XDi 96 Dual

Rudder Angle

Library owner: DEIF STANDARD LIB

Library number: 31

Library version: 2013

Table of Contents

Library description :
This XDi Dual library contains a selection of rudder indicators (VI), respectively for forward and aft bridge applications. Download the DEIF Rudder indicator system application note to get inspiration and help to design and setup your rudder indicator system. Each virtual indicators has a selection of input/output setup profiles (VS) covering the most common used combination of XDi-net, CANopen, NMEA, and AX1 analogue inputs. Some VS profile also supports the NX1 NMEA output extension module. Default CAN bus setup and dimmer input configurations are available in the selection of product profiles (PP). Contact input on NX module can be setup to act as button 2 and 3 to control the dimmer level also from external buttons. Select the VS and PP profile that fits your need for CAN or Analogue inputs and make the necessary adjustments via the XDi installation menu or user menu. Some indicators present setpoint (commanded rudder) value as default, but this function can be disabled. CAN TPDO output are added on all relevant VI's to make integration with XL CAN series easier. VI09 and VI10 has adjustable grey scale sections. This library is using XDi platform 2 main software and can use the front button dimmer option.

Library status symbols :	
🔒	Released & Locked
✔	Approved
➜	Pending
✏	Draft
⊘	Not approved

Library Specification

Library owner no. :	000001
Library owner name :	DEIF STANDARD LIB
Product type :	XDi 96
Performance class :	Dual
Library number :	31
Library name :	Rudder Angle
Library orientation :	Landscape
Library status :	Released & Locked
Library version :	2013
Last changed :	14-02-2023 14:34:48

Library default settings :

180 display rotation :	False
CAN NodeID :	30

Library notes :

14-02-2023/JOL, Ver. 2013: XDi main software update to Qt v.3.06.1 and Capp software is updated to v.3.06.0, this version supports presentation of UK MER flag mark in surveyor menu in addition to the wheel marking, no other changes are made.

19-01-2023/JOL, Ver.2012: VS help text for AX1: input lost <3.5mA is changed to "AX1 input lost below 3.5mA" to get it presented correkt is the PDF document.

24-01-2022/JHU, Ver.2011:
- PP 07, PP 08, PP 09 (NMEA product profiles) added
- NMEA VS's added to all VIs
- Bug corrected in VI 013

06-01-2022/JOL (ATH/JHU), Ver.2010: Added VI011, VI012 and VI013 for double rudder (Non MED)
JOL: ver.2009: This version was not released for sales, a small improvement was made to get to v.2010.

24-07-2020/JOL, Ver.2008: VS08 for 3-wire rudder angle input are added to all VI's.

3-4-2020/JOL, Ver.2007: All 4-20mA analogue input profiles are updated with a new input lost function (AX1 input error) and 2 new VS profiles (VS06 and VS07) for use in a XDi-net (CAN) system where one XDi w/AX1 is connected to a rudder transmitter w/analogue out and a rudder set-point output is connected to another XDi w/AX1, both units are sharing their analogue data on XDi-net (CAN). More XDi-net repeaters can be connected using VS01. All digital readlouts are extended to be able to show full +/-180 deg range.

Product profiles (PP)

Default settings of product and system related parameters, as dimmer and CANbus settings are stored in a product profile.

