

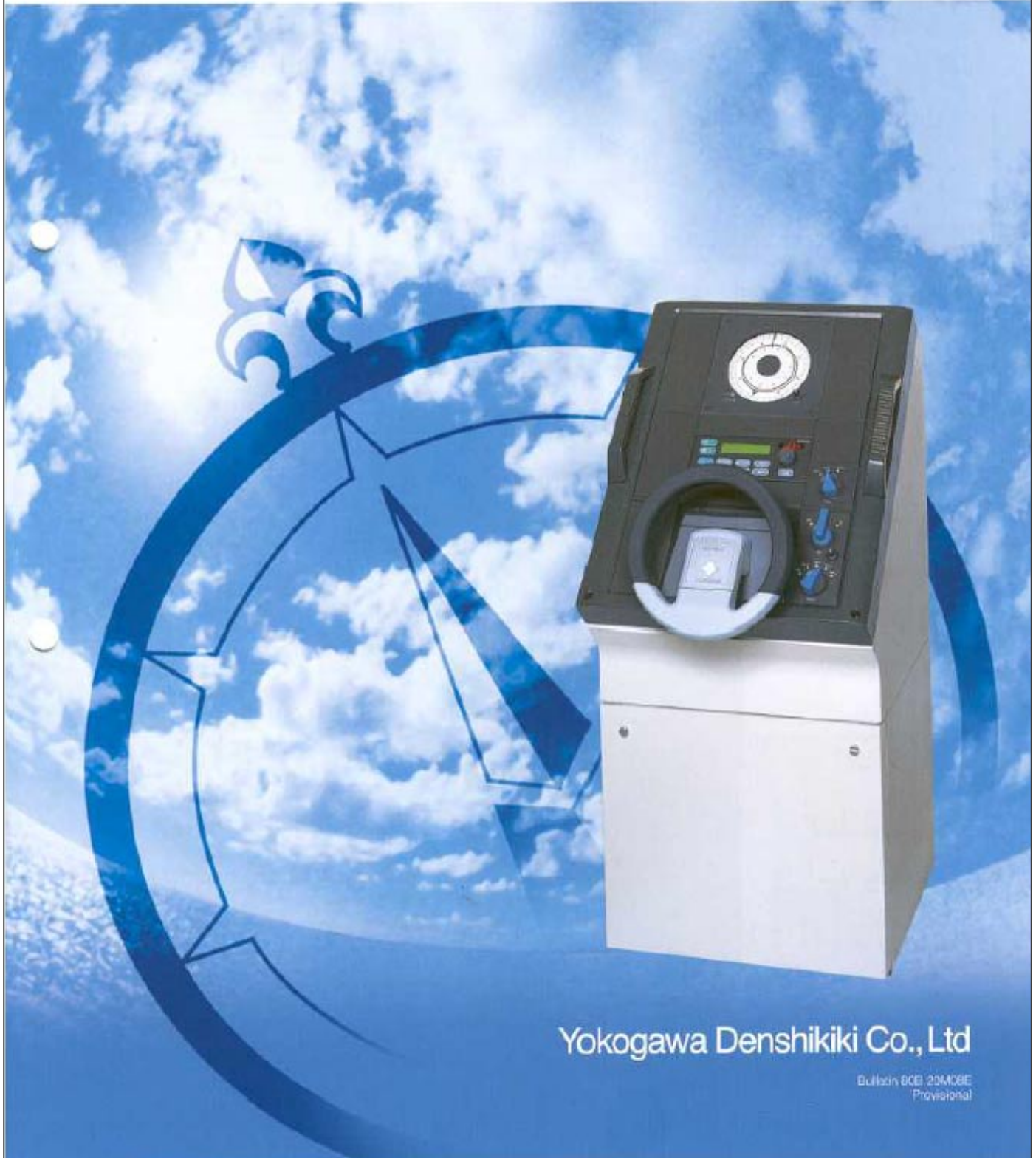
YOKOGAWA 

Autopilot Series

Model PT70



ISO 9001-1994
Marine Equipment




Yokogawa Denshikiki Co., Ltd

Bullseye 0CE 20M06E
Provisional

Control Panel

PT70 AUTO STEERING UNIT MPB351



Gyro compass select key
Pressing this key selects the gyro compass to determine the control heading AUTO steering.

External compass select key
Pressing this key selects an external compass to determine the control heading during AUTO steering.

Buzzer stop key

Steering angle limit setting key
Sets the rudder angle for controlling the steering angle during automatic steering. At the limit, displayed "RUDDER LIMIT" on the data display.

Off-course alarm setting key
Sets the deviation angle at which the off-course alarm is detected.

