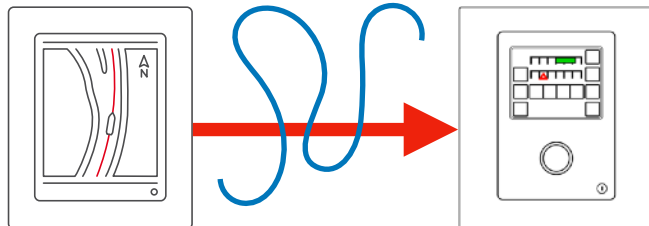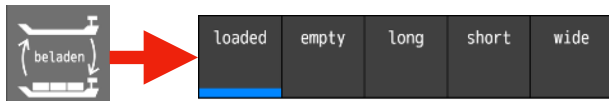# AlphaRiverTrackPilot – quick start guide

Preparation
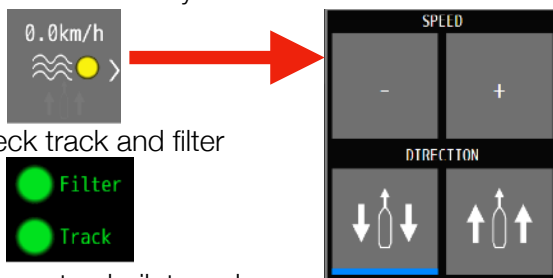
1. Choose track from ECDIS or in TrackPilot

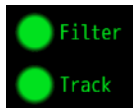2. Choose profile

loaded	empty	long	short	wide

3. Set stream velocity and direction

SPEED
− +
DIRECTION

4. Check track and filter

Filter
Track

5. Turn on trackpilot mode

Permanent track deviation

! **Check stream settings**

! Permanent track deviation

16.5
0 °/MIN
5.5
No

? Autopilot reaches rate of turn setpoint and stays inside the valid range (blue)

8.9
0 °/MIN
6.7
Yes

1.
ROER

2.
CONTROLLER GAIN
0.0   0.5   1.0   .5   2.0
LOW   −   MID   +   HIGH

1. Increase „rudder" on autopilot
2. Increase „controller gain" on TrackPilot
3. Check rate of turn signal
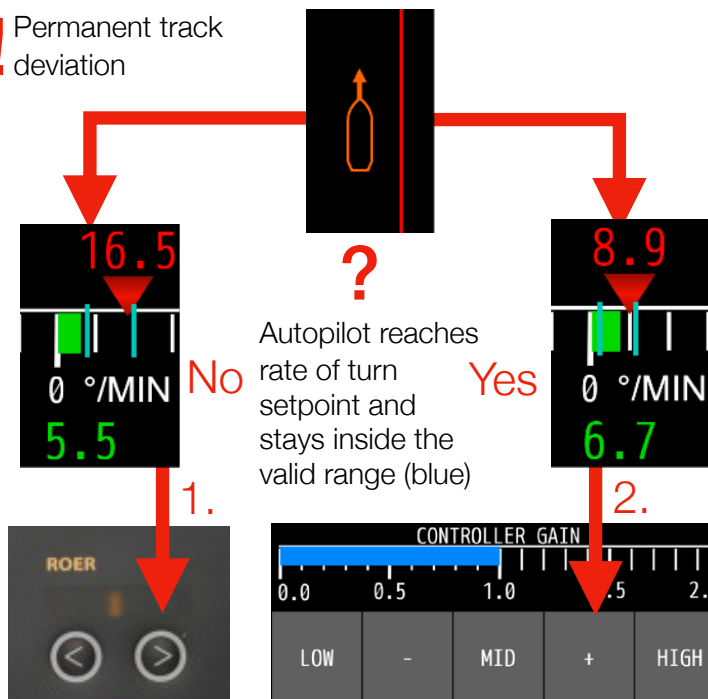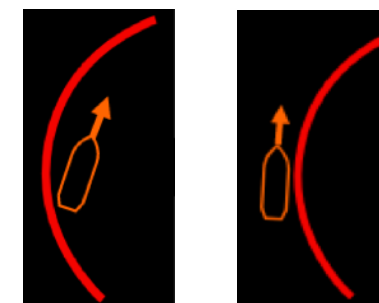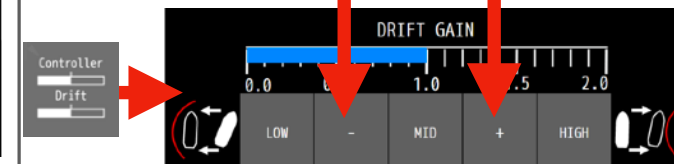
Deviation in curves

! **Check stream settings**

Too far on inside of curve

Too far on outside of curve

Adjust drift gain

Controller
Drift

DRIFT GAIN
0.0   0   1.0   .5   2.0
LOW   −   MID   +   HIGH

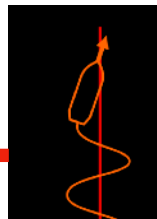Test for a few minutes and adjust further if necessary

Oscillations

! **Check stream settings**
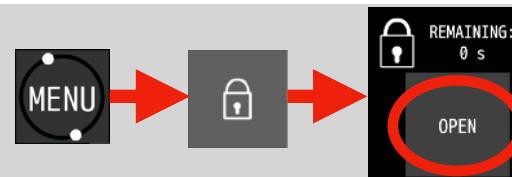
! Oscillations around guiding line

Lower „controller gain"