| | | | Timestamp | 14-02-2023 14:35:00 |

PP No.	PP Name	Description	Status	Notes
1	PP01 XDi-net	**XDi-net Dimmer** or from front buttons (option required) XDi-net is active **Default settings:** Dimmer group 1 Dimming via XDi-net Auto Day/Night Shift at 70% Monitoring supply volt. 1	🔒	CANbus and Dimmer settings can be changed from XDi menu
2	PP02 Analogue	**Analogue Dimmer** Required: AX1 in Slot 1 Dimmer potmeter(+term3 -term 1, wiper term 2) Can be reconfigured to voltage input **Default settings:** Dimmer group 1 Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% Shared on XDi-net Monitoring supply volt. 1	🔒	An external ref. voltage >7.5V can be connected to Vref out overwriting the internal Vref. From the user menu, you can alternatively reconfigure the analogue dimmer input to a normal voltage input.
3	PP03 CAN	**CAN Dimmer** CANopen TPDO dimming **Default settings:** Dimmer group 1 Auto Day/Night Shift at 70% Monitoring supply volt. 1	🔒	DEIF default TPDO's are predefined and used in all standard libraries. The default TPDO's for dimmer group control can be changed to any TPDO or RPDO via user menu.
4	PP04 Digital	**Digital Dimmer** Required: DX1 in Slot 1 Digital input 1 up (+term 11,- term 10) Digital input 2 down (+term 8,- term 7) Simultaneous activation of IN1 and IN2 for Day/Night Shift **Default settings:** Dimmer group 1 Shared on XDi-net Monitoring supply volt. 1	🔒	Digital input configuration can be changed from menu.

PP No.	PP Name	Description	Status	Notes
5	PP05 Lo Analog	**Analogue Dimmer Local** Required: AX1 in Slot 1 Dimmer potmeter(+term3 - term 1, wiper term 2) Can be reconfigured to voltage input **Default settings:** Dimmer group: Local Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% (Local - Not shared XDi-net) Monitoring supply volt. 1	🔒	The dimmer group is "Local" and the dimmer input will only affect this unit, dimmer level will not be shared on XDi-net.
6	PP06 ECR Fixed	**ECR Fixed Dimmer** Adjust via front buttons (Button option avail.) **Default settings:** Dimmer group Local Dimmer level 80% to extend backlight life (Local - Not shared XDi-net) Auto Day/Night Shift at 20% Monitoring supply volt. 1	🔒	Default fixed dimmer level is reduced to 75% to extend backlight life. Dimmer level and Day/Night colour can be changed from user menu.
7	PP07 NMEA 1	**Front but./XDi-net dimmer** NX2 module is required. Default: Dim gr1. Auto day/night at 70%. Shares dimmer value on XDi-net. Supported NMEA sentences: Rudder actual: RSA Rudder set-point: ROR,HTD Default: COM1 or 3, 4.8 kbps Shares selected NMEA data on XDi-net	🔒	In an XDi-net system any XDi in a group can control the groups dimmer level when it uses this product profile. In the user menu the VI day/night mode can be set to automatic change or fixed night mode can be selected. Actual rudder avaraging filter is default off. Can be changed from menu. Example for Rudder 1 actual: Install->Manual input configuration...->PROPULSION->Angle Rudder->Azi 1->filter.

PP No.	PP Name	Description	Status	Notes
8	PP08 NMEA 2	**NMEA dimmer, auto day/night** NX2 module is required. Default: Dim gr.1, NMEA controlled level Auto day/night at 70%. Supported NMEA sentences: Rudder actual: RSA Rudder set-point: ROR,HTD Default: COM1 or 3, 4.8 kbps Shares selected NMEA data on XDi-net	🔒	In an XDi-net system any XDi in group 1 can control the groups dimmer level when it uses this product profile. NMEA sentence for dimmer: DDC. The XDi has no color presets (preset parameter don't care). The default dimmer group can be changed from the menue. If the dimmer group is changed and NMEA dimmer control is used, select the dimmer group in the the NMEA settings in the install menu, and deselect dimmer group 1. Actual rudder avaraging filter is default off. Can be changed from menu. Example for Rudder 1 actual: Install->Manual input configuration...->PROPULSION->Angle Rudder->Azi 1->filter.
9	PP09 NMEA 3	**NMEA dimmer, man. day/night** NX2 module is required. Default: Dim gr.1, NMEA controlled level and colour Supported NMEA sentences: Dimmer: DDC Rudder actual: RSA Rudder set-point: ROR, HTD Default: COM1 or 3, 4.8 kbps Shares selected NMEA data on XDi-net	🔒	In an XDi-net system any XDi in group 1 can control the groups dimmer level when it uses this product profile. NMEA sentence for dimmer: DDC. The XDi has no color presets (preset parameter don't care). The default dimmer group can be changed from the menue. If the dimmer group is changed and NMEA dimmer control is used, select the dimmer group in the the NMEA settings in the install menu, and deselect dimmer group 1. Actual rudder avaraging filter is default off. Can be changed from menu. Example for Rudder 1 actual: Install->Manual input configuration...->PROPULSION->Angle Rudder->Azi 1->filter.

