Mechanical Telescopic Mast User’s Guide

1. Facility summary

This equipment is designed for positioning instrumentation/communication equipment at a certain height. This equipment can automatically control height by tightening the nut with a constant TORQUE using DC MOTOR.

2. Driving preparation

- Make sure that there are obstacles (wires/trees etc.) around and make room.
- Check that the power lamp on the controller is turned on.
- Turn on the main controller to supply power.
- When the control power is applied, check (+) and (-) and turn on the s/w to supply the control power.

3. Using the mast and main controller

- Before using the mast, make sure that the main controller and hand switch are properly connected.
- First, Check that the power cable (DC 24V), the motor cable, the Encoder cable, and the origin sensor cable are connected properly to the main controller.
- Connect the cable on the hand switch.
  * Position ON the switch of switchboard.
  * Check that the main controller is energized.
  * You can raise and lower the mast by hand switch or manually.

4. Hand Switch Usage

* Order of Raise to Target Position

  (1) Press the UP switch.
      (The LED on the button turns on to drive the motor.)
  (2) Displays the current position in the display window and drives to the target position you set.
  (3) Press the up switch if any abnormalities are detected during operation or if you
want to stop the motor from running.

(Motor drive stopped as LED goes off*)

* Order of lowering to lowest (origin) position

(1) Press the DOWN switch.

(While the LED button turns (*ON), stops the motor from running.)

(2) The display window shows the current position and drives it to the origin position.

(3) Press the down switch if any abnormalities are detected during operation or if you want to stop the motor from running.

(LED goes *OFF and motor stops running)

*Target Positioning Method

● The mast must be in a normal state to set the target position.

(There must be no error state in the main controller and the motor must come to a stop)

※ In the event of an error, press reset button on the controller to release it.

(1) Once the set switch is pressed, the LED lights up and enters setup mode.

(2) Press the UP/DOWN switch and the user sets the desired target position.

(3) A single press of the SET switch turns the LED off and enters the motor drive mode.

5. precautions for handling

● Check the safety precautions before operating the machine.

● Don't touch moving parts.

● Always keep the drive area clean. Contaminated surroundings may cause fire.

● Shorting of electrical tables and wiring may cause fire. Keep all electrical contacts clean.

● When the desired height is set, use the machine completely stopped.

● If the vehicle requires movement, move with the mast fully lowered.

● Slope of harm as possible and run in the flat terrain, please.

● When inspecting or servicing the machine, make sure the machine is completely stopped.