InteliCompact NT®

Paralelling gen-set controller

SW version 1.3.1, December 2011

Operator Guide

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Table of contents

1 Document information

INTELICOMPACT-NT® - OPERATOR GUIDE
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DOCUMENT HISTORY

REVISION NUMBER	RELATED SW. VERSION	DATE
1	1.0	30.05.2008
2	1.1	28.02.2009
3	1.3.1	12.12.2011

1.1 Clarification of notation

NOTE:
This type of paragraph calls readers attention to a notice or related theme.

CAUTION!
This type of paragraph highlights a procedure, adjustment etc., which can cause a damage or unproper function of the equipment if not performed correctly and may not be clear at first sight.

WARNING!
This type of paragraph indicates things, procedures, adjustments etc. which need high level of attention, otherwise can cause personal injury or death.

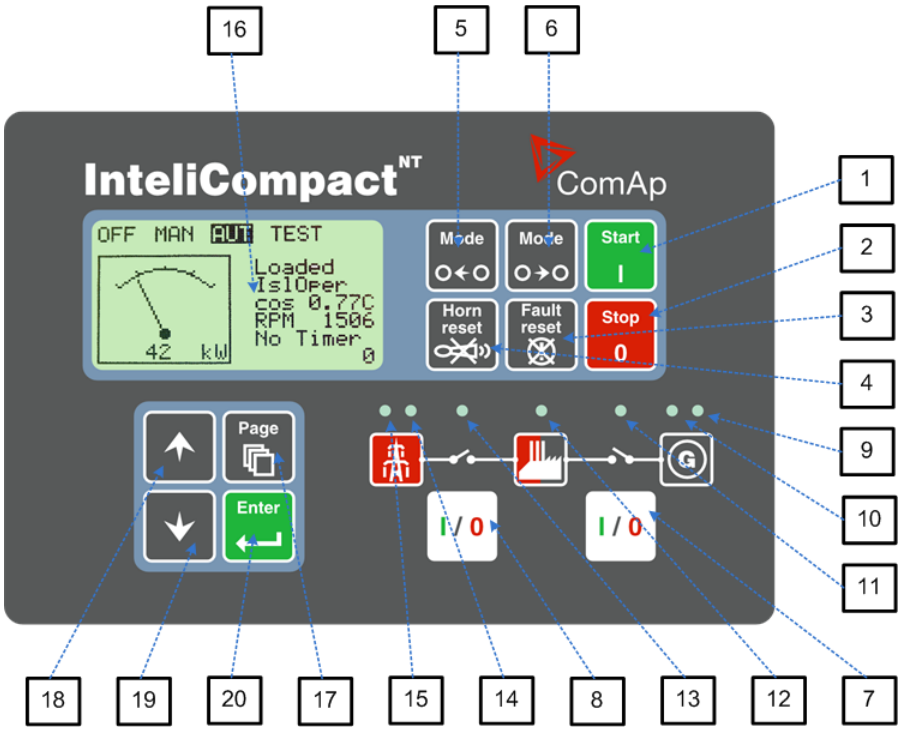
1.2 Conformity Declaration

CE

The following described machine complies with the appropriate basic safety and health requirement of the EC Low Voltage Directive No: 73/23 / EEC and EC Electromagnetic Compatibility Directive 89/336 / EEC based on its design and type, as brought into circulation by us.

2 Operator guide

2.1 Front panel elements



GEN-SET CONTROL BUTTONS

POSITION		DESCRIPTION
1	Start I	**START** button. Works in MAN mode only. Press this button to initiate the start sequence of the engine. See the Reference Guide – "Engine start" chapter to learn more about start sequence.
2	Stop 0	**STOP** button. Works in MAN mode only. Press this button to initiate the stop sequence of the gen-set. Repeated pressing or holding the button for more than 2s will cancel current phase of stop sequence (like ramping the power down or cooling) and next phase will continue. See the Reference Guide – "Engine cooldown and stop" chapter to learn more about stop sequence.
3	Fault reset	**FAULT RESET** button. Use this button to acknowledge alarms and deactivate the horn output. Inactive alarms will disappear immediately and status of active alarms will be changed to "confirmed" so they will disappear as soon as their reasons dismiss. Learn more about alarms in the Reference Guide – "Alarm management" chapter.
4	Horn reset	**HORN RESET** button. Use this button to deactivate the horn output without acknowledging the alarms.
5	Mode	**MODE LEFT** button. Use this button to change the mode. The button works only if the main screen with the indicator of currently selected mode is displayed. **NOTE:** This button will not work if the controller mode is forced by one of binary inputs listed in the Reference Guide – "Operating modes" chapter.