Virtual Indicators (VI)

The VI contains the graphical layout of and indicator and defines all data types that are presented on the indicator.

Each VI has at least one VI-setup profile (VS) that defines the input types and default parameter settings.

Timestamp   14-02-2023 14:35:00

VI No.	Name	VI-setup profiles (VS)	Approvals	Status
001	±40 FWD	10		
002	±40 AFT	10		
003	±45 FWD	10		
004	±45 AFT	10		
005	±50 FWD	10		
006	±50 AFT	10		
007	±70 FWD	10		
008	±70 AFT	10		
009	±40 ADJ	10		
010	±40 ADJ	10		
011	2x±45 FWD	4		
012	2x±45 AFT	4		
013	2x±45 FWD	4		

Approvals only apply for XDi 192.

DEIF

VI 001	**±40 FWD**

Description :	**FWD ±40 DEG**

Rudder 40-0-40 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	The XDi-net profile is used when the indicator is a repeater, receiving data from other XDi units or from a CAN controller providing data in XDi-net format. Please note that TPDO's or RPDO's are not retransmitted in XDi-net format, but are used directly by all indicators (e.g. Angle transmitted CAN data), zero or scaling adjustments can be synchronized via XDi-net. Use VS02 if a combination of XDi-net and TPDO inputs (e.g. CAN encoder) are used. This profile has NMEA output support requires NX1 extension module
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	Default setup to match DEIF RTC 300 or RTC 600 CANopen angle transmitters. TPDO COBID can be changed to any valid TPDO or RPDO COBID via the XDi installation menu. TPDO input can be scaled from menu. This profile can also be used for XDi-net input, if a combination of TPDO and XDi-net is used. TPDO input can be disabled to run pure XDi-net. This profile has NMEA output support requires NX1 extension module TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.

VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Analogue input type and scaling can be changes from XDi installation menu. TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	Analogue input type and scaling can be changes from XDi installation menu. TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder angle: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Analogue sin/cos input and scaling can be changes from XDi installation menu. TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.

VI-setup profiles (VS) for VI001

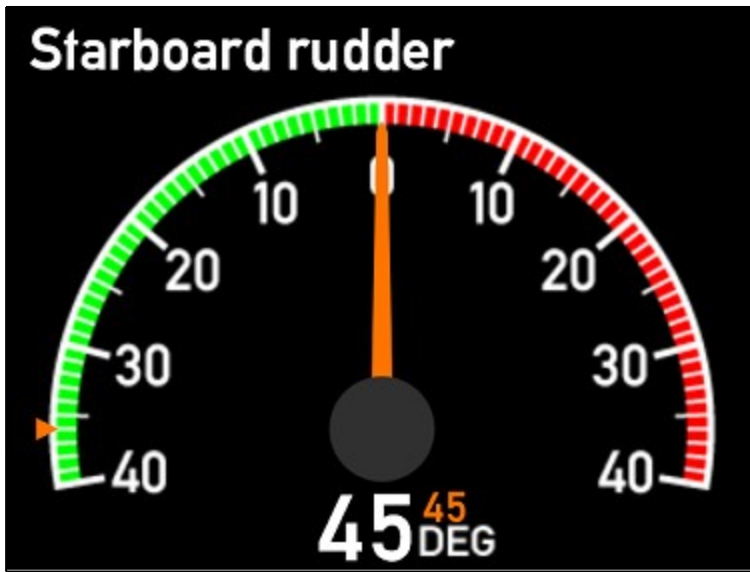| VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	Use this VS in systems where set-point data is received from another XDi using VS07. Analogue input type and scaling can be changes from XDi installation menu. TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	Use this VS profile in systems where the rudder angle is received from another XDi using VS06. Analogue input type and scaling can be changes from XDi installation menu.

VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -400 (-40.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +400 (40.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.

VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 002	±40 AFT

Description : **AFT ±40 DEG**

Rudder 40-0-40 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder angle: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	Use this VS in systems where set-point data is received from another XDi using VS07. Analogue input type and scaling can be changes from XDi installation menu. TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
7	VS07 CAN/Analg	**CAN/Analog set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	Use this VS profile in systems where the rudder angle is received from another XDi using VS06. Analogue input type and scaling can be changes from XDi installation menu.

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -400 (-40.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +400 (40.0deg SB) AX1 S1 input error is indicated if input voltage <0.1V or >30V (Can be changed in menu) You can calibrate the rudder from the XDi menu. Support for NX1 NMEA output module and CAN TPDO se description in VS04.
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 003	±45 FWD

Description :	**FWD ±45 DEG**
	Rudder 45-0-45 deg.
	Rudder ±180 deg.
	Digital readout
	All with set point
Status :	🔒
VI Notes :	

VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO Output Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Output Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Output Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -450 (-45.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +450 (45.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 004	±45 AFT

Description :   **AFT ±45 DEG**

Rudder 45-0-45 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status :   🔒

VI Notes :

VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO Outputs Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Output Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Outputs Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Outputs** Rudder angle: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -450 (-45.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +450 (45.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 005	±50 FWD

Description :   **FWD ±50 DEG**

Rudder 50-0-50 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status :   🔒

VI Notes :

VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI005

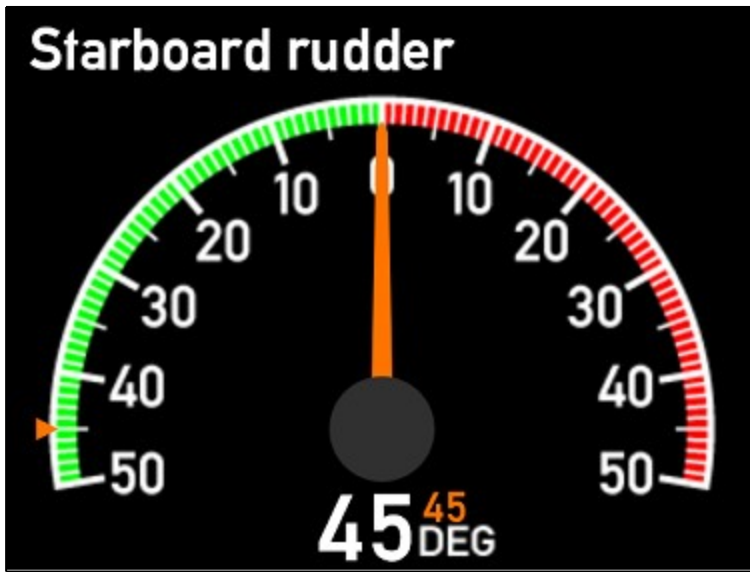| VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -500 (-50.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +500 (50.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 006	±50 AFT

Description :   **AFT ±50 DEG**

Rudder 50-0-50 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status :   🔒

VI Notes :

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net**	🔒	See similar VS profile for VI001
		Rudder angle: XDi-net		
		Rudder angle set: XDi-net		
		NMEA output requires NX1 Default OFF, set in menu		

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -500 (-50.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +500 (50.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 007	±70 FWD
Description :	**FWD ±70 DEG**
	Rudder 70-0-70 deg. Rudder ±180 deg. Digital readout All with set point
Status :	🔒
VI Notes :	

