Gyro Compass GyroStar II

with:
Additional Configuration: PLUS PACKAGE
Additional Configuration: PLUS SEC PACKAGE
Additional Configuration: PLUS SYSTEM PACKAGE

Additional Configurations with:
- Distributor Compact 110–224 NG001/NG002
- Operator Unit 130–601/130–602/130–605
- Control Unit GY01 or GY03

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Please note:

“GyroStar II” and “GyroStar II with PLUS...PACKAGE” are absolutely identical compasses.

The different designations as there are “GyroStar II PLUS PACKAGE”, “GyroStar II PLUS SEC PACKAGE“ and “GyroStar II PLUS SYSTEM PACKAGE“ depends on the connected equipment.

The so called “stand-alone-system” is a GyroStar II with the equipment,

- Junction box, type 138-113
- Repeater compass, type 133-558 (optional)
- AC/DC Converter, type 121-058 (optional)
- Quick Settling control unit, type 130-606 NG001 (optional)
- Dongles for QS and SEC (optional)

The compass GyroStar II additional configuration: “PLUS PACKAGE” is connected:

- via the Connection box, type 138-113 to the
- Distributor Compact, type 110-224 NG001 or NG002.

The compass GyroStar II additional configuration: “PLUS SEC PACKAGE” is connected:

- via the Connection box, type 138-113 to the
- Distributor Compact, type 110-224 NG001 or NG002
  (with SEC-function) and with Operator Unit, type 130-601.

The compass GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” is connected to:

- the Control Unit, type GY01 and the
- Operator Unit, type 130-601/602/605

While connecting to the Control Unit and/or the Distributor Compact, there are restrictions depending on the Speed Error correction.

This GyroStar II “PLUS....PACKAGE”-family has no restrictions depending on the size of a vessel.
In general:
All designations “STANDARD 20” and “STANDARD 20 PLUS” in this or appended manuals must be designated in the meaning of GyroStar II PLUS...PACKAGE.

For connecting a GyroStar II additional configuration: “PLUS PACKAGE” to a Distributor Compact see drawings:
10-C0-D-X00009-C and Assembly drawing 110 C 231 HP010 in this manual.

For connecting a GyroStar II additional configuration: “PLUS SEC PACKAGE” to a Distributor Compact see drawing:
10-C0-D-X00010-C and Assembly drawing 110 C 231 HP010 in this manual.

For connecting a GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” to a Control Unit see drawing 10-C90-D-X00011-C.

The connection of a GyroStar II additional configuration: PLUS PACKAGE to a Control Unit and or to a Distributor Compact is different to a connection of a STANDARD 20 compass.
The operation is identical.

Restrictions on the combination of a GyroStar II PLUS...PACKAGE with a Control Unit and with a Distributor Compact are shown in the following sections.
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### Drawings:

10-C0-D-X00009-C  Cable and Connection Diagram

- **GyroStar II additional configuration: “PLUS PACKAGE”** (GyroStar II with Distributor Compact)

10-C0-D-X00010-C  Cable and Connection Diagram

- **GyroStar II additional configuration: “PLUS SEC PACKAGE”** (GyroStar II with Distributor Compact and Operator Unit 130–601)

10-C0-D-X00011-C  Cable and Connection Diagram

- **GyroStar II additional configuration: “PLUS SYSTEM PACKAGE”** (GyroStar II with Control Unit GY... and Operator Unit 130–601/130–602/130–605) Sheets 1 and 2

110 C 231 HP010  Assembly drawing for GyroStar II PLUS...PACKAGE

### Additional manuals (depending on order–configuration):

**Operator Manual 3125E.DOC012:**
- Gyro Compass Equipment STANDARD 20 PLUS (Control Unit, type GY01 or GY03 and Operator Unit STANDARD 20, type 130–601 E01)

**Service Manual 3125EDOC032:**
- Gyro Compass Equipment STANDARD 20 PLUS (Control Unit, type GY01 or GY03 and Operator Unit STANDARD 20, type 130–601 E01)

**Service Manual 3002E/100–224.NG001.DOC032**
- Distributor COMPACT, type 110–224 NG001
Service Manual 3113E/110-224.NG002.DOC032
- Distributor COMPACT with Speed-error Correction, type 110–224 NG002

Operator Manual 3099E.DOC012
- Gyro Compass Equipment STANDARD 20 COMPACT with Speed-error Correction  
  (Systemdescription)

Service Manual 3099E.DOC032
- Gyro Compass Equipment STANDARD 20 COMPACT with Speed-error Correction  
  (Systemdescription)