6		**MODE RIGHT** button. Use this button to change the mode. The button works only if the main screen with the indicator of currently selected mode is displayed. **NOTE:** This button will not work if the controller mode is forced by one of binary inputs listed in the Reference Guide – "Operating modes" chapter.
7		**GCB** button. Works in MAN and TEST modes only. Press this button to open or close the GCB or start synchronizing manually. Note that certain conditions must be valid otherwise GCB closing resp. starting of synchronization is blocked. See the Reference Guide – "Connecting to the load" chapter for details.
8		**MCB** button. Works in MAN and TEST modes only. Press this button to open or close the MCB or start reverse synchronization manually. **NOTE:** Only in InteliCompact SPTM version. **CAUTION!** You can disconnect the load from the mains supply with this button! Be sure you know well what you are about to do!

GEN-SET OPERATION INDICATORS

POSITION	DESCRIPTION
9	**General alarm**. This red indicator lights if at least one alarm is present in the alarm list. It blinks if a new alarm has appeared and is still not acknowledged.
10	**Gen-set voltage OK**. This green indicator lights if the generator voltage and frequency is in limits. **NOTE:** The limits for the generator voltage and frequency are given by setpoints in the Gener Protect group.
11	**GCB position**. This green indicator blinks if the forward sychronizing is currently in progress; otherwise it shows current status of the generator circuit breaker according to the feedback input.
12	**Bus under voltage**. This green indicator shows if the bus is under voltage or not.
13	**MCB position**. This green indicator blinks if the reverse sychronizing is currently in progress; otherwise it shows current status of the mains circuit breaker according to the feedback input. **NOTE:** Only in InteliCompact SPTM version.
14	**Mains voltage OK**. This green indicator lights if the mains is evaluated as healthy. See the Reference guide – "AMF function" chapter for details about mains evaluation. **NOTE:** Only in InteliCompact SPTM version.
15	**Mains failure**. This red indicator lights when the mains failure is detected and after the gen-set has started and is about to take the load it lights permanently until the mains failure disappears. **NOTE:** Only in InteliCompact SPTM version.

DISPLAY AND DISPLAY CONTROL BUTTONS

POSITION		DESCRIPTION
16		Graphic B/W display, 128x64 pixels
17		**PAGE** button. Use this button to switch over display pages. See next chapter for details about display pages and screens structure
18		**UP** button. Use this button to move up or increase value.
19		**DOWN** button. Use this button to move down or decrease value.
20		**ENTER** button. Use this button to finish editing a setpoint or moving right in the history page.

2.2 User interface modes

There are two modes of the user interface:

- **User mode** allows the user to go through all screens with measurements and alarms. The  button does not work, i.e. setpoints and history pages are not accessible.
- **Engineer mode** gives the qualified person full access to all pages and screens.