VI-setup profiles (VS) for VI007

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI007

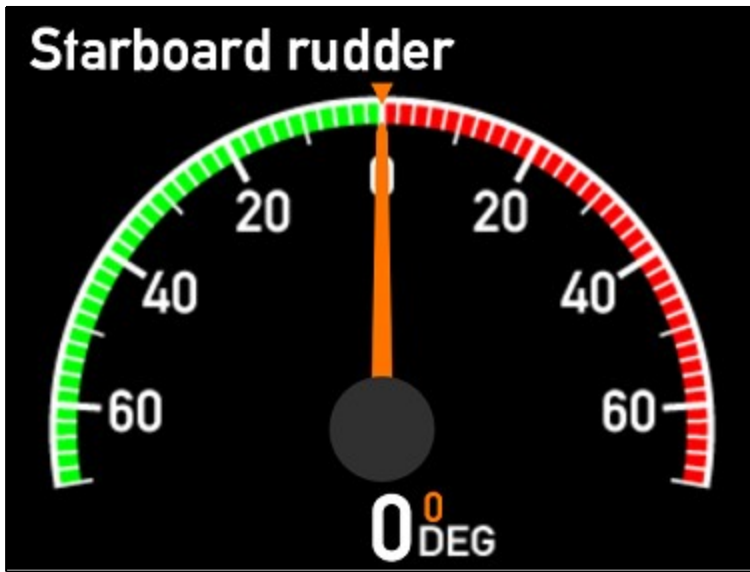| VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO Outputs Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Outputs Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Outputs Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder angle set: TPDO/XDi **Outputs** Rudder angle: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI007

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -700 (-70.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +700 (70.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI007

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 008	±70 AFT

Description :   **AFT ±70 DEG**

Rudder 70-0-70 deg.
Rudder ±180 deg.
Digital readout

All with set point

Status :   🔒

VI Notes :

VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO Outputs Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Outputs Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Outputs Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Outputs** Rudder angle: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
7	VS07 CAN/Analg	**CAN/Analg set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -700 (-70.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +700 (70.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu.

VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 009	±40 ADJ

Description : FWD ±40 ADJ

Adjustable endpoints using warningsmark to make rudder below ±40 degrees
Digital readout and set point

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI009

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net** Rudder angle: XDi-net Rudder angle set: XDi-net NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI009

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	TPDO output: TPDO 0x18A (ruder angle) is default on and tranmitted. It is intended for systems with XL indicators. TPDO 0x18A can be disabled from output menu so the TPDO is not transmitted if TPDO data is conflicting with other equiptment.

VI-setup profiles (VS) for VI009

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See note for similar VS in VI001
7	VS07 CAN/Analg	**CAN/Analog set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See note for similar VS in VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -400 (-40.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +400 (40.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu..

VI-setup profiles (VS) for VI009

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 010	±40 ADJ
	Rudder Angle

Description : **AFT ±40 ADJ**

Adjustable endpoints using warningsmark to make rudder below ±40 degrees
Digital readout and set point

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI010

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**input XDi-net**	🔒	See similar VS profile for VI001
		Rudder angle: XDi-net		
		Rudder angle set: XDi-net		
		NMEA output requires NX1 Default OFF, set in menu		

VI-setup profiles (VS) for VI010

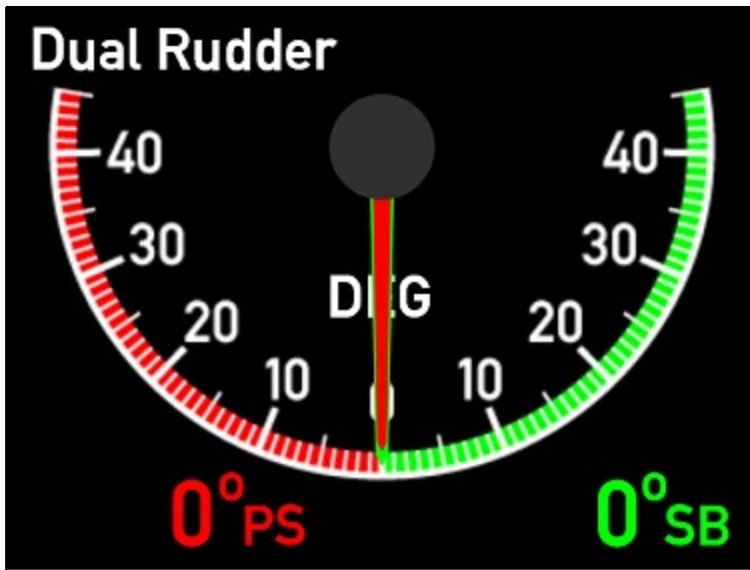| VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**input TPDO** or XDi-net Rudder angle: TPDO (RTC) Rudder angle set: TPDO **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi NMEA output requires NX1 Default OFF, set in menu	🔒	See similar VS profile for VI001
3	VS03 Analg/CAN	**Analogue/CAN** Requried: AX1 in Slot 1 Rudder angle: TPDO (RTC) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 (Default OFF) Activate only on one XDi	🔒	See similar VS profile for VI001
4	VS04 Analogue	**Analogue** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA **Output** Rudder angle: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001
5	VS05 SIN/COS	**SIN/COS - CAN** Required: AX1 in Slot 1 Rudder angle: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7 GND term1) Rudder set: TPDO/XDi **Output** Rudder: CAN TPDO1 0x18A, Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See similar VS profile for VI001

