

YOKOGAWA 

# Autopilot Series

Model PT70



ISO 9001-1994  
Marine Equipment



Yokogawa Denshikiki Co., Ltd

Bulletin 8CEI-20MCBE  
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

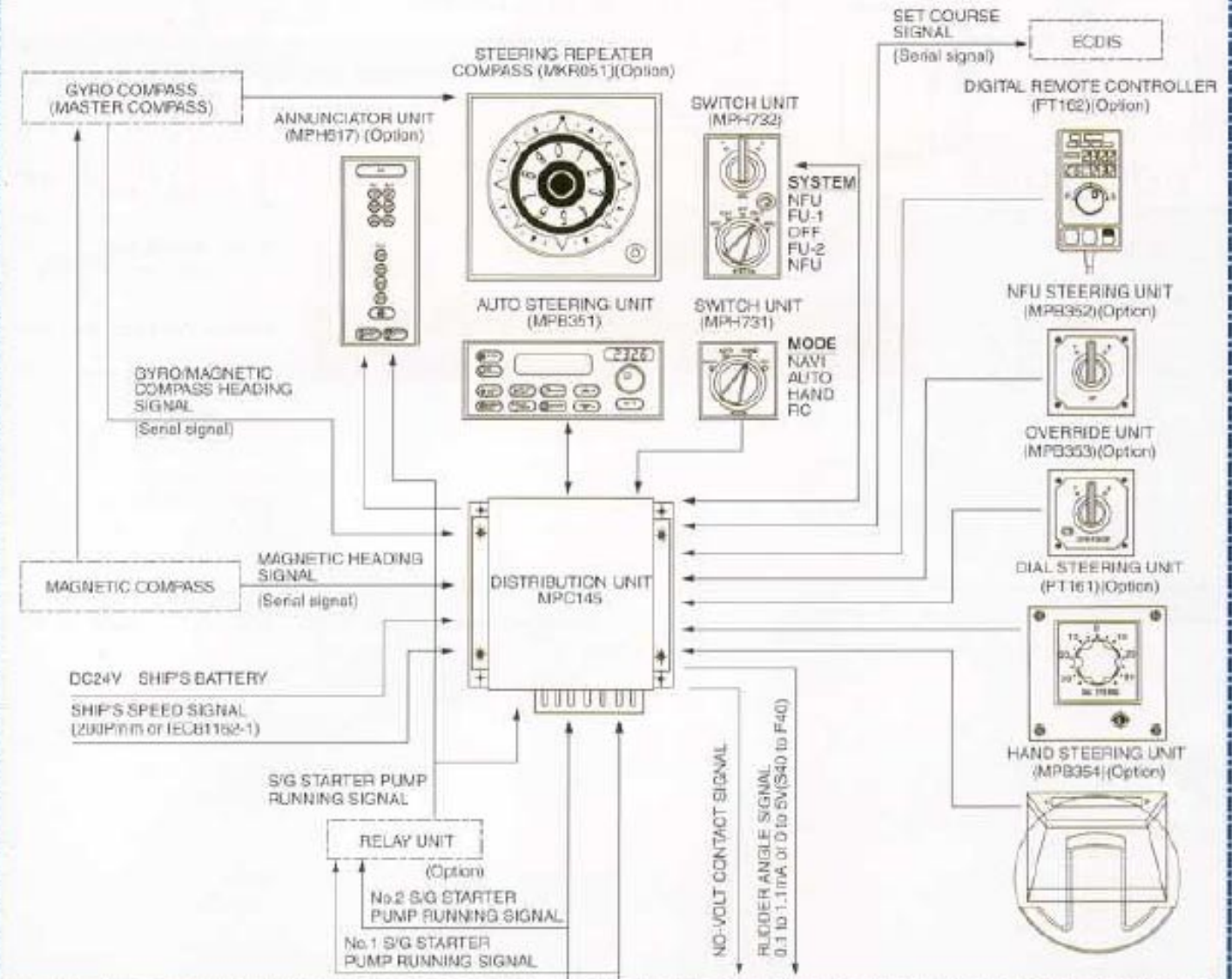
#### Dimmer

#### SYSTEM SWITCH

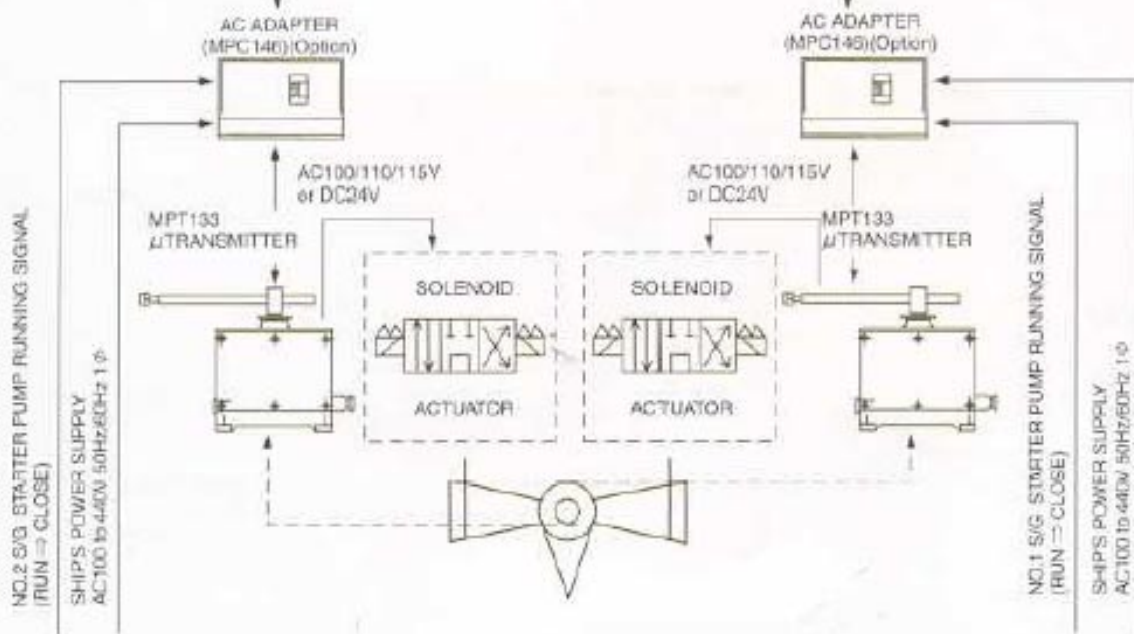
- OFF : Operation stop
- FU-1 : No.1 system operation
- FU-2 : No.2 system operation
- NFU : Non follow-up lever

