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General Information

ABOUT THIS MANUAL
This manual has been published primarily for professionals and qualified personnel. The user of this material is assumed to have basic knowledge in marine systems.

Note! Auto–Maskin continuously upgrades its products and reserves the right to make changes and improvements without prior notice.

All information in this manual is based upon information at the time of printing.

For updated information, please contact your local distributor.

Ordering Information
The following articles are available in the 300 Series.

<table>
<thead>
<tr>
<th>Item</th>
<th>Article #</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCU 305 R3 – Engine Panel</td>
<td>1006602</td>
</tr>
<tr>
<td>DCU 305 A R2 – Engine Panel</td>
<td>1006400</td>
</tr>
<tr>
<td>DCU 305 P R2 – Engine Panel</td>
<td>1006401</td>
</tr>
<tr>
<td>RSP 305 – Remote Panel</td>
<td>1006500</td>
</tr>
<tr>
<td>RK–66 – Interface Module</td>
<td>1075410</td>
</tr>
<tr>
<td>AK–6 – Analog Expansion</td>
<td>1075264</td>
</tr>
<tr>
<td>MK–14 – Relay Expansion</td>
<td>1121341</td>
</tr>
<tr>
<td>Rudolf Configuration cable</td>
<td>1075225</td>
</tr>
<tr>
<td>USB to RS–232 Converter cable</td>
<td>1020080</td>
</tr>
</tbody>
</table>
300 Series Overview

AVAILABLE MODULES

These are some of the modules available in the 300 Series.

DCU 305 R2 Engine Panel

The DCU 305 R2 is an engine monitoring and control unit. It comes in two different versions:

- The DCU 305 A R2 is for auxiliary and emergency genset installations.
- The DCU 305 P R2 is for propulsion installations.

One panel is required for each engine.

DCU 305 R3 Engine Panel

The DCU 305 R3 is an engine monitoring and control unit. It is based on the R2 unit, with the following extra features:

- New front panel
- Menu driven user interface
- J1939 CANbus is standard
- Password protected configuration

RSP 305 Remote Panel

The remote panel is compatible with 1–4 DCU 305 panels of type R2 or R3.

Expansion Modules

The 300 Series can be expanded with analog input and relay output modules.
Front Panel Overview

In addition to the backlit LCD screen, the front panel has a total of eight buttons.

Finally, the Menu button has a triple function. It will be an Enter or Exit function depending on the LED in the button. When the button has no lit LED’s, then it can be long-pressed to see the panel menu.

Home Screen

To see the engine overview, press the green Home button, located bottom right on the front panel.

The panel displays a list of up to four engines.

Engine Information

The following explains the header in the Home screen.

#

This is the engine ‘label’. The engines are labeled simply A, B, C and D. In the above example there is just one engine, and it is labeled ‘A’.

Home button

The green Home button gives an overview of the engine(s) connected to the panel, as well as key information.

Soft buttons

Underneath the screen are three so-called soft-buttons. They always apply the function or command in the text field just above the button.

Alarm List button

The alarm list button has two colored red dots in it, to indicate it ‘belongs’ with the alarm indication LED’s above. Pressing the button displays the alarm list.

Arrow buttons

The two arrow-buttons are used to navigate in menus and other lists.

Menu button
If more than one engine is connected, then the label distinguishes them, even if the engine panel name may be configured equally.

**Engine**

This is the engine name, taken from the name configured into the DCU panel.
The names should be configured to be unique, but they may be equal.

**Status**

This is the engine status, read from the DCU panel. It can be for instance, Ready, Cranking, Running, Cooling, Stopping, etc.

**Mode**

This is the engine panel operating status, for instance Standby, Manual, Local, etc.

