - Main



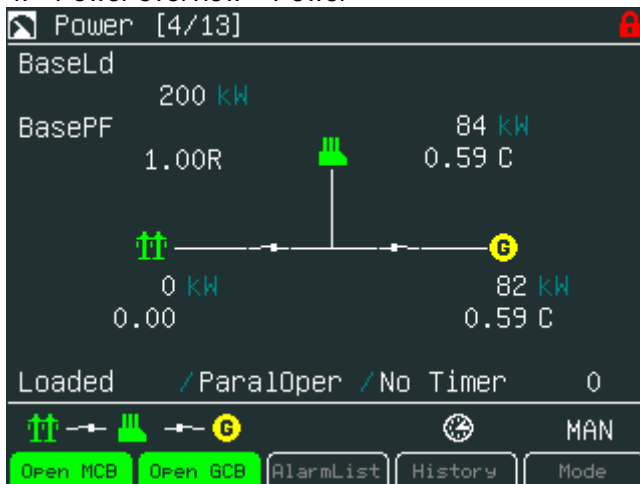
2. Generator overview - Gen



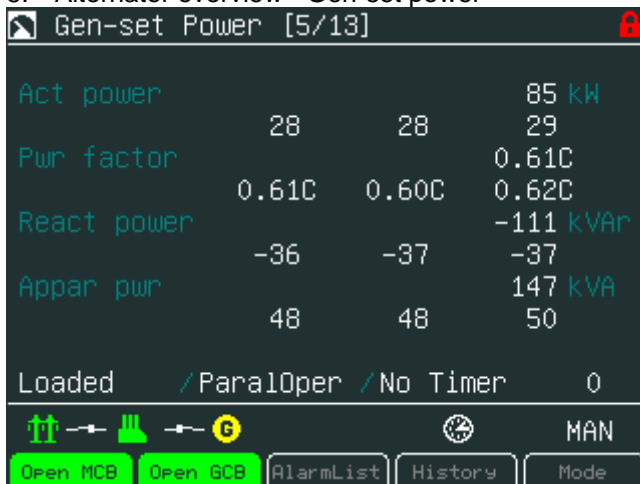
3. Mains overview - Mains



4. Power overview – Power



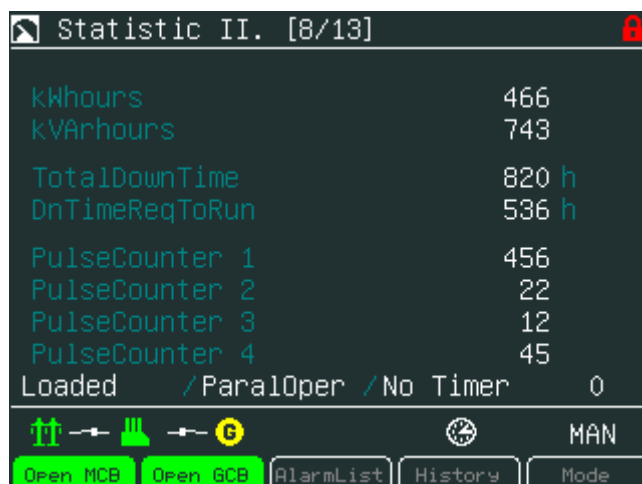
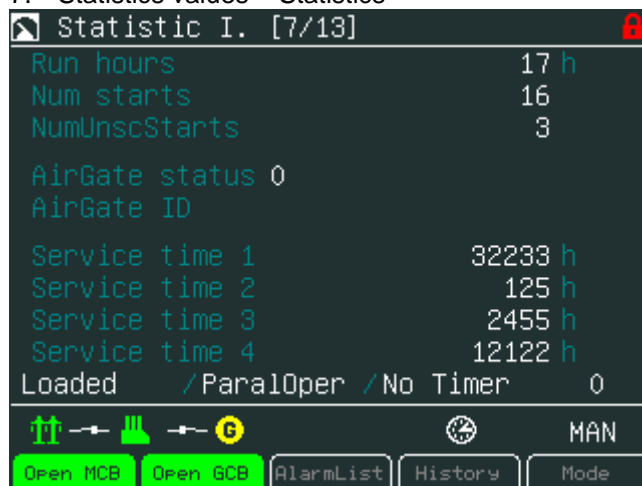
5. Alternator overview - Gen-set power

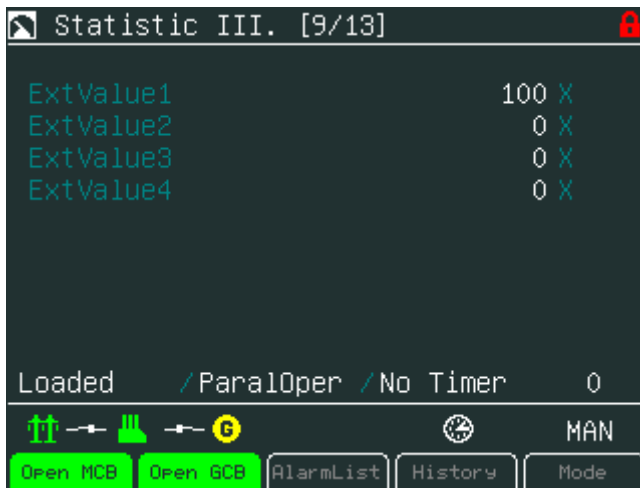


6. Synchroscope

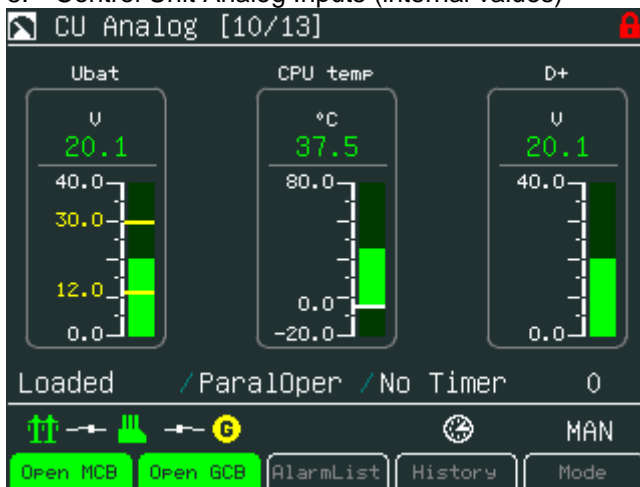


7. Statistics values – Statistics

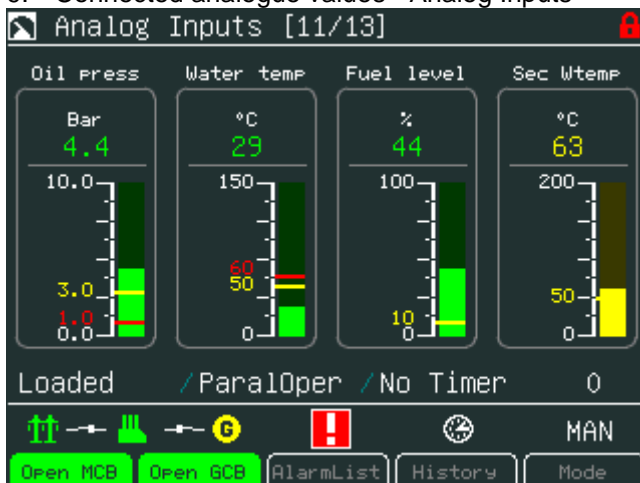




8. Control Unit Analog Inputs (internal values)



9. Connected analogue values - Analog Inputs



10. Controller binary inputs and outputs - Binary I/O

Binary I/O [12/13]			
BIN		1101000000000000	
GCB feedback	1	Warning 9	0
MCB feedback	1	Warning 10	0
Remote S/S	0	SD 11	0
Emergency stop	1	SD 12	0
AccessLock int	0	SD 13	0
Remote OFF	0	SD 14	0
Warning 7	0	SD 15	0
Warning 8	0	SD 16	0

MAN

Open MCB Open GCB AlarmList History Mode

Binary I/O [13/13]			
BOUT		0111100101111100	
Starter	0	Ready	0
Fuel solenoid	1	Running	1
GCB close/open	1	Ready to load	1
MCB close/open	1	Cooling pump	1
Alarm	1	CommonActLev 1	1
Horn	0	CommonAlLev 1	1
Prestart	0	CommonActLev 2	0
Idle/Nominal	1	CommonAlLev 2	0

MAN

Open MCB Open GCB AlarmList History Mode

Other screens with ECU values, analogue or binary inputs/outputs can follow. It depends on the controller configuration.