VI-setup profiles (VS) for VI010

VS No.	Name	Description	Status	Notes
6	VS06 Analg/CAN	**Analog/CAN set** Requried: AX1 in Slot 1 Rudder angle: AX1 S1i1 4-20mA (+term9, -term8) AX1 inp. lost below 3.5mA Rudder set-point: XDi-net **Output** Rudder: CAN TPDO1 Always ON for XL, BW, BRW-2, TRI-2 (sCAN, sID10)	🔒	See note for similar VS in VI001
7	VS07 CAN/Analg	**CAN/Analog set** Requried: AX1 in Slot 1 Rudder angle: XDi-net Rudder angle set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See note for similar VS in VI001
8	VS08 3-wire	**3-wire system** Requried: AX1 in Slot 1 Rudder: AX1 S1i1 Potmeter (3-wire) (0V t.1, Witper t.11,+ t.3) Vref.(t 3) to +24V (max. 30V) Rudder set: AX1 S1i2 4-20mA (+term5, -term4) AX1 inp. lost below 3.5mA **Output** Rudder: TPDO1 (0x18A) (Always ON) use for XL,BW,BRW,TRI (sCAN, sID10)	🔒	3-wire input use a potentiometer connected between AGND and Vref. The input is measured relative to Vref and is scaled between 0 and 10,000. If Vref is overwritten by an ext. voltage the input is still scaled to 10,000. This means that voltage fluctuation on the ext. supply V is ilinminated. This profile is setup to use an external +24V DC supply connected to Vref (tern.3) and the input signal swing is +/-9V relative to ½Vref. This means: 3.0V = in val. 1250 = -400 (-40.0deg PS) 12.0V = in val. 5000 = 0 (0deg) 21.0V = in val. 8750 = +400 (40.0deg SB) AX1 S1 input error is indicated if input1 voltage <0.1V or >30V og in2 is <3.5mA (Can be changed in menu) You can calibrate the rudder from the XDi menu..

VI-setup profiles (VS) for VI010

VS No.	Name	Description	Status	Notes
9	VS09 NMEA 1	**Input NMEA/XDi-net** For single/starboard rudder (instance 1) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	Use this VS for Starboard rudder or Single rudder. If the NMEA data (RSA, ROR) contains portside data, they will also be converted and sent through XDi-net: STBD: 0x3001 PORT: 0x3002 If a port rudder data is received via RSA as starboard/single data: - Portside indicator for system WITHOUT XDi-net: Use this VS and select the Port rudder headline in the install menu. - Portside indicator for system WITH XDi-net: Use VS 010.
10	VS10 NMEA 2	**Input NMEA/XDi-net** For Portside rudder (instance 2) Requires NX2 module or XDi-net Rudder angle: NMEA Rudder angle set: NMEA Selectable headlines	🔒	This VS is used to show Port rudder. If the data comes in RSA/ROR sentence containing both Starboard and Port data no changes are required. If the data comes in RSA/ROR sentence containing only single data from the Port rudder sensor (RSA,x.x,A,,V where x.x is single or STBD angle data) the NMEA settings need to be changed: - Go to "Install" menu/"NMEA setup"/"NMEA input setup…" - Press OK to "Auto scan and input selection…" - Select "Stop scan – manual select…", press OK - Press OK to "PROPULSION" - Set "Angle Rudder/Azi 2" to ….RSAs - Set "Ang. Rud/Azi Com 2" to ….RORs - Set "Angle Rudder/Azi 1" to XDi-net - Set "Ang. Rud/Azi Com 1" to XDi-net - Press repeatedly on back button