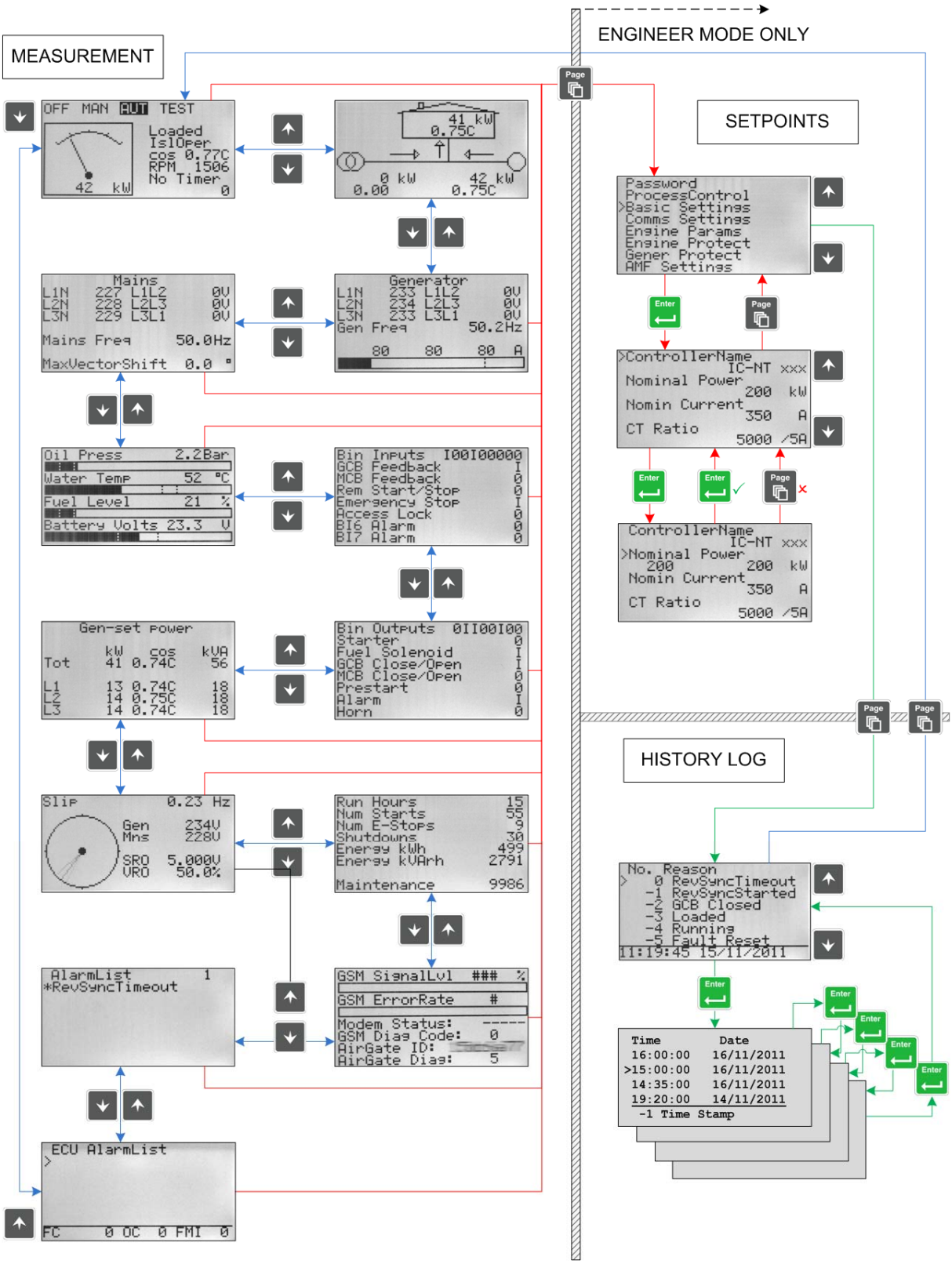
See the chapter “User interface mode selection” in Reference Guide to learn how to switch the user interface mode.

2.3 Display screens and pages structure

The displayed information is structured into "pages" and "screens". Use PAGE button to switch over the pages.

1. The page *Measurement* consists of screens which display measured values like voltages, current, oil pressure etc., computed values like i.e. gen-set power, statistic data and the alarm list on the last screen.
2. The page *Setpoints* contains all setpoints organized to groups and also a special group for entering password.
3. The page *History log* shows the history log in the order that the last record is displayed first.

NOTE:
The picture below shows the structure of displayed data. The contents of each particular screen may be slightly different according to the firmware branch and version.

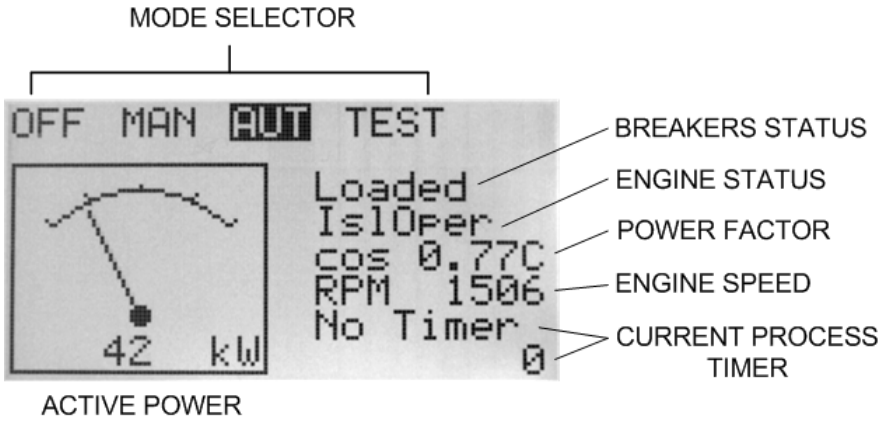


STRUCTURE OF THE DISPLAYED DATA (BASIC)

2.4 View measured values

Press Page button repeatedly until you see the main screen with the kW meter and mode selector.