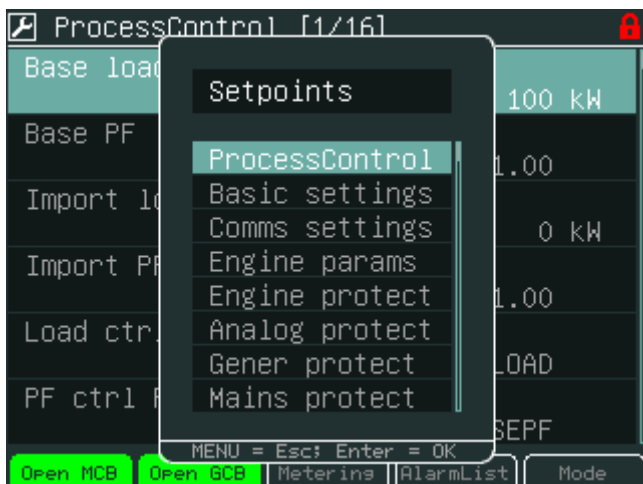
Hint

Use ↑ or ↓ to scroll the screens.

Screens could be hidden or the order of the screens could be modified by users.

Setpoints Screens

To go to Setpoints screen press **Menu** button, use arrow to find proper item in menu and confirm it with **Enter** button. The following sub-menu appears with the list of the setpoints groups.

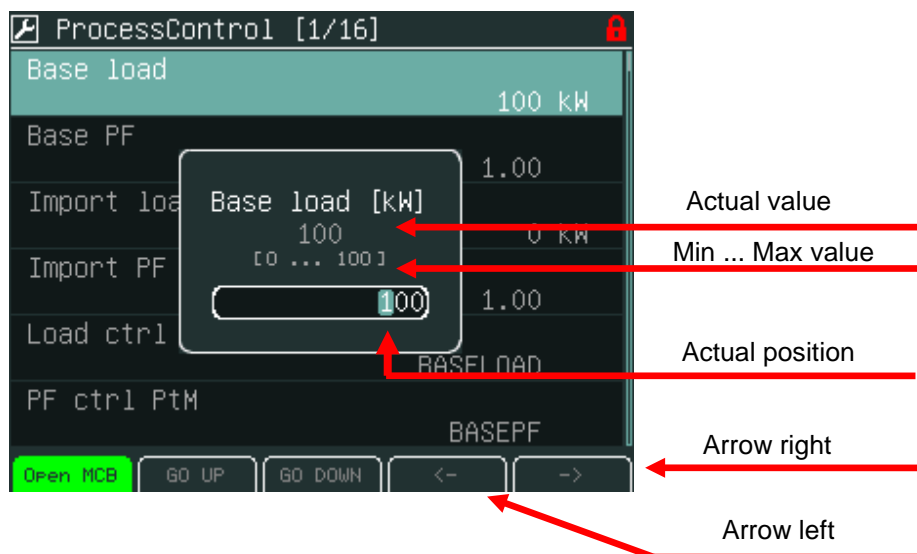


Setpoints groups depends on the application, see Reference Guide of the specific application (e.g. IGS-NT-SPtM-2.5-reference Guide.pdf).

Setpoints could be presented as a numeric, text, string or mixed value and they can be changed in the following ways:

Numerical Value Change

1. Press the button when the proper setpoints group is chosen (e.g. ProcessControl)
2. Use arrows \uparrow or \downarrow to go to a certain set-point (e.g. Base load) and press **Enter** button, see picture below:



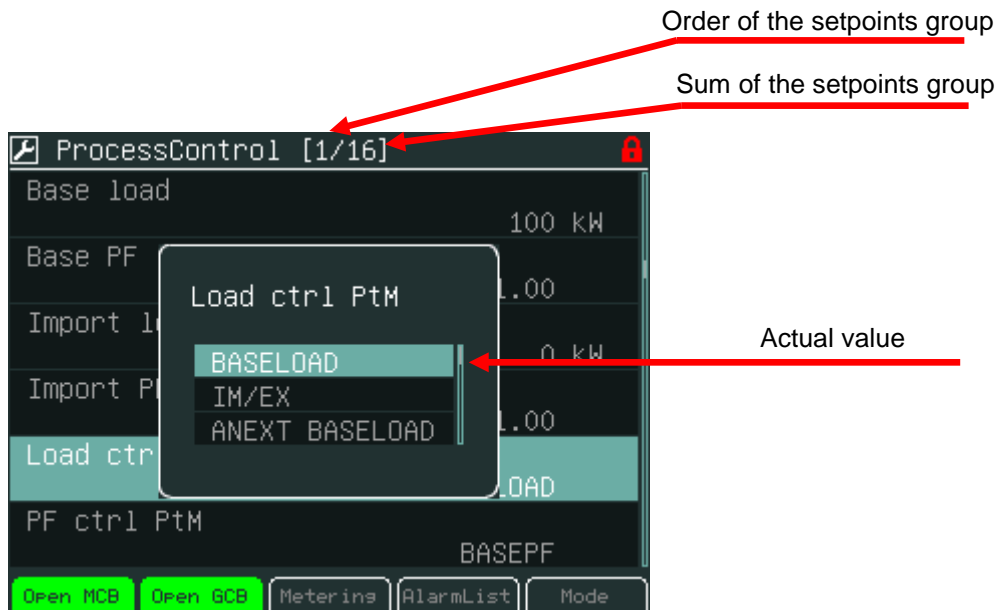
3. Use \rightarrow or \leftarrow buttons to go to a certain position of the field and use \uparrow or \downarrow buttons to change the value. Then use Enter button to confirm new value.

Hint:

If you set the value out of limit, the field will get red colour and the new value is invalid. Invalid value cannot be confirmed.

String Selection

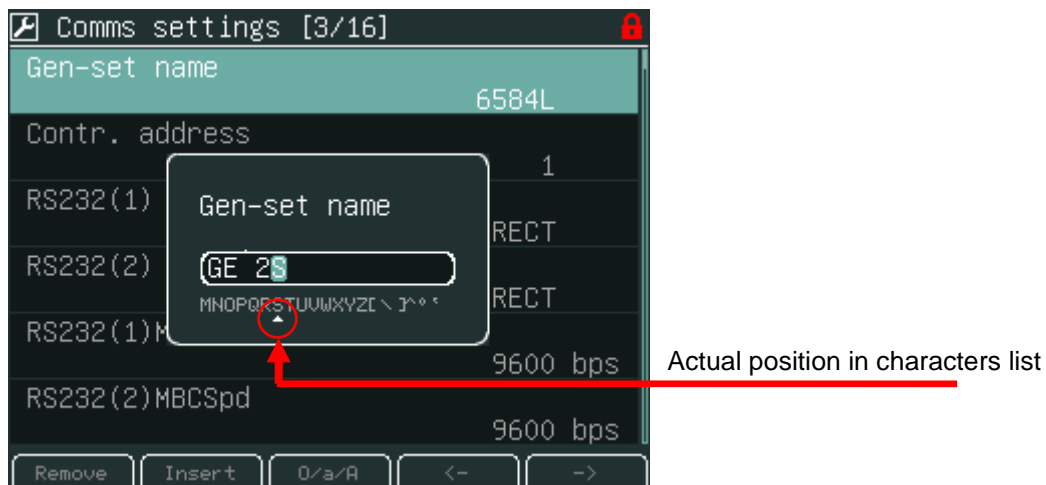
1. Press the button when the proper setpoints group is chosen (e.g. ProcessControl)
2. Use arrows ↑ or ↓ to go to a certain set-point (e.g. Load ctrl PtM) and press Enter button, see picture below:



