

TOKYO
KEIKI

AUTOPILOT PR-3000 Series



TOKYO KEIKI INC.

Name of each unit

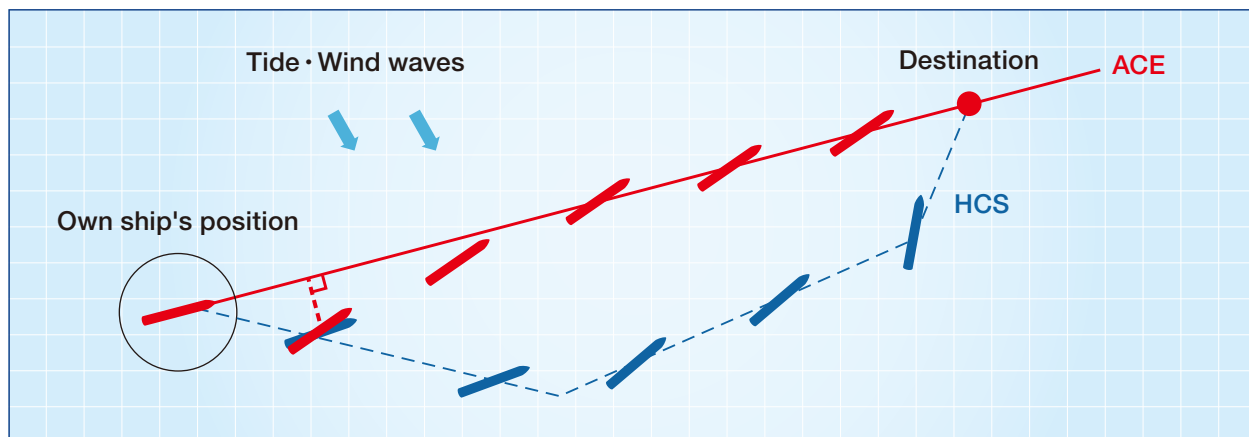
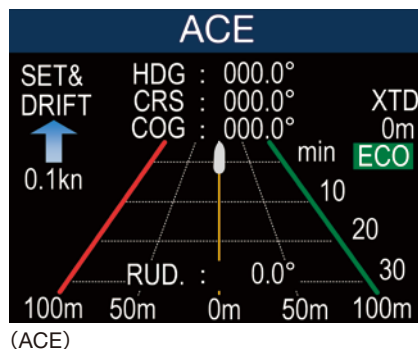


Advanced Control for Ecology [ACE] (Optional function)

It is possible to control a straight course on the PR-3000 without connection to other equipment.

With the new course control function (ACE), a route is automatically created on the heading between the current position and the destination.

When compared to auto steering, reduced route deviation/shorter sailing distance/and reduction of wasted rudder, ultimately contributes to safe and energy efficient navigation.



PR-3000 series

PR-3000 is the successor of PR-2000 which has had a remarkable sales record of over 17,000 units for coastal and fishing vessels.

In addition to the various sophisticated information provided by new color LCD panel, we pursued enhanced safety, reliability, and maneuverability to this new model.

Features

Reinforced information is displayed for further comfortable navigation.

User-friendly operation panel

While maintaining the usability of PR-2000, more intuitive maneuverability has been added to this new model.

Flexibility suits you to applying new functions onboard

The flexible design of PR-3000 allows you to install the new function* easily even after the PR-3000 is installed to your vessel.
*ex. Adaptive control, ACE, and so on.

Graphical information supports safe voyage

Adoption of a LCD display enabling the display of various types of information for simple navigation more clearly.

Alert function provides you advanced safety

In addition to the rudder follow-up failure or the abnormality of feedback from solenoid valve, an audible and visible alert for the abnormality of a heading sensor or another sensors will be issued.

High reliability system design

Enhancing the redundancy by separating the function of system, and installing the function that monitors the systems mutually at any time. These designs contribute to high reliability of our PR-3000.

Various types of PR-3000 based on the specification

Stand type, GYLOT type, console type, and other several types of PR-3000 we can propose based on your specification requirement. And it's possible to combine the PR-3000 and the steering gear manufactured by other makers.