VI 011	2x±45 FWD

Description : **DUAL RUDDER FWD**

±45 DEGREES

Rudder 45-0-45 deg.
Digital readout ±60 deg.
With selectable headline and two labels

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI011

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**All input via XDi-net** Rudder angle SB: XDi-net 0x3001:02 Rudder angle PS: XDi-net 0x3002:02 NMEA0183 output requires NX1 Default OFF - activate via menu	🔒	

VI-setup profiles (VS) for VI011

VS No.	Name	Description	Status	Notes
2	VS02 RTC / TPDO	**RTC / TPDO** or XDi-net Rudder angle SB TPDO1, COBID 0x181 16b signed (RTC 300/600) Rudder angle PS TPDO1, COBID 0x182 16b signed (RTC 300/600) NMEA0183 output requires NX1, Default OFF - activate via menu	🔒	
3	VS03 Analogue	**Analogue input** Requried: AX1 in Slot 1 Rudder angle SB: AX1 in1 4-20mA (+t.9, -t.8) Rudder angle PS: AX1 in2 4-20mA (+t.5, -t. 4) AX1 inp. lost below 3.5mA Output (Default OFF - activate via menu) SB: CAN TPDO1 - 0x18A PS: CAN TPDO1 - 0x18B for XL, BW, BRW-2, TRI-2 (sCAN, sID10/11) NMEA0183 out requires NX1	🔒	
4	VS04 NMEA	**NMEA** Requires NX2 module or XDi-net SB Rudder angle: instance 1 PS Rudder angle: instance 2 Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	

VI 012	2x±45 AFT
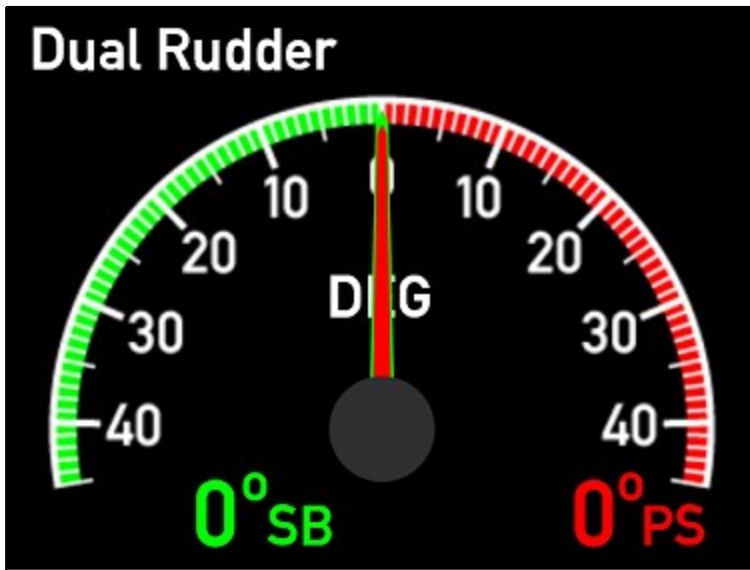
Description : **DUAL RUDDER AFT**

±45 DEGREES

Rudder 45-0-45 deg.
Digital readout ±60 deg.
With selectable headline and two labels

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI012

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**All input via XDi-net** Rudder angle SB: XDi-net 0x3001:02 Rudder angle PS: XDi-net 0x3002:02 NMEA0183 output requires NX1 Default OFF - activate via menu	🔒	