# Block diagram (Panel type)

## Wheel house

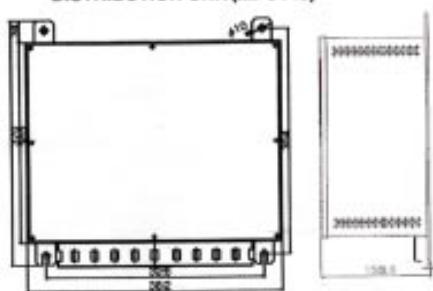


## Steering gear room

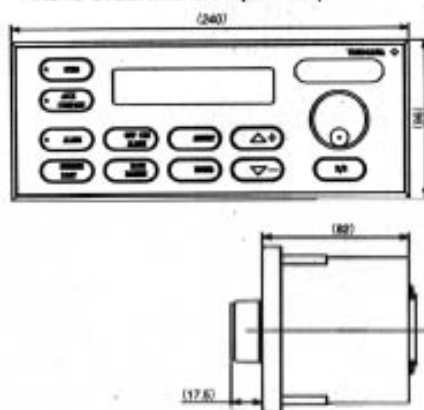


# Dimensions

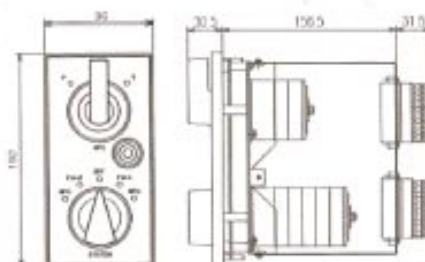
**DISTRIBUTION UNIT (MPC145)**



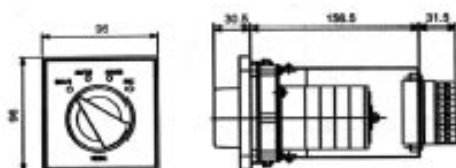
**AUTO STEERING UNIT (MPB351)**



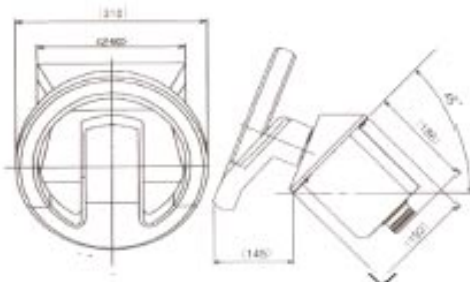
**SWITCH UNIT (MPH732)**



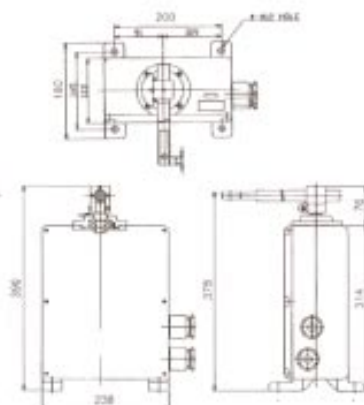
**SWITCH UNIT (MPH731)**



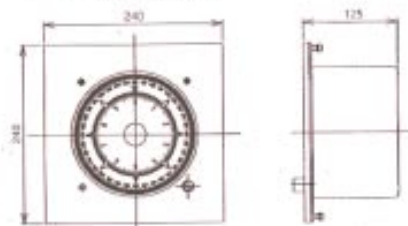
**HAND STEERING UNIT (MPB354)**



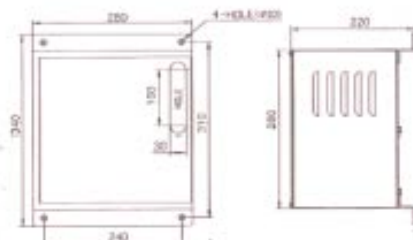
**μ TRANSMITTER (MPT133)**



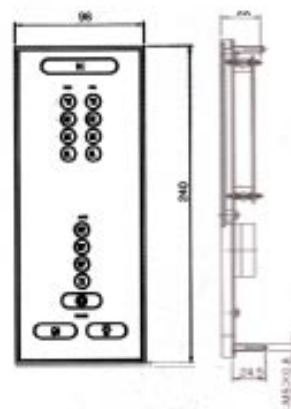
**STEERING REPEATER COMPASS (MKR051)**



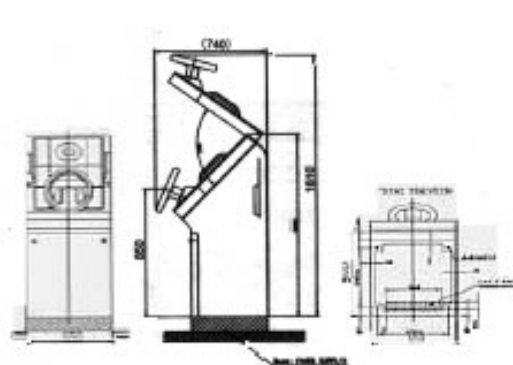
**AC ADAPTER (MPC146)**



**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

Represented by

**ALPHATRON**  
Marine