Operator Manual 3165E.DOC012
- Gyro Compass Equipment with Control Unit GY01/GY03  
  Operator Unit TMC 130–605  
  Magnetic Sonde 108–010  
  (Systemdescription)

Service Manual 3165E.DOC032
- Gyro Compass Equipment with Control Unit GY01/GY03  
  Operator Unit TMC 130–605  
  Magnetic Sonde 108–010  
  (Systemdescription)

Operator Manual 3072E.DOC012
- Gyro Compass Equipment with Control Unit GY01/GY03  
  Operator Unit 130–601  
  Magnetic Sonde 108–010  
  Operator Unit 130–602  
  (Systemdescription)

Service Manual 3072E.DOC032
- Gyro Compass Equipment with Control Unit GY01/GY03  
  Operator Unit 130–601  
  Magnetic Sonde 108–010  
  Operator Unit 130–602  
  (Systemdescription)
Features of GyroStar II PLUS...PACKAGE-Family

Some functions are restricted while connected to a Distributor Compact or a Control Unit:

GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” connected to a Control Unit.
- no dongles can be inserted (connection without Connection Box).
  Speed Error Correction is performed via the Operator Unit.

GyroStar II additional configuration: "PLUS SEC PACKAGE" connected to a Distributor Compact, type 110–224.
- dongle for Quick Settling can be inserted into the Connection box, type 138–113.
  Speed Error Correction is performed via the Operator Unit.

GyroStar II additional configuration: “PLUS PACKAGE” connected to a Distributor Compact, type 110–224.
- Because a connection of an Operator Unit the dongle for Quick settling function may be inserted into the junction box, type 138–113 (optional).
  This GyroStar II additional configuration: “PLUS PACKAGE” has no Speed Error Function.

In general it is not allowed to combine the power supply (24VDC) in another way, than shown in the drawings.
The power capacity of the Control Unit is able to supply one GyroStar II additional configuration: “PLUS SYSTEM PACKAGE", but the Distributor Compact has not enough power capacity to supply a GyroStar II additional configuration: “PLUS PACKAGE” or a GyroStar II additional configuration: “PLUS SEC PACKAGE”.

Alarm indication and operating principles of the GyroStar II additional configurations: “PLUS PACKAGE”, “PLUS SEC PACKAGE” or “PLUS SYSTEM PACKAGE” are not restricted.
1.1 **GyroStar II additional configuration: “PLUS PACKAGE” (Combination of GyroStar II with Distributor Compact, type 110–224 NG001)**

A GyroStar II additional configuration: “PLUS PACKAGE” has to be connected to a Distributor Compact via the Junction box, type 138–113 (see also manual 3490 “GyroStar II”), drawing nos.: 10–C0–D–X00009–C and Assembly Drawing 110 C 231 HP010 in this manual.

**GyroStar II additional configuration: “PLUS PACKAGE” connected to a Distributor Compact, type 110–224 NG001**

Only the dongle for Quick Settling can be inserted into the Junction Box, type 138–113.

**Caution:**
It is not allowed to insert a dongle for Speed Error Correction into the Distribution Box 138–113.

For alarm indication see operation manual 3490 "GyroStar II", section 4. Operating principles for GyroStar II additional configuration: "PLUS PACKAGE" and Distributor Compact are not restricted.

**It is only allowed to connect the power supply for the GyroStar II additional configuration: “PLUS PACKAGE” and the Distributor Compact as shown in the respective drawings in this manual.**
1.1.1 Connections and jumpering hints

Output 1:
Distributor Compact has to be connected to terminal strip as below mentioned:
Terminal strip L4 (see also Connection diagram for GyroStar II PLUS...PACKAGE in this manual):

<table>
<thead>
<tr>
<th>Connection box 138-113</th>
<th>Distributor Compact 110-224</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal 1</td>
<td>L1.70</td>
</tr>
<tr>
<td>Terminal 2</td>
<td>L1.42</td>
</tr>
<tr>
<td>Terminal 14</td>
<td>L1.71</td>
</tr>
</tbody>
</table>
1.2  GyroStar II additional configuration: “PLUS SEC PACKAGE” (Combination of GyroStar II with Distributor Compact, type 110-224 NG002 and Operator Unit 130-601)

A GyroStar II additional configuration: “PLUS SEC PACKAGE” has to be connected to a Distributor Compact via the Junction box, type 138–113 (see also manual 3490 “GyroStar II”), drawing nos.: 10–C0–D–X00009–C and Assembly Drawing 110 C 231 HP010 in this manual.