3. Use ↑ or ↓ buttons to select the string from the list and press the Enter button.

String Edit

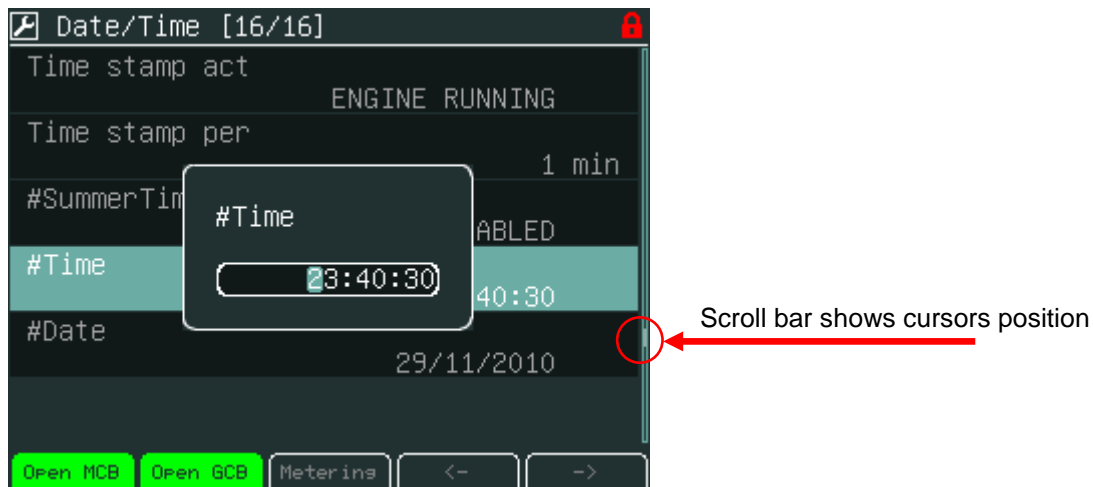
1. Press the button when the proper setpoints group is chosen (e.g. Comms settings)
2. Use arrows ↑ or ↓ to go to a certain set-point (e.g. Gen-set name) and press Enter button, see picture below:



3. Use ↑ or ↓ buttons to select the character and → ← buttons for the next position and press Enter button.

Time and Date Edit

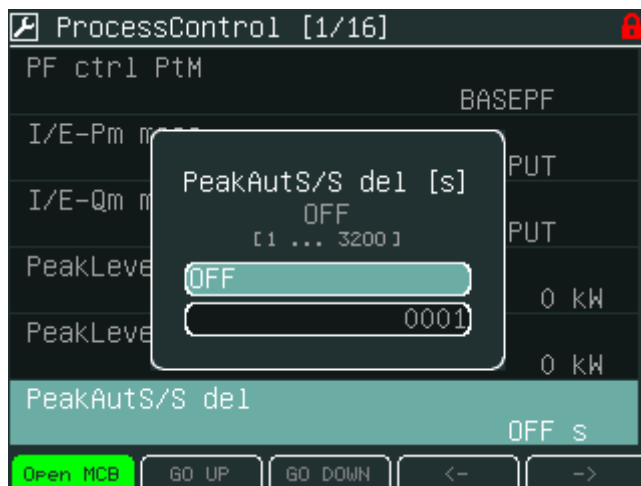
1. Press the button when the proper setpoints group is chosen (e.g. Date/Time)
2. Use arrows \uparrow or \downarrow to go to a certain set-point (e.g. Time) and press Enter button, see picture below:



3. Use \uparrow / \downarrow buttons to select the number, \rightarrow / \leftarrow for the next position and press **Enter** button.

Combined Setpoints

1. Press the button when the proper setpoints group is chosen (e.g. ProcessControl)
2. Use arrows \uparrow or \downarrow to go to a certain set-point (e.g. PeakAutS/S del) and press Enter button, see picture below:



3. Use \uparrow or \downarrow buttons to select the number, \rightarrow or \leftarrow for the next position or Go Up/Go Down context buttons and press Enter button.

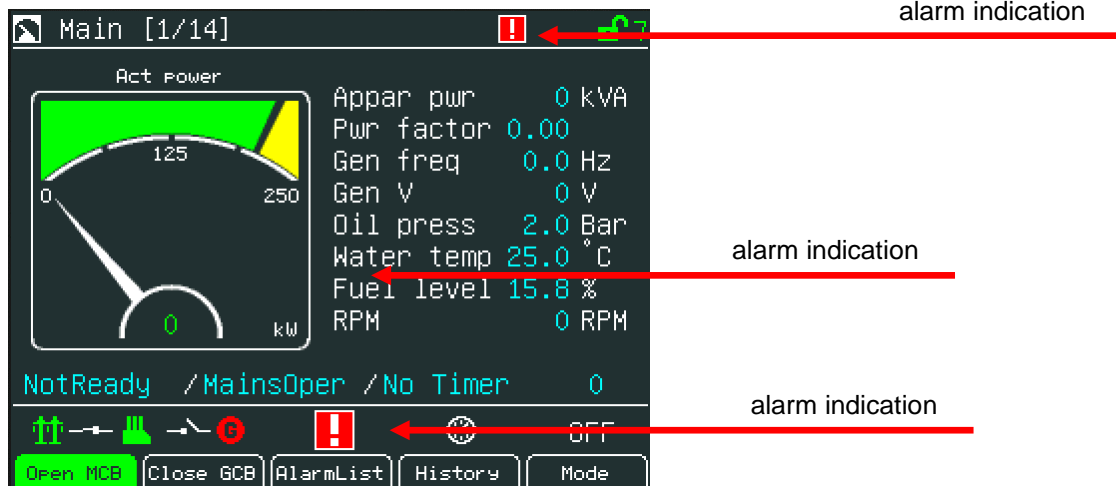
Unauthorized access message

Setpoints can be locked for unauthorized edit. If a user does not have permission to edit certain setpoints, "Access Denied" pop-up message is displayed (see figure below).




AlarmList Screen

On AlarmList screen you can see and work with alarms. When an error occurs, a new alarm appears in the **AlarmList** screen, exclamation mark starts blinking on the measurement screens. A small alarm icon is placed also to heading to be visible in all screens of IV5 including newly generated screens from Screen editor or by adding new modules in configuration. See figure below.