Course altering control mode select key
RATE: Turns the vessel at a constant rate during automatic course altering.
RADIUS: Turns the vessel at a constant radius during automatic course altering.

Data display
Indicates various control data and also the cause of an alarm. By selecting the display screen, you can display the steering angle and rate of turn on a bar graph.

Set course display
This is an LED display which displays the set course during automatic steering.

Course setting dial
To set a course, press the dial, then rotate it while keeping it depressed.

Heading one-touch read key
Pressing this key causes the gyro heading to be read to the set course display.


Data UP key

Data DOWN key

Key for setting various parameters
Sets the dimmer/contrast, pilot control and various hull parameters.

Data finalizing key

PT70 CONTROL STAND UPPER PANEL



ANNUNCIATOR UNIT (MPH617)
This unit monitors the operation of the autopilot.

- Operation indicator lamps
- Alarm indicator lamps
 - Power failure
 - Actuator failure
 - Auto steering unit failure
 - Emergency alarm
 - Caution alarm
 - Off-course alarm

AUTO STEERING UNIT (MPB351)

HAND STEERING UNIT (MPB354)
Steering direction indicator lamp
◀:PORT ▶:STBD

Steering angle indicator

Steering handle

STEERING REPEATER COMPASS (MKR051) Main card (1X)

Vernier card (36X)

Dimmer

SWITCH UNIT (MPH731)

Mode switch
NAVI : Route tracking steering
AUTO : Automatic steering
HAND : Hand steering
RC : Remote steering

SWITCH UNIT (MPH732)

Non follow-up steering lever

Dimmer

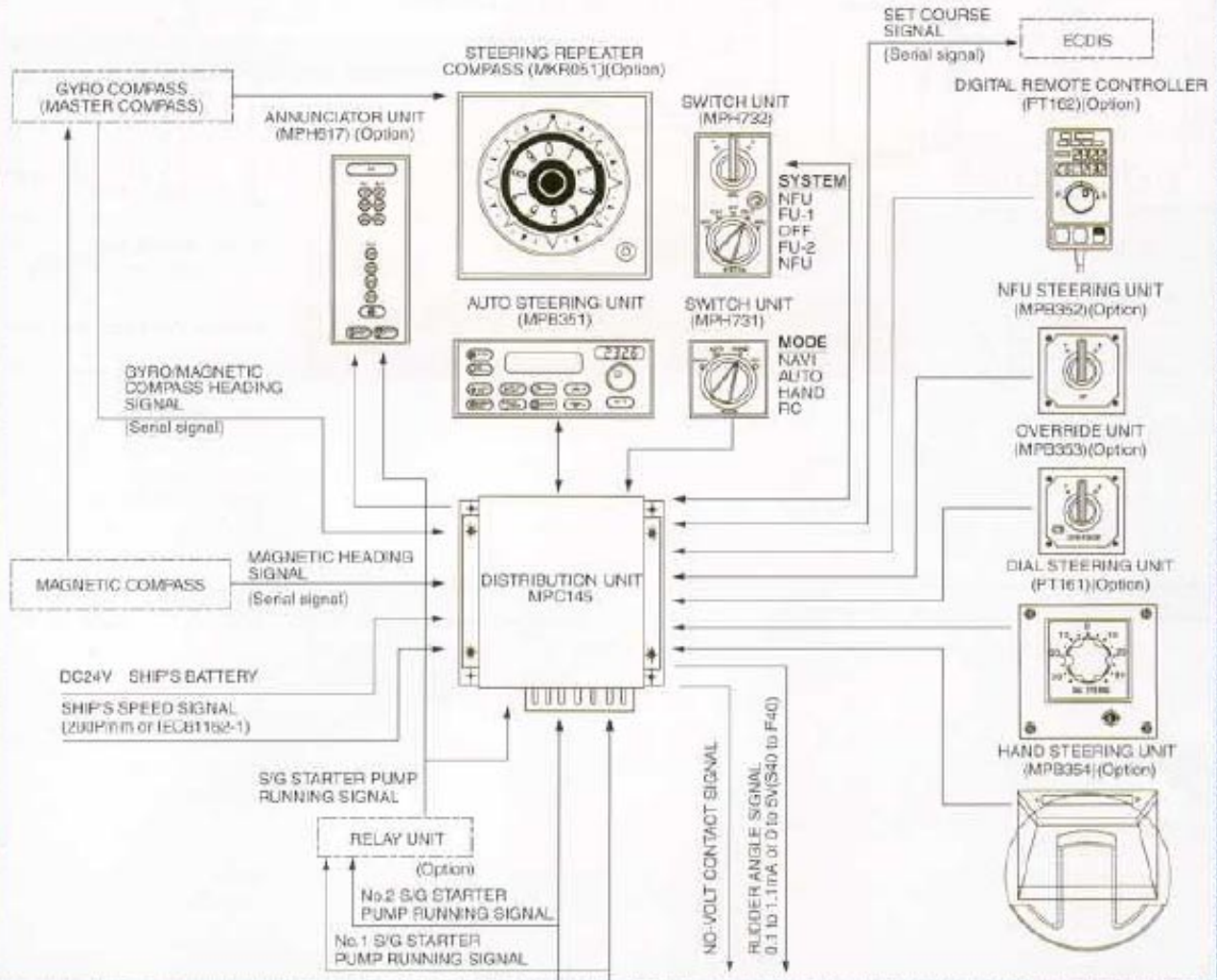
SYSTEM SWITCH
OFF : Operation stop
FU-1 : No.1 system operation
FU-2 : No.2 system operation
NFU : Non follow-up lever