CONTROLLER GAIN
0.0   0   1.0   1.5   2.0
LOW   −   MID   +   HIGH
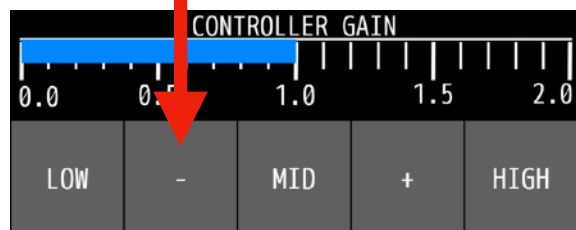
Test for a few minutes and adjust further if necessary

Miscellaneous

Check system version

MENU → ⓘ → System version 3.1

Open access for remote support

MENU → 🔒 → REMAINING: 0 s
OPEN

Restart TrackPilot

Variant A)
MENU → → → ? → ⏻

Variant B)

Setup watch alarm

MENU → 2x → → WATCH ALARM
DELAY
0.0   2.5   5.0 MIN   7.5   10.0
−5   −0.5   5   +0.5   +5
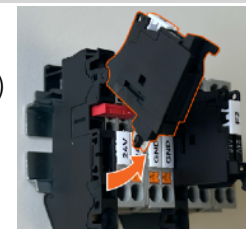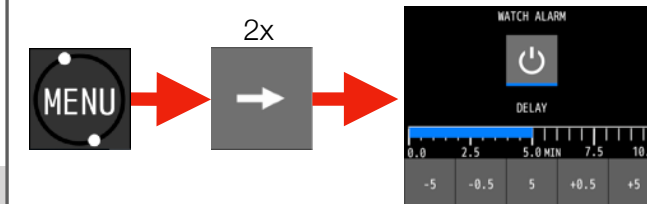
Download manual

ALPHATRON Marine

powered by argonics
an Alphatron Marine company

AlphaRiverTrackPilot – warnings and alarms

Warning Name	Action
AIS: Error - Contact support	• (Re-)Start the AIS. • If the warning does not disappear by itself, contact support.
AIS: No data received	• TargetPilot active? ➡ Closely monitor track control system for correct operation • Malfunction of AIS? ➡ immediately deactivate TargetPilot
Close to end of track	• Switch to manual steering • Choose new guiding line
Collision ahead	• Move current track • Wait until the ship has reached the shifted line
Distance to track large	• Check if the autopilot system processes the commands by the track control system • Acknowledge warning
ECDIS / Alphatron Display: connection lost	• (Re-)Start the ECDIS / Alphatron Display. • If this warning does not disappear by itself, contact support.
End of SafetyContour ahead	• Select new safety corridor
GPS (2): No heading received	• Acknowledge warning and closely monitor track control system for correct operation • Error persists after 10 minutes? ➡ Contact support, if nec. switch to manual steering
GPS (2): No position received	• Acknowledge warning • Closely monitor track control system for correct operation • Increase attention • Wait if data comes back • otherwise switch to manual steering
GPS (2): No velocity received	• Acknowledge warning and closely monitor track control system for correct operation • Error persists after 10 minutes? ➡ Contact support, if nec. switch to manual steering
Left/Right limit violated	• Move the track to keep the planned path within the safety corridor
No ROT received	• Check the correct function of all devices. • If this warning does not disappear by itself, contact support.
Position inaccurate	• Wait for the warning to disappear • If EstimationDegraded error comes up switch to manual steering
Power supply connected incorrectly	• Contact dealer/installer
Strong cross current detected	• Increase attention
Target close	• Decrease velocity or deactivate TargetPilot or select different target
Target lost	• Closely monitor track control system for correct operation
Trackpilot switched off	• Activate Trackpilot again if required • Check correct function of all devices
Velocity low	• Increase velocity • Acknowledge warning
Watch alarm: Activity required	• Move Track or click any button on the touch display

Alarm Name	Action
Autopilot connection lost: Take control	• Switch off immediately • Check correct function of all devices • Contact customer support
Collision ahead: Take control	• Acknowledge alarm by switching to manual steering. There is no other way to acknowledge the alarm. • Continue to steer manually and avoid collision • In case of false alarm, check the setting of the argoLaneWarning
End of track reached: Take control	• Immediately switch to manual steering • Choose new guiding line
I/O: Error - Contact support	• Switch off immediately • Check correct function of all devices • Contact customer support
Position unusable: Take control	• Acknowledge alarm by switching to manual steering. There is no other way to acknowledge the alarm. • Wait until state of track control system returns to „READY". • Check in ECDIS if ship position on map and reality match. • Switch on track control system • Increase attention
Rudder change too large: Take control	• Acknowledge alarm by switching to manual steering. • Wait until state of track control system returns to „READY". • Check in ECDIS if ship position on map and reality match. • Switch on track control system • Increase attention
System Error 001/002/003 - Contact support	• Switch off immediately • Contact customer support
Target lost: Take control	• Acknowledge alarm by switching to manual steering. There is no other way to acknowledge the alarm. • Continue manually and select new AIS target or deactivate TargetPilot
Target too close: Take control	• Acknowledge alarm • Continue manually and increase distance to AIS target or deactivate TargetPilot
Track too far away	• Switch to manual steering • Check if the correct guiding line has been chosen • Choose another line closer to the current position
Turn too sharp: Take control	• Switch to manual steering • Check guiding line for errors (points very close together) • Choose new guiding line
Watch alarm: Take control	• Acknowledge alarm by switching to manual steering. • Activate Trackpilot mode again