There are 2 levels of alarms:

First level alarms -  is displayed by YELLOW colour

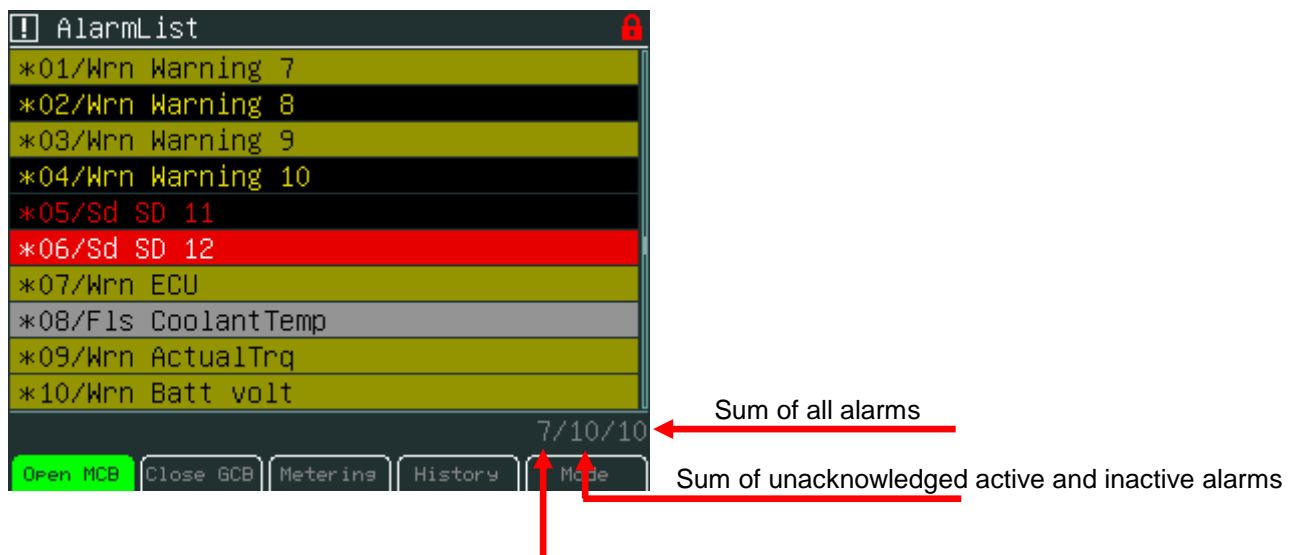
Second level alarms -  is displayed by RED colour

Hint:

When a new alarm appears AlarmList screen is displayed automatically when Main Measurement screen is displayed. From different screen, AlarmList button has to be used to display AlarmList screen.

Where to Find Alarms:

1. To go to AlarmList screen, press AlarmList context button or Menu button and choose AlarmList.



Number of active alarms

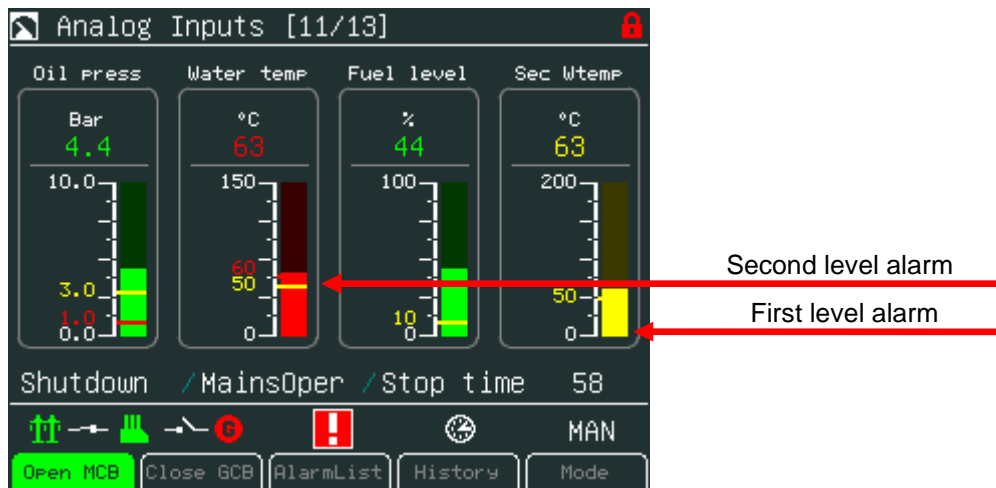
2. Press Fault Reset button to confirm all alarms. The exclamation mark will stop blinking.
3. Resolve the error. The alarm will disappear from the AlarmList and exclamation mark will turn off.

Hint: When the issue is resolved before Fault Reset button is used, the alarm still remains in the AlarmList (it will be turned black) till you press Fault Reset button.

Types of alarms:

- Alarm with asterisk - Unacknowledged alarm (not confirmed by **Fault Reset** button)
- Alarm without asterisk - Acknowledged alarm (confirmed by **Fault Reset** button)
- Alarm written in colour background - Active alarm
- Alarm written in black background - Inactive alarm (resolved - visible only when unacknowledged)

Alarm activated with analogue value



Alarm activated with binary inputs



History Screen

Press **History** context button or **Menu** and choose the **History** in the menu. For details see following picture:

No.	Reason	Date	Time
0	Idle run	03/12/2010	19:09:46.8
-1	Fault reset	03/12/2010	19:09:25.1
-2	Sd Oil Press	03/12/2010	19:09:24.1
-3	Fault reset	03/12/2010	19:09:18.9
-4	Wrn Oil Press	03/12/2010	19:09:14.0
-5	Fault reset	03/12/2010	19:09:13.7
-6	GCB feedback	03/12/2010	19:08:05.9
-7	Sd Oil Press B	03/12/2010	19:08:05.9
-8	Idle run	03/12/2010	19:08:01.0
-9	Switched On	03/12/2010	19:07:59.7
-10	Emergency stop	03/12/2010	18:16:00.3
-11	Emergency stop	03/12/2010	18:15:00.2
-12	Emergency stop	03/12/2010	18:14:00.1
-13	Emergency stop	03/12/2010	18:13:00.1
-14	Emergency stop	03/12/2010	18:12:00.3
-15	Emergency stop	03/12/2010	18:11:00.3
-16	Emergency stop	03/12/2010	18:10:00.2
-17	Emergency stop	03/12/2010	18:09:00.2
-18	Emergency stop	03/12/2010	18:08:00.1

No.	-3 / 143	Date	03/12/2010
Reason	Fault reset	Time	19:09:18.9
1x	HOME	Metering	<-
			->

Number of history records

Cursor position

Context buttons:

Once/1xPage/10xPage	-Select page mode– scroll history by lines or page or 10x pages
Home	-Jump to the first column when the first column is not on the screen
Metering	-Jump to the last displayed Measurement screen
Arrow to left	-Scroll to the left side
Arrow to right	-Scroll to the right side

Hint:

History depends on a controller configuration. History is erased when controller configuration is changed and reprogrammed. For more information how to change history columns see GenConfig Reference Guide or GenConfig context help.

Help/Others Menu

Sub-menu Help/Others Contains Following Screens:

1. Language
2. Users/Password
3. Communication
4. ControllerInfo
5. Modules Info
6. IV Info
7. IV Settings
8. Service Screen

Language

1. Press **Menu** button.
2. Use ↑ or ↓ to choose **Help/Others** menu item and use **Enter**
3. Use ↑ or ↓ to choose **Language** and use **Enter**.
4. Use ↑ or ↓ to choose correct language and press **Enter**



Hint:

IntelIVision 5 will reboot when the language is changed. This reboot does not affect control unit.

User/Password

When a user is signed into the controller he can choose a user from the list of users (every user has got certain rights) and then password has to be used.

To see information how to enter passwords go to [How to Enter a Password?](#) sub-chapter and for information how to change a password goes to [How to Change a Password?](#) sub-chapter.

Hint:

Users' administration has to be done via PC SW IntelIMonitor. The users' level rights are defined via GenConfig only. For more details see IntelIMonitor/GenConfig Reference Guide or context help.

Communication

To see information how to connect IntelliVision 5 display to a controller, go to [How to Connect IV5 display to IGS-NT?](#) sub-chapter.