Specifications:

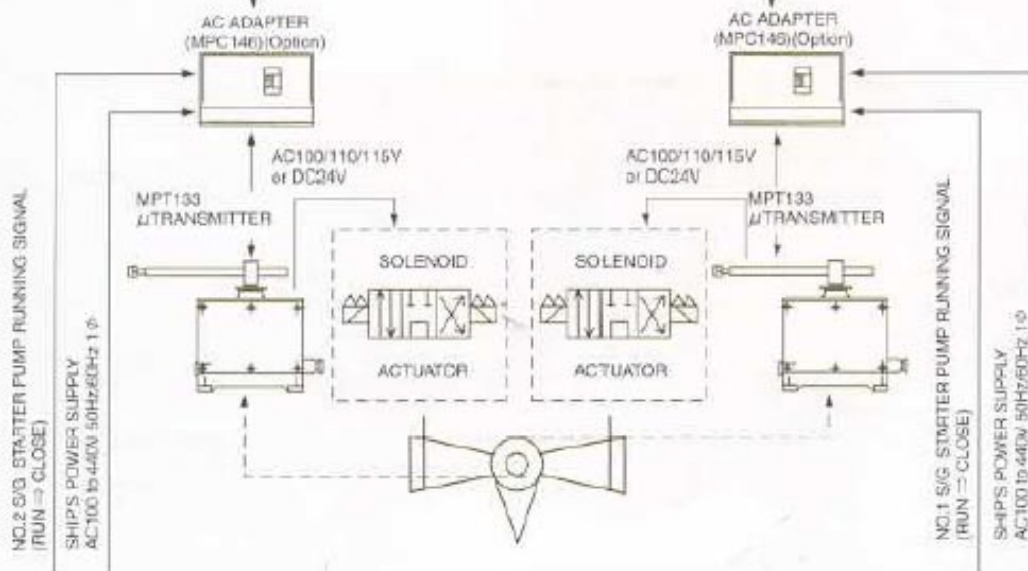
	Power supply :	24VDC optional 100/110/115/220VAC
Input signals	Speed signal :	200 pulse /NM or NMEA 0183
	Compass heading signal :	IEC 61162 (NMEA 0183)
	External set course signal :	IEC 61162 (NMEA 0183)
	External steering device :	e.g. ECDIS or Joystick
Output signals	Serial signal :	IEC 61162 (NMEA 0183)
	Analog rudder angle:	Course recorder
	Off course alarm	
	No voltage alarm	
	System failure alarm contact	
Performance	Power consumption :	24 VDC Max. 3A
	Steering angle output precision:	Within 1.0 deg
Environmental conditions (Normal use)	Operating temperature :	0 – 55 °C
	Protection class :	IP 44
	Inclination :	Roll, pitch below +/- 40 deg.
	Swaying :	Roll, pitch below +/- 22.5 deg.
	Type approval:	JG and wheelmark (EC MED)

Block diagram (Panel type)