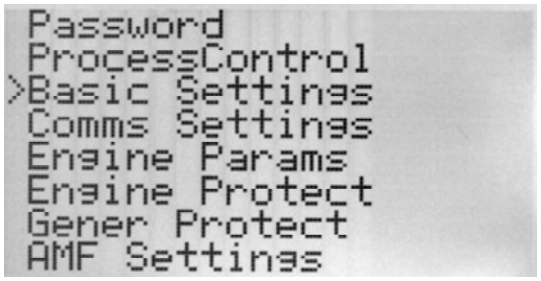
Then press ↑ or ↓ to select a requested screen within the measurement page.



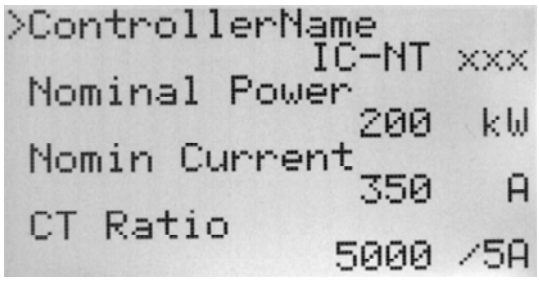
MAIN SCREEN

2.5 Setpoints - view and change

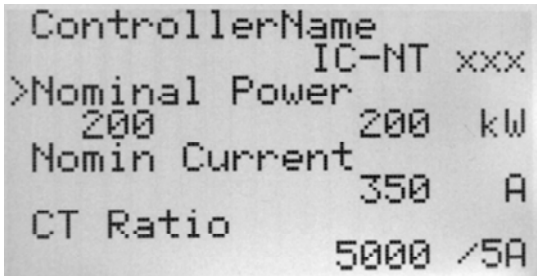
1. Press Page button repeatedly until you see a screen with a list of setpoint groups. Then select desired group by pressing the ↑ or ↓ buttons and finally press Enter button to continue into the selected group.
2. Now you will see the list of setpoints which belong to the selected group together with their current setting. Use the ↑ or ↓ buttons again to select the setpoint you want to modify and press Enter.
3. The current value of the setpoint will appear in the right part under the setpoint name and you can change it by pressing ↑ or ↓ buttons. The rate of changing the value will accelerate when the button is held down
4. Press Enter button to confirm the change or Page to discard it and return to the list of setpoints of the selected group.
5. Continue with change of another setpoint or press Page to return to the list of groups.



LIST OF GROUPS OF SETPOINTS



LIST OF SETPOINTS WITHIN SELECTED GROUP



EDITING A SETPOINT

2.6 Browsing the history log

1. Press 

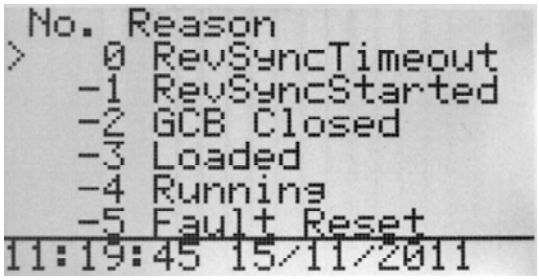
button repeatedly until you see the main history log screen with the reason column and the latest record.

NOTE:
The records are numbered in reverse order, i.e. the latest (newest) record is "0" and older records have "-1", "-2" etc.

2. Use the 

button to move over columns within the selected record. Pressing it repeatedly will move cyclically through the columns, i.e. after last column the first one will be displayed.
3. Use buttons  and  to move over the records.
4. Press 

button to select another display page.



MAIN HISTORY LOG SCREEN

NOTE:
The first history record after the controller is switched on, programmed or watchdog reset occurs contains diagnostic values instead of operational. Some fields in these records seem to have nonsense values. Do not take these values into account.