Controller info

To see information about the control unit see *Controller info* page. On the screen you can find information as (See the picture below):

- ID controller string
- Application used
- SW version
- HW version
- Serial number
- Password decode
- HW name
- ID-Chip
- Dongle
- SW dongle
- ECU list



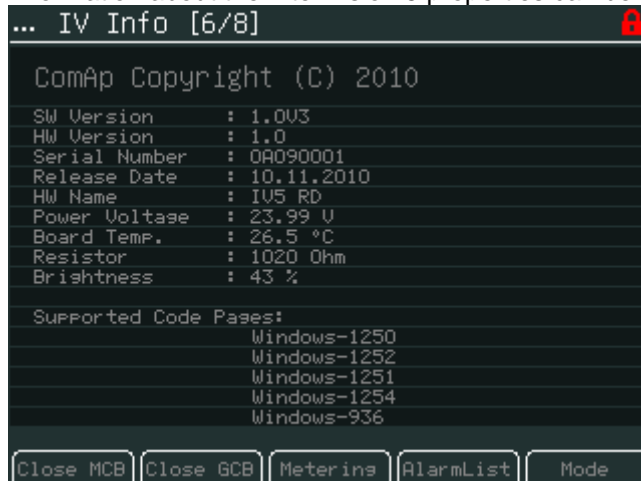
Modules info

Modules info is the screen where all connected modules can be seen, e.g. I-LB+, IGS-NT-E-COM etc.



IV5 Info

Information about the IntelliVision 5 properties can be seen in IV info screen. See the picture below:



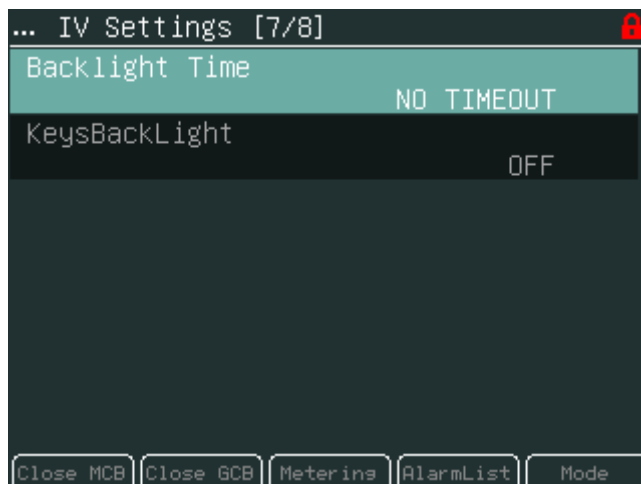
IV5 Settings

Backlight Time setting allows to switch off display backlight (Standby Mode is applied). Backlight time is switched off, when time in parameter "backlight time" lefts. The parameter is based on the time from 1 to 240 minutes or never.

For recover any button has to be pressed (see IV5 Settings) or in case of new incoming alarm, the display awakes from standby mode and backlight of the display is activated.

Hint:

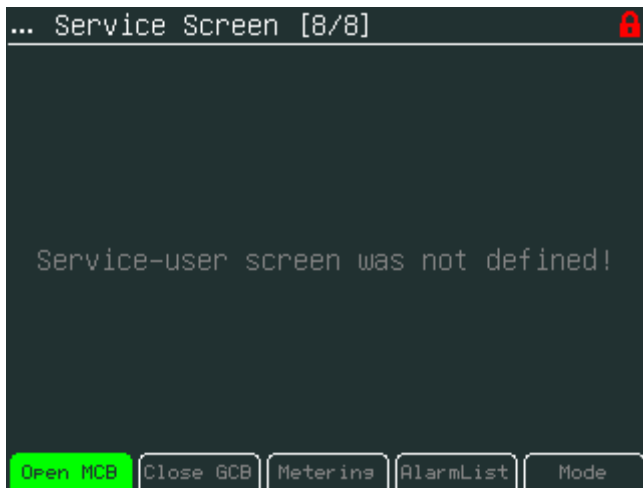
When Alarmlist contains not confirmed alarms, Standby Mode is NOT applied.



Keyboard and display backlight could be switch on or off based on this set-point.

Service Screen

Context information like a telephone number, a name of the service organization and etc... could be placed on this screen.



The Service screen is defined in Screen Editor tool or via xml description.

Screen Editor is easy drag&drop way how to modify screens in IntelliVision 5. Screen Editor is available as the part of GenConfig 2.6 and higher.

Other features

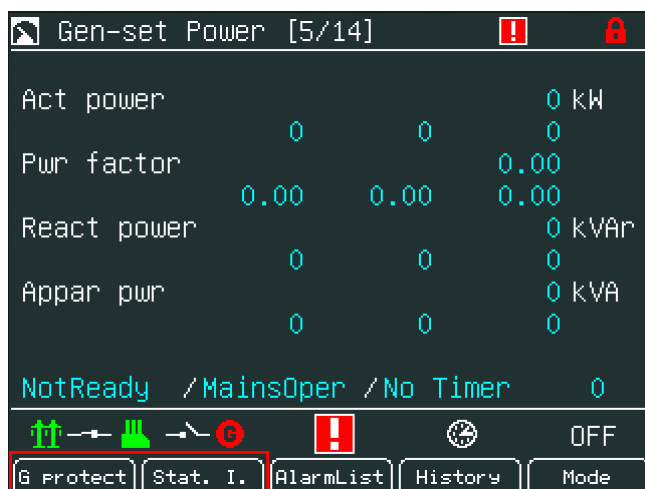
User configurable soft keys buttons

The user has possibility to assign various functions of configurable soft keys buttons - buttons on the bottom of IntelliVision 5 (see figure below). Different functions can be assigned to any button of any screen.

Pre-defined functions

- Fast jump to any Measurement & Setpoints screen
- Binary signal activation
 - Set button - each press of a button sets binary signal to 1
 - Reset button - each press of a button sets binary signal to 0
 - Toggle button - press set binary signal to 1 or 0 (depends on initial value) and next press set value to opposite value. Initial value can be defined.
 - Pulse generator (the button generates pulse 1)
- Genset commands (start, stop, MCB on, faultReset etc.)

See example in the figure below. The first button is fast link to “*Generator protection*” list in Setpoints Menu and the second button is fast link to “*Statically I.*” screen in Measurement. Labels on buttons are customizable.



The functions can be easily defined in the graphical Screen Editor. Functions actually assigned to buttons in actual archives are default.

Support of TIER 4 symbols

IntelliVision 5 is ready to use in projects requiring TIER4 regulation. IV5 supports displaying symbols concerned TIER4 regulation. The figure below shows all supported symbols in all color variations.

They are available to choose in Screen Editor (as Pictogram / GaugeBit / GaugeBitBlink instruments) during your IV5 screen modification.



Warning:

New TIER 4 symbols will be available in Screen Editor from incoming GenConfig version.

Support of the internal buzzer (IV5-RD)

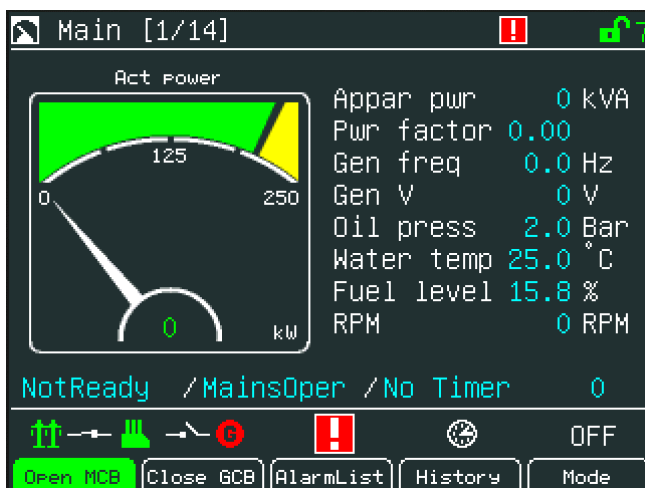
InteVision 5-RD contains an internal buzzer. New parameter “Internal Horn” relating to the internal buzzer was implemented.

Parameter enables/disables using of internal buzzer. The parameter is placed in “*IV setting*” menu and it is available only in IV5-RD display. Default setting is enabled.

The controller controls if the buzzer should be active/inactive. If communication with the controller is lost, the internal buzzer will be immediately automatically disabled (in case of activated internal buzzer, the sound stops).