Wheel house

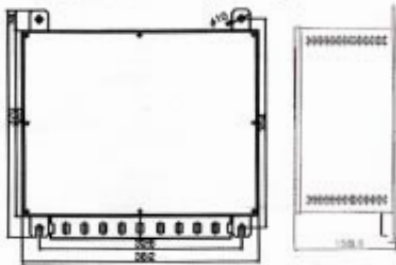


Steering gear room

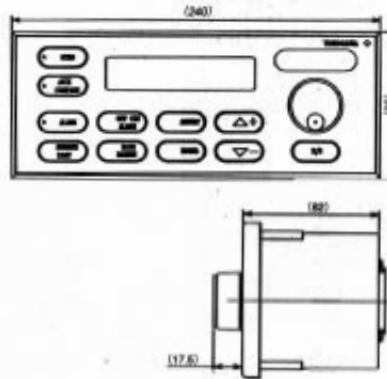


Dimensions

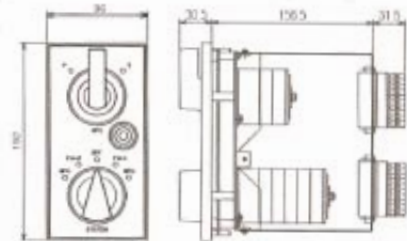
DISTRIBUTION UNIT(MPC145)



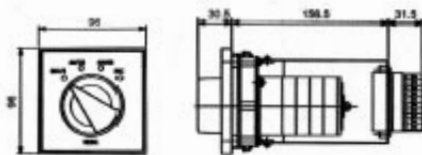
AUTO STEERING UNIT (MPB351)



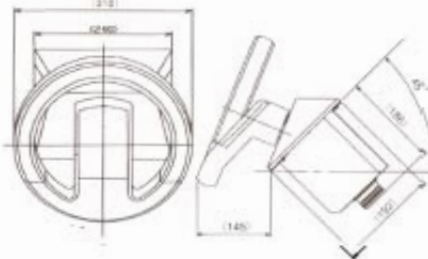
SWITCH UNIT (MPH732)



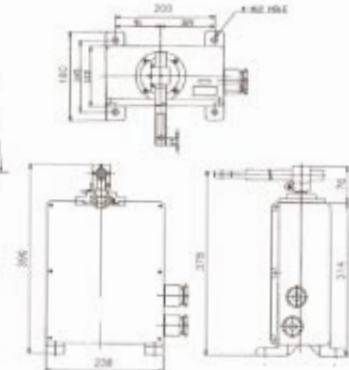
SWITCH UNIT (MPH731)



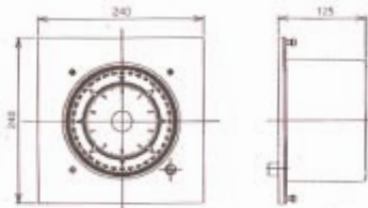
HAND STEERING UNIT (MPB354)



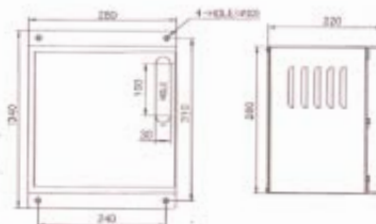
μ TRANSMITTER (MPT133)



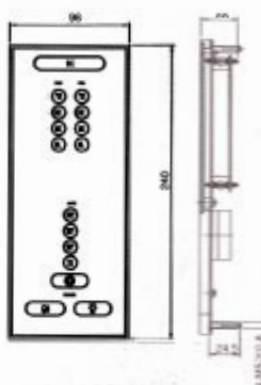
STEERING REPEATER
COMPASS (MKR051)



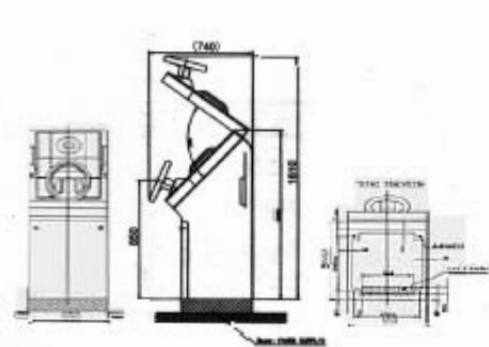
AC ADAPTER (MPC146)



ANNUNCIATOR UNIT(MPH617)



CONTROL STAND (MPM227)



YOKOGAWA



Yokogawa Denshikiki Co., Ltd.



Caution: Please read the manual before using this product

Address : 21st Floor, Shinjuku Park Tower.

3-7-1 Nishi-shinjuku, Shinjuku-ku, Tokyo, 163-1054 Japan

International Sales Dept. Phone : (81) 3-5323-5120 FAX : (81) 3-5323-5555

Service Dept. Phone : (81) 3-5323-5132, 5133 FAX : (81) 3-5323-5555

Domestic Sales Dept. Phone : (81) 3-5323-5123 FAX : (81) 3-5323-5555

Osaka branch Phone : (81) 6-6368-7102 FAX : (81) 6-6368-7103

Imabari branch Phone : (81) 896-22-4559 FAX : (81) 896-33-2005

Nagasaki branch Phone : (81) 956-28-7828 FAX : (81) 956-28-2570