2.7 Browsing alarms

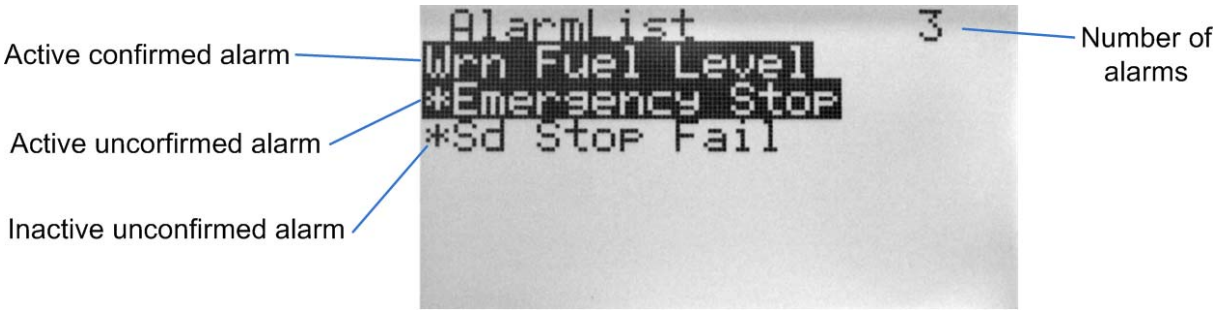
The Alarmlist and ECU Alarmlist are displayed on the last two screens in the measurement page. If the main screen is displayed then the Alarmlist screen will appear automatically always when a new alarm occurs. It can be also displayed manually as described in the chapter “View measured values” in Reference Guide.

- Use the 

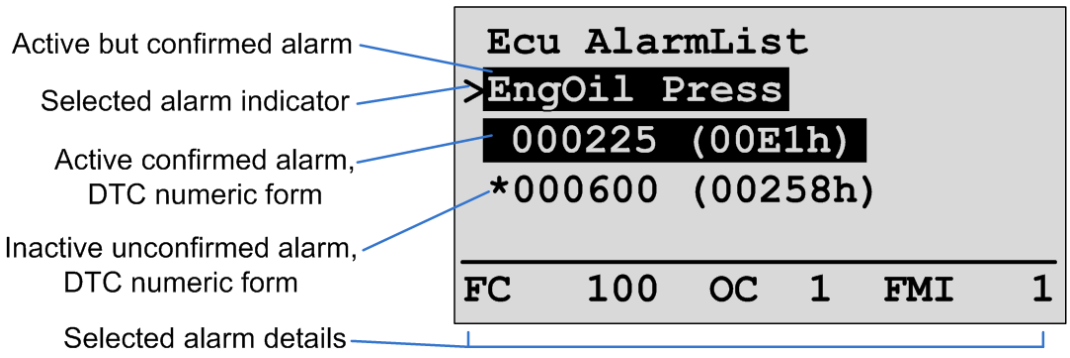
to move over the alarms in the ECU Alarmlist. Details of the selected alarm are displayed in the bottom line.
- Press 

button to reset alarms.

- **Active alarms** are displayed as white text on black background. It means the alarm is stil active, i.e. the appropriate alarm conditions are still present.
- **Inactive alarms** are displayed as black text on white background. It means the alarm is no more active, i.e. the appropriate alarm conditions are gone.
- **Not confirmed alarms** are displayed with an asterisk. It means the alarm is still not acknowledged (confirmed).



ALARMLIST



ECU ALARMLIST

NOTE:
The ECU AlarmList is visible only if an ECU is configured.

2.8 Entering the password

The password must be entered prior adjusting setpoints that are password-protected. Password is located in the first group of setpoints and the way how to enter or change password is similar to change of setpoints as described in the “Setpoints” chapter in Reference Guide.

NOTE:
It is possible to change only passwords of the same or lower level than actually entered password!

NOTE:
Lost password? Display the information screen which contains the serial number and a password decode number as is described in the chapter below. Write down both numbers and send a request to retrieve the passord to your local distributor containing these two numbers. You can also save and send an archive instead.

2.9 Controller information screen

1. Press the 

button repeatedly until you will see the main controller screen with the mode selector and kW analog meter.
2. Hold down the 