GyroStar II additional configuration: “PLUS SEC PACKAGE” connected to a Distributor Compact, type 110–224 NG002 and Operator Unit 130–601
Only the dongle for Quick Settling can be inserted into the Junction Box, type 138–113.
Caution: It is not allowed to insert a dongle for Speed Error Correction into the Distribution Box 138–113. In this case the Speed Error Function is performed by the Operator Unit.

For alarm indication see operation manual 3490 "GyroStar II", section 4. Operating principles for GyroStar II additional configuration: “PLUS SEC PACKAGE”, Distributor Compact and Operator Unit are not restricted.

It is only allowed to connect the power supply for the GyroStar II additional configuration: “PLUS SEC PACKAGE” and the Distributor Compact as shown respective drawings in this manual.
1.2.1 Connections and jumpering hints

Output 1:
Distributor Compact has to be connected to terminal strip as below mentioned:
Terminal strip L4 (see also Connection diagram for GyroStar II additional configurations: “PLUS...PACKAGE” in this manual):

<table>
<thead>
<tr>
<th>Connection box 138-113</th>
<th>Distributor Compact 110-224</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal 1</td>
<td>L1.70</td>
</tr>
<tr>
<td>Terminal 2</td>
<td>L1.42</td>
</tr>
<tr>
<td>Terminal 14</td>
<td>L1.71</td>
</tr>
</tbody>
</table>
1.3  **GyroStar II additional configuration: “PLUS SYSTEM PACKAGE”**
(Combination of GyroStar II with Control Unit GY01 and Operator Unit 130–601/130–602/130–605)

A GyroStar II additional configuration: PLUS SYSTEM PACKAGE” has to be connected to a Control Unit with cable no.: NB60–125 see drawing no.: 10–C0–D–X00011–C.

For alarm indication see operation manual 3490 "GyroStar II", section 4.
Operating principles for GyroStar //, Control Unit and respective Operation Unit are not restricted.

1.3.1  **Connections hints**
Connection hints for Gyro 1

<table>
<thead>
<tr>
<th>GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” Plug B100</th>
<th>Control Unit GY01 (Transfer Module STD 20, U22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below mentioned connections are performed via the cable NB60-125 with plugs on both ends</td>
<td></td>
</tr>
<tr>
<td>Terminal 5</td>
<td>Modul U22 Plug B11 Terminal 2</td>
</tr>
<tr>
<td>Terminal 24</td>
<td>Modul U22, Plug B11, Terminal 1</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” Plug B100</th>
<th>Control Unit GY01 Terminal board L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below mentioned connections are performed via the cable NB60-125 by screwing at terminals</td>
<td></td>
</tr>
<tr>
<td>Terminals 17,37,36 or 18</td>
<td>Terminal board L2 Terminal 31</td>
</tr>
<tr>
<td>Terminals 15,34,16, or 35</td>
<td>Terminal board L2 Terminal 12</td>
</tr>
</tbody>
</table>

Cable screen has to be connected at (<unsigned 1> ) of terminal board L2 of the Control Unit.
Connection hints for Gyro 2

<table>
<thead>
<tr>
<th>GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” Plug B100</th>
<th>Control Unit GY01 (Transfer Module STD 20, U22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below mentioned connections are performed via the cable NB60-125 with plugs on both ends</td>
<td></td>
</tr>
<tr>
<td>Terminal 5</td>
<td>Modul U22, Plug B13, Terminal 2</td>
</tr>
<tr>
<td>Terminal 24</td>
<td>Modul U22, Plug B13, Terminal 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GyroStar II additional configuration: “PLUS SYSTEM PACKAGE” Plug B100</th>
<th>Control Unit Gx01 o Terminal board L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below mentioned connections are performed via the cable NB60-125 by screwing at terminals</td>
<td></td>
</tr>
<tr>
<td>Terminals 17,37,36 or 18</td>
<td>Terminal board L2, Terminal 33</td>
</tr>
<tr>
<td>Terminals 15,34,16, or 35</td>
<td>Terminal board L2, Terminal 14</td>
</tr>
</tbody>
</table>

Cable screen has to be connected at ( ) of terminal board L2 of the Control Unit.
GyroStar II PLUS...PACKAGE

KABEL UND ANSCHLUSSPLAN
KREISELKOMPASS-DOPPELANLAGE
GYROSTAR II "PLUS SYSTEM PACKAGE"

CABLE AND CONNECTION DIAGRAM
GYRO COMPASS TWIN EQUIPMENT
GYROSTAR II "PLUS SYSTEM PACKAGE"

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