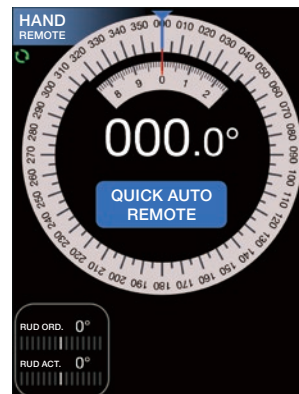


Function / Option

Function		Performance Explanation
Steering stand	Steering method	AUTO <ul style="list-style-type: none"> ● AUTO steering with the heading sensor. ● It is an option that can be selected multiple heading sensor.
		HAND <ul style="list-style-type: none"> ● HAND steering by the steering wheel. (FU)
		REMOTE <ul style="list-style-type: none"> ● REMOTE steering (RC) in a place away from the bridge by means of a remote controller. (FU)
		LEVER <ul style="list-style-type: none"> ● LEVER steering by direct control of the power unit or solenoid valve without using the control circuit. (NFU)
		MANUAL HYDRAULIC (MANUAL PUMP) ※TOKYO KEIKI's T type of power unit only <ul style="list-style-type: none"> ● Emergency hydraulic steering at the steering stand can operate, in case of electric power failure.
		Quick Auto function (option) <ul style="list-style-type: none"> ● The Quick Auto function is activated, and ship's heading is set on the direction which you want to go by manual steering(HAND or REMOTE) and after that set the wheel in midship. Then,the steering mode will be automatically changed to AUTO and you can sail towards your target direction on the AUTO steering mode.
		Takeover function (option) <ul style="list-style-type: none"> ● When multiple REMOTE steering units are connected, steering right is able to be acquired at the desired steering position without operating at the main steering position. (excluding LEVER steering mode)
Repeater compass <ul style="list-style-type: none"> ● The repeater compass is displayed on the 10.4 inch color LCD screen of the steering stand. The open scale type is equipped as standard and the rudder angle indication can be also displayed. 		
Off-course alarm (option) <ul style="list-style-type: none"> ● OCA is an optional function to issue an alert when there is any deviation between the set heading in the AUTO steering mode and the heading of another sensor not used for AUTO steering (ex.Magnetic compass). 		
Gyrocompass (option) <ul style="list-style-type: none"> ● TG-8100 gyrocompass (For more than 500G/T vessel by SOLAS rule requirement) <ul style="list-style-type: none"> · Satisfies JG performance standard and IMO requirements. ● ES-180 gyrocompass <ul style="list-style-type: none"> · Operates on DC24V power supply. · Repeater signal outputs each 4 circuits of step signal and serial signal. 		
GPS compass (option) <ul style="list-style-type: none"> ● TOKYO KEIKI GPS compass (TC-300) built in the steering stand is possible. 		
Tracking pilot (option) <ul style="list-style-type: none"> ● Controls by ship like tracing the line of route plan drawn on the chart when the electronic chart system or the GPS plotter connected. It's possible to sail on the route by the most efficient rudder control based on the calculation of cross track distance (XTD). 		
Aux. steering stand (option) <ul style="list-style-type: none"> ● AUTO, MANUAL, REMOTE steering mode are possible at the desired steering position. Water-proof construction. 		



GPS Compass built-in stand type
(OPTION)



QUICK AUTO
(OPTION)



AUX. STEERING STAND
(OPTION)

Steering Stand

■ GYLOT® type (S type)



■ Stand type (S type)



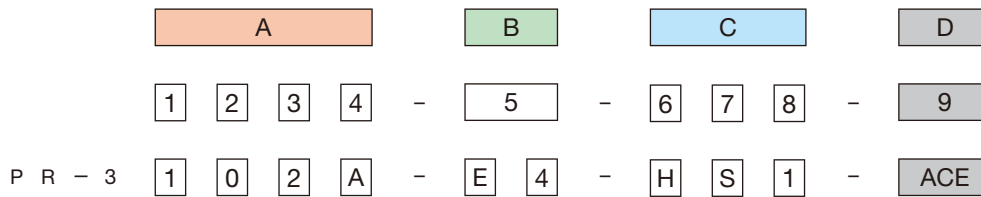
■ Stand type (T type)



■ Console type (1000mm range)



Type of models



A
1 [Automatic steering control model] 1 : PID Single line 3 : PID Single line and ADPT Single line 9 : Without automatic steering control
2 [Interface Connection] 0 : Repeater Interface, No THS 1 : Repeater Interface 2 : With THS 3 : Repeater Interface, With THS
3 [Type of stand] 1 : Stand type (S type/T type) 2 : GYLOT® type (S type) 3 : Console type (500mm range) 4 : Unit type 5 : ECS Autopilot type 6 : Console type (1000mm range) 7 : Special console type
4 [Type of heading sensor] C : Another manufacturer's heading sensor D : TG-8100 E : TG-8600 F : FOG J : TKG-1100 K : Installed our heading sensor (For retrofitting) L : ES series M : TC-300 N : Magnetic compass X : Without auto steering function

B
5 [Type of steering gear unit] E <input type="checkbox"/> : Solenoid valve (Solenoid valve control type) E0 : TBD E1 : AC100/110V ON · OFF control (Manufactured by other company) E2 : DC24V ON · OFF control E3 : TBD E4 : AC100/110V ON · OFF control (Manufactured by TOKYO KEIKI)

C
6 [Rudder turning angle] S : 35° Y : 40° W : 45° F : 60° H : 70°
7 [Type of steering control — The number of rudder] S : Single rudder D : Twin rudders (Rod link type) T : Twin rudders
8 [Steering gear control type, The number of pump for a rudder] 1 : Single+Standard helm unit 2 : Dual+Standard helm unit (SGCS complete twin system) T : Single+T type helm unit A : Dual+Standard helm unit (Dual SGCS system)

D
9 [Course Control system] ___ : Without Course Control system ACE : With Course Control system

Design and specifications are subject to change without prior notice, and without any obligation on the part of the manufacturer.



	CAUTION	Thoroughly read the instruction manual before operating the equipment.
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