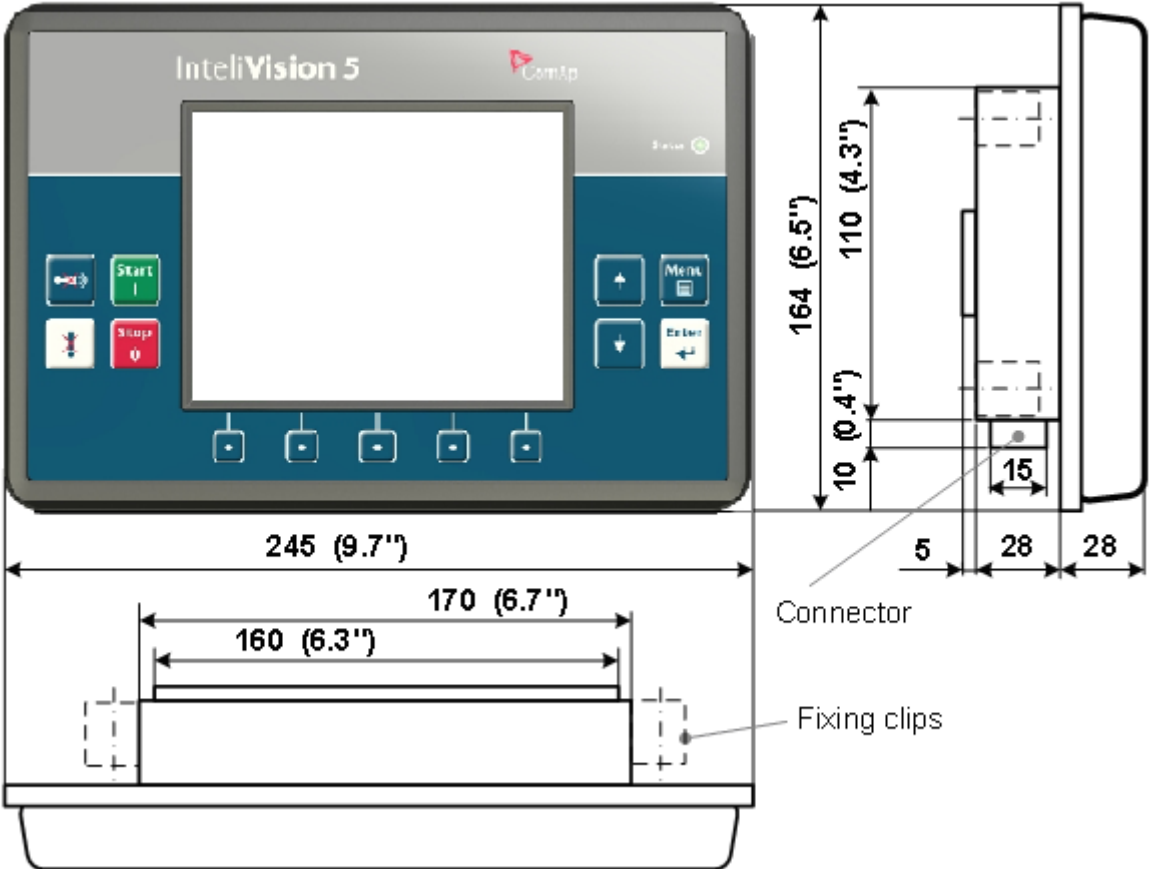
Change of all label colour

From 1.1 version the color of all texts and values was changed to be text better readable also from angles. The text color is white and value color is aqua. See texts and values on right side of figure below.



Installation

Terminals and Dimensions



IntelliVision 5 Cutout

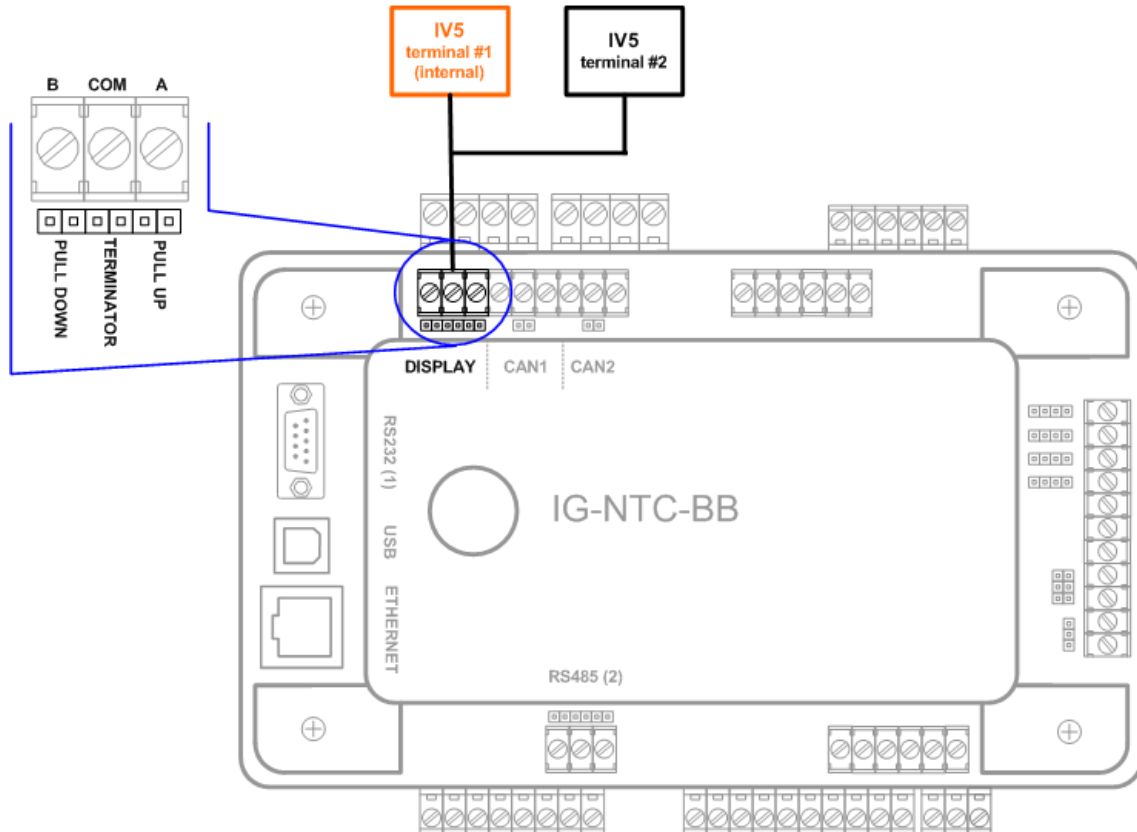
175 x 115 mm

How to Connect IntelliVision 5 to controller

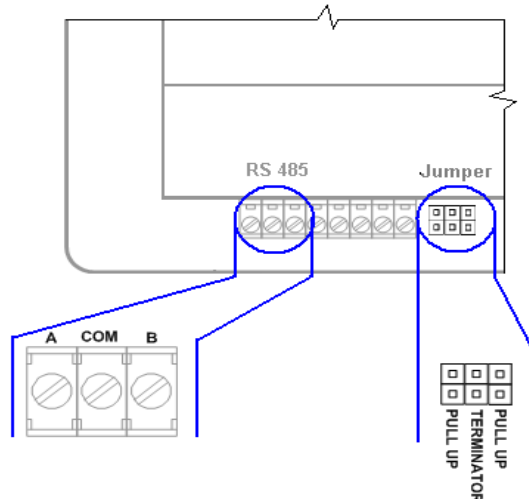
IntelliVision 5 is possible to connect to controller via NT-terminal port or via Direct connection.