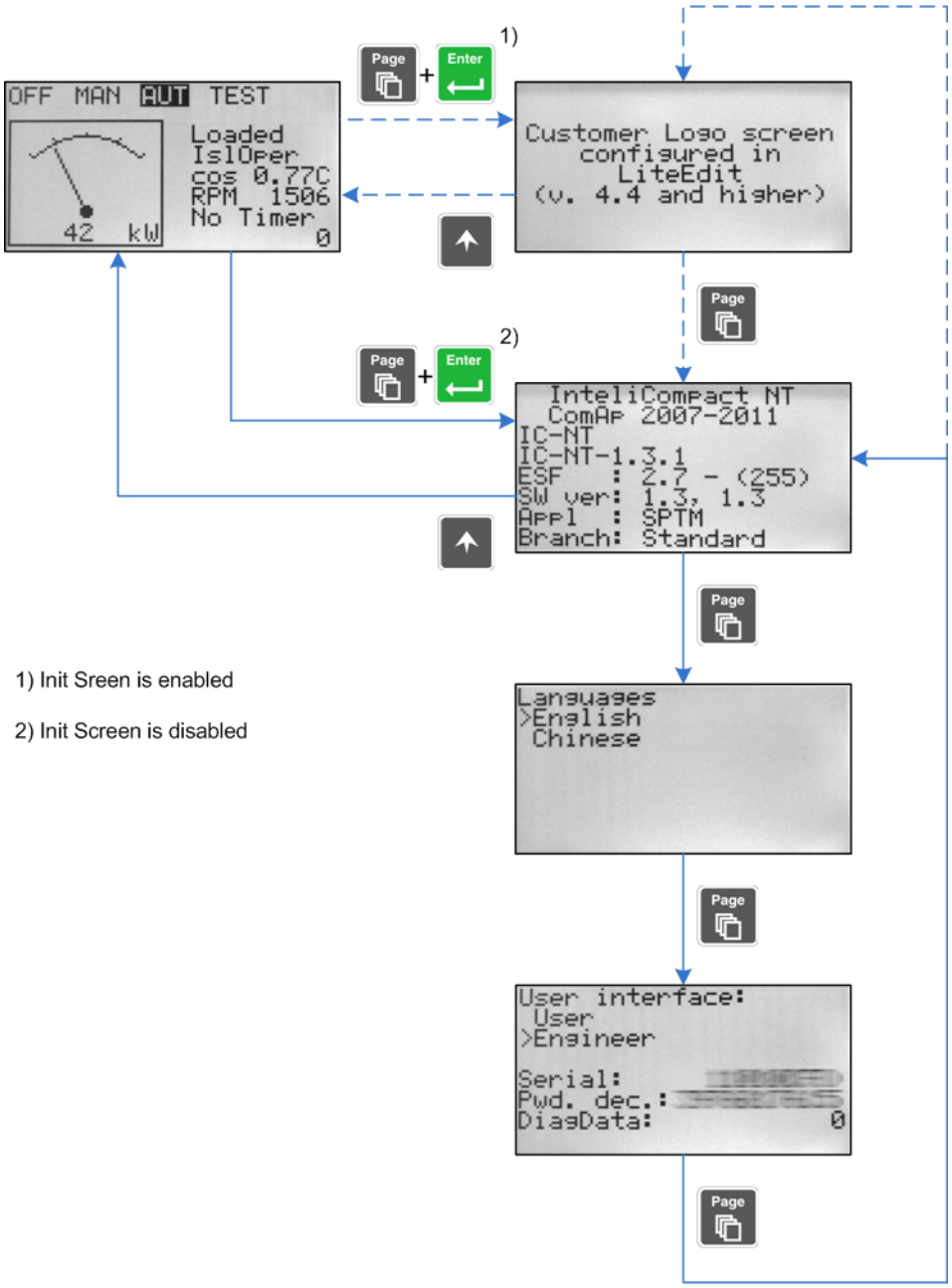
button and simultaneously press the button 

to see the controller information screen.
3. The information screen will disappear automatically after 5 secs
4. Press the button 

again within 5s to switch to language selection screen.
5. Press the button 

again to switch to the user interface mode selection screen. This screen also contains serial number and password decode number.
6. Next pressing of the button 

switches back to the information screen.
7. Press the button  to get back to the controller main screen.



STRUCTURE OF THE DISPLAYED DATA (ADVANCE)

The information screen contains following information:

- Controller Name
- Firmware identification string
- Serial number of the controller
- ESF version
- Firmware version, application version
- Application type
- Branch name

NOTE:
ESF version is shown only when electronic engine is configured.

2.10 Controller language selection

There are two languages available in the controller. Default languages are English and Chinese. The languages can be changed or modified during the configuration in LiteEdit. Please see the LiteEdit documentation for details.
To switch the controller language:

1. Display the information screen as described above.
2. While the information screen is still displayed, press the 

button.
3. Language menu will appear, use  or  buttons to select the desired language.
4. Press 

to confirm the selection.

2.11 User interface mode selection

To switch the User interface mode, follow instructions below:

1. Display the information screen as described above.
2. While the information screen is still displayed, press the 

button twice.
3. User interface mode menu will appear, use  or  buttons to select the desired mode (User or Engineer).
4. Press 

to confirm the selection.

2.12 Display contrast adjustment

1. Press the 

button repeatedly until you will see the main controller screen with the mode selector and kW analog meter.
2. Hold down the 

button and simultaneously press button  or  repeatedly to increase or decrease the contrast.