**Alarm**

This indicates alarm list status for the engine panel by using letters in the following fashion:

<table>
<thead>
<tr>
<th></th>
<th>New</th>
<th>Acknowledged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning</td>
<td>W</td>
<td>w</td>
</tr>
<tr>
<td>Alarm</td>
<td>A</td>
<td>a</td>
</tr>
<tr>
<td>Shutdown</td>
<td>S</td>
<td>s</td>
</tr>
</tbody>
</table>

**New**

New entries in the alarm list are indicated with a capital letter. There may be acknowledged entries too.

**Acknowledged**

User acknowledged events are indicated with a lowercase letter. The event is acknowledged but still present.

**Example:**

Panel indicates “Wa”.
Here, there is a new Warning and an already acknowledged alarm(s).

**Detailed Engine Information**

From the Home screen, use the arrow buttons to move the cursor up/down, and then select an engine by pressing **Enter**.

The RSP 305 will display an image exactly like on the DCU 305 panel.

Navigate to next/previous instrument picture with the up/down arrow buttons.

Press the Exit or Home button to return to the top level Home screen.
Alarm List

Press the **Alarm List** button to see the alarm list.

The panel displays a list of alarms from all the connected engines. The following explains the header in the Alarm List.

<table>
<thead>
<tr>
<th>Warning</th>
<th>W</th>
<th>w</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm</td>
<td>A</td>
<td>a</td>
</tr>
<tr>
<td>Shutdown</td>
<td>S</td>
<td>s</td>
</tr>
</tbody>
</table>

**SORT ALARMS**

While in the alarm list, pressing the **Chrono** soft-button will toggle the sort order of the alarm list as follows.

<table>
<thead>
<tr>
<th>Chrono</th>
<th>Sorts the most recent alarm to be at the top of the list, then chronologically downwards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>Sorts all alarms from engine ‘A’ at the top, then all alarms from engine ‘B’, etc.</td>
</tr>
<tr>
<td>Severity</td>
<td>Sorts the most severe events in the list at the top, ie shutdown events at the top, then all alarm events and finally all warning events.</td>
</tr>
</tbody>
</table>

**ACKNOWLEDGE ALARMS**

**Acknowledge single event**

From the alarm list, press the **Ack.** soft-button to acknowledge the selected alarm.

Move the cursor up/down to select other events to acknowledge.

**Acknowledge all events**

Press the **Ack. All** soft-button to acknowledge all alarms in the alarm list.
Menu
Press and hold the Menu button to access the menu.

DCU Info
This displays the DCU engine panel status, along with the engine’s running hours and start counters.

Log
This displays the logged alarm events from all connected engines.

Alarm Flash
Select whether the LCD shall flash to attract attention when a new alarm is present in the alarm list.

Backlight
Select Full, half or Night Mode backlight.

Night Mode
In Night Mode, the panel turns off the LCD backlight completely after a few seconds. Also the LED’s are switched off completely.

If a new warning or alarm appears, then the backlight switches to half intensity until the event has been acknowledged.

Lamp Test
Press and hold to switch on all LED’s. In total, 11 LED’s shall be lit, including the power LED.

About
This displays information about the RSP 305 panel, like firmware version. It also has a counter that counts quickly when the panel is communicating to the DCU panel(s).

DCU Scan
If a DCU 305 engine panel is added or removed from the connection to the RSP 305, then the RSP 305 needs a new DCU Scan.

Scanning the network otherwise does not harm but is not necessary. Note that after a new scan, the RSP 305 will re-indicate any present alarms as new alarms.

LCD Contrast
Adjust display contrast using the two softbuttons provided.
Start Engine

From the Home screen, select the engine to start using the arrow up/down buttons, then select Start from the softbutton provided.

The RSP 305 asks for verification.

Note that the Start button is visible only if the engine is not running.

Stop Engine

From the Home screen, select the engine to stop using the arrow up/down buttons, then select Stop from the softbutton provided.

The RSP 305 asks for verification.

Note that the Stop button is visible only if the engine is running.

Standby/Manual

From the Home screen, select the DCU engine panel to command, then select Standby or Manual from the softbutton provided.