NT-Terminal

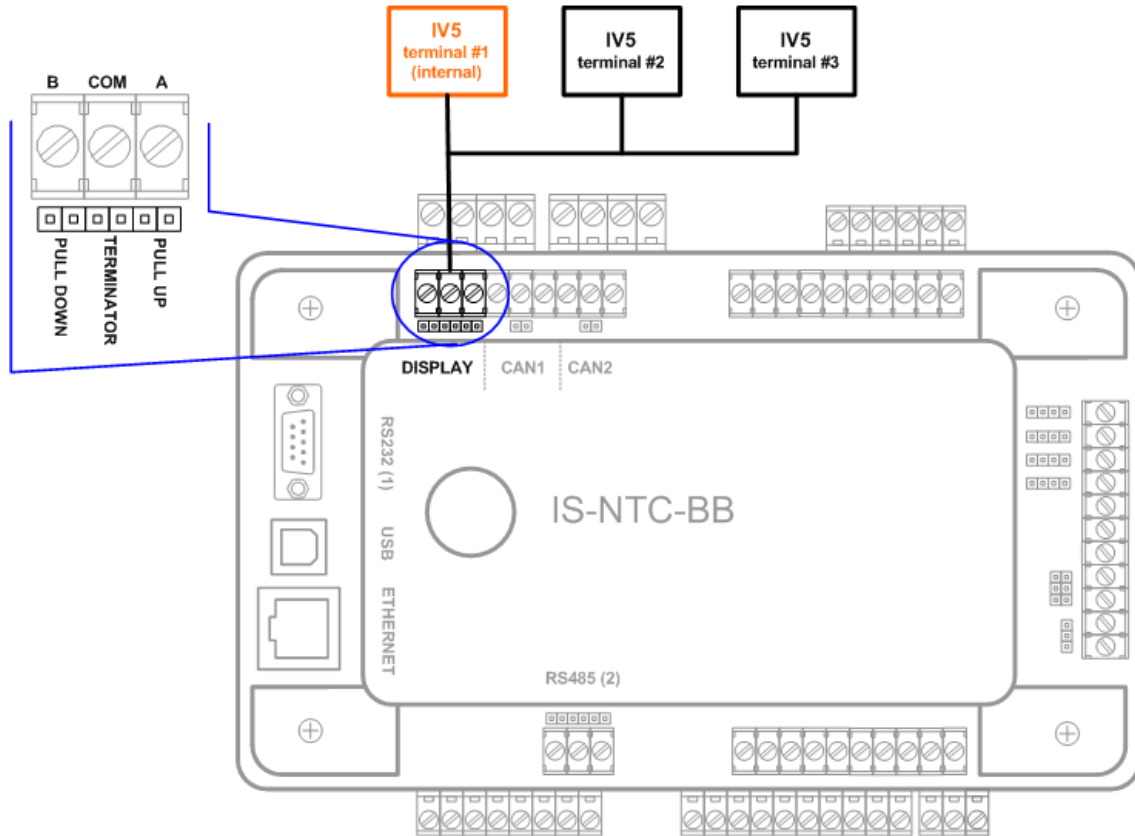
How to Connect IntelliVision 5 to IG-NTx-BB



How to Connect IntelliVision 5 (Detail of IntelliVision 5 Socket)



How to Connect IntelliVision 5 to IS-NTx-BB



Direct communication between IntelliVision 5 and IG/IS-NT-(BB) controllers

Direct communication enables the usage of converters with constant communication speed in both directions between IntelliVision 5 and the controller.

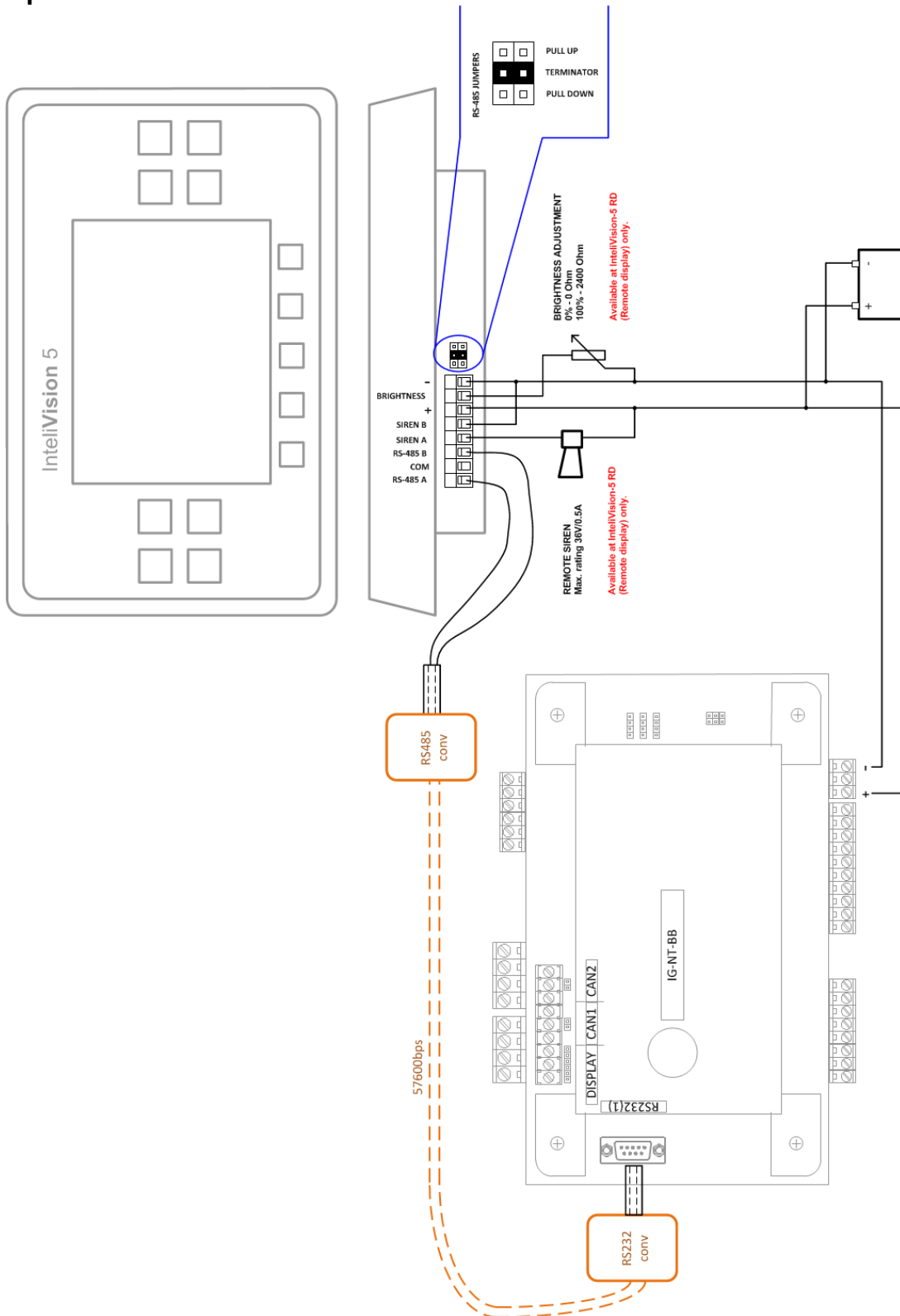
From version 1.1.1 it is possible to run IntelliVision 5 connected to controller RS232 or RS485 port with following setting in the controller:

Option	Controller port	Setting in the controller
A	RS232(1)	RS232(1) mode = DIRECT RS485(1)conv. = DISABLED
B	RS485(1)	Not possible Port dedicated to NT-terminal line connection
C	RS232(2)* **	RS232(2) mode = DIRECT RS485(2)conv. = DISABLED
D	RS485(2)*	RS232(2) mode = DIRECT RS485(2)conv. = ENABLED

* RS232 OR RS485 direct connection can be used. They cannot be used simultaneously.