VI-setup profiles (VS) for VI012

VS No.	Name	Description	Status	Notes
2	VS02 RTC / TPDO	**RTC / TPDO** or XDi-net Rudder angle SB TPDO1, COBID 0x181 16b signed (RTC 300/600) Rudder angle PS TPDO1, COBID 0x182 16b signed (RTC 300/600) NMEA0183 output requires NX1, Default OFF - activate via menu	🔒	
3	VS03 Analogue	**Analogue input** Requried: AX1 in Slot 1 Rudder angle SB: AX1 in1 4-20mA (+t.9, -t.8) Rudder angle PS: AX1 in2 4-20mA (+t.5, -t.4) AX1 inp. lost below 3.5mA Output (Default OFF - activate via menu) SB: CAN TPDO1 - 0x18A PS: CAN TPDO1 - 0x18B for XL, BW, BRW-2, TRI-2 (sCAN, sID10/11) NMEA0183 out requires NX1	🔒	
4	VS04 NMEA	**NMEA** Requires NX2 module or XDi-net SB Rudder angle: instance 1 PS Rudder angle: instance 2 Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	

VI 013	2x±45 FWD
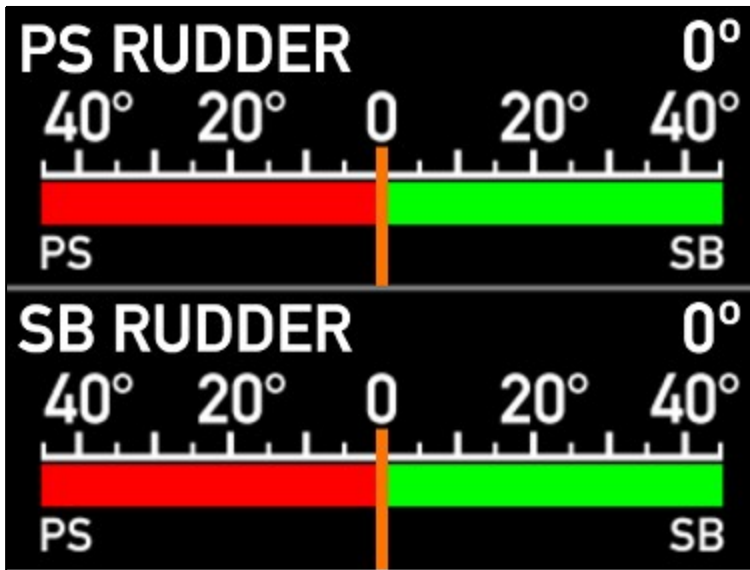
Description : **Dual rudder FWD**

Dual rudder +/-45deg.

Selectable headlines

Status : 🔒

VI Notes :

VI-setup profiles (VS) for VI013

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**All input via XDi-net** Rudder angle SB: XDi-net 0x3001:02 Rudder angle PS: XDi-net 0x3002:02 NMEA0183 output requires NX1 Default OFF - activate via menu	🔒	

VI-setup profiles (VS) for VI013

VS No.	Name	Description	Status	Notes
2	VS02 RTC / TPDO	**RTC / TPDO** or XDi-net Rudder angle SB TPDO1, COBID 0x181 16b signed (RTC 300/600) Rudder angle PS TPDO1, COBID 0x182 16b signed (RTC 300/600) NMEA0183 output requires NX1, Default OFF - activate via menu	🔒	
3	VS03 Analogue	**Analogue input** Requried: AX1 in Slot 1 Rudder angle SB: AX1 in1 4-20mA (+t.9, -t.8) Rudder angle PS: AX1 in2 4-20mA (+t.5, -t.4) AX1 inp. lost below 3.5mA Output (Default OFF - activate via menu) SB: CAN TPDO1 - 0x18A PS: CAN TPDO1 - 0x18B for XL, BW, BRW-2, TRI-2 (sCAN, sID10/11) NMEA0183 output req. NX1	🔒	
4	VS04 NMEA	**NMEA** Requires NX2 module or XDi-net SB Rudder angle: instance 1 PS Rudder angle: instance 2 Shares NMEA data STB and port on XDi-net Selectable headlines	🔒	