** Only available in IG-NTC / IS-NT-BB

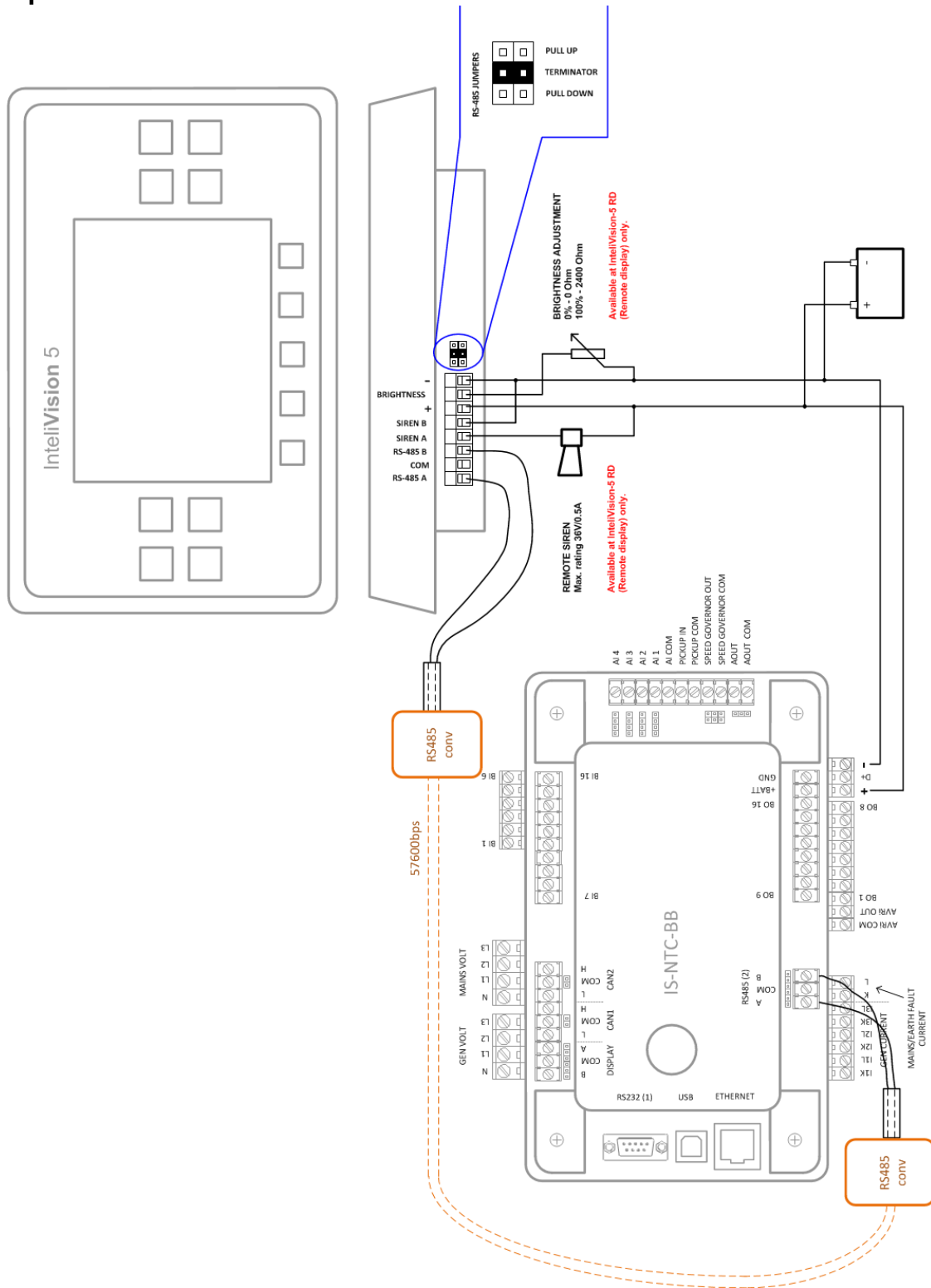
Option A



Option C

Analogous to Option A for second RS232 port.

Option D



Hint:

Make sure that bias (pull up, pull down) resistors are connected only on one side of the RS485 line.

Technical Data

The device is intended to be used in the engine room or on the engine directly.

HW Modification

	RS-485 isolated	Distance [m]	Binary Output	Analog Input	Backlit (Display Buttons)	Protected IP	Internal buzzer
InteliVision 5	No	2	No	No	No	IP-65 (face)	No
InteliVision 5 Remote Display	Yes	1000	Yes	Yes	Yes	IP-65 (face)	Yes

Power Supply

Value	Controller	IV5 Display
Voltage supply	8-36V DC	8-36V DC
Consumption depends on supply voltage	1,1A at 8VDC	0,7A at 8 VDC

Hint:

InteliVision 5 and the control unit should be used the same battery source. When external battery is needed because of long wiring and etc.. InteliVision 5 RD is recommended to use.

Operating Conditions

Operating temperature	-40...+70°C
Storage temperature	-30...+80°C
Flash memory data retention time	10 years
Protection front panel	IP65
Humidity	85% without condensation IEC/EN 60068-2-30

Standard Conformity

Low Voltage Directive	EN 61010-1:95 +A1:97
Electromagnetic Compatibility	EN 61000-6-3 EN 61000-6-4 EN 61000-6-1 EN 61000-6-2
Vibration	EN 60068-2-6

Dimensions and Weight

Dimensions	Front panel 245x164mm InteliVision 5 cutout 175x115mm
Weight	855g

Communication Interface

Maximal distance 1000m (only Remote Display)
Speed up to 57.6kBd

LCD Display

5.7" colour TFT display with resolution of 320 × 240 pixels
LCD display active area dimension 115,2x86,4mm
Pixel size 0.120(W) x 0.360(H) mm

List of Possible Events

InteliVision 5 screen texts	Description
Detecting	Controller detection sequence is in progress. Text disappears when controller is detected.
Checking	Controller configuration sequence is checking. Text disappears when controller is detected.
Reading cfg. Table	Controller configuration reading is in progress. Text disappears when controller is detected.
Preparing	Display setting Ok.
Running	Indication of running display.
Wrong Display HW	SW and HW mismatch. Correct firmware has to be programmed.
Invalidate configuration table Error	Configuration table is invalid. Controller configuration has to be reprogrammed or upgraded.
Unsupported controller Error	Controller is not supported.
Unsupported cfg. table format Error	Controller configuration table is not supported. InteliVision 5 firmware upgrade is necessary.
Mismatch parameters length Error	Controller parameters mismatch. Controller configuration upgrade is necessary.
Mismatch const values length Error	Controller constants mismatch. Controller configuration upgrade is necessary.
Mismatch values length Error	Controller values mismatch. Controller configuration upgrade is necessary.
Mismatch val states length Error	Controller values states mismatch. Controller configuration upgrade is necessary.
Controller was not detected Error	Controller is not connected or communication via RS485 is interrupted. Communication is lost or RS485 line A and B are swapped.
Communication Error	Controller is detected; RS485 communication level is not defined correctly. Reason of this behaviour could be: RS485 line is not terminated properly, environment disturbance is present or RS485 line is too long.
Screen template missing Error	Unsupported controller firmware, missing InteliVision 5 support.
Screen template version Error	Unsupported controller screen. InteliVision 5 firmware has to be updated.
Font not valid Error	Corrupted display font. Font programming was not done properly. Display firmware/font programming is necessary.
Font format not supported Error	Unsupported font, InteliVision 5 font or firmware is necessary.
Bitmaps not valid Error	Bitmaps (generator, engine, fuel and etc...) Firmware upgrade is necessary.
Bitmaps format not supported Error	Unsupported bitmaps format. (Engine, gen-set and etc...) Firmware upgrade is necessary.
Default lang. not supported Error	Default/Defined language error/not supported. Language change or code page change is necessary.