1. Disconnect the ACU power cable from charging station.
2. Place the ACU in a suitable location.
3. Open the ACU case by pressing the handle knobs and pull the handles up.
4. Turn on the main power switch (D) in order to boot up the APOS PC program (booting process will take about 1.5 minutes).
5. Place the Cable drum close to the ACU.
6. Operation - see online help.
7. Connect the dunking transducer cable to the upper right connector (B).
8. Lower the dunking transducer (Y) into the sea (more than 10 m below the lowest part of the platform/ship).
9. Note! If the dunking transducer is not deployed in water, the Maximum Transmitter power setting should be limited to "High".
   - If a small test transducer is connected for communication in air, you must ensure to limit output Transmitter power to "Low" setting.
10. Return the ACU to charging station (power off mode).

Wake up APOS PC from Stand-by
When APOS PC is not in use for a certain time, it will go into Stand-by mode. This means that the screen will turn black. Touch the screen or the trackball to return to Operation mode.

Communication:
- Communication between the ACU and the SCU may easily be tested by running the Read Solenoid status or Reading Battery status.
- Main Link mode is Cymbal communication. In order to switch between Cymbal and FSK (alternative mode); follow the APOS instructions given in System Configuration, instructing you to wait for 1 minute prior to use the alternative Link mode.
- (X) If you have problem to communicate with the chosen SCU unit in water; after at least three trials, try to increase power with one step. If this does not work then try the alternative ACU unit.
- If no success is obtained by following (X), try the alternative FSK modulation mode.
- The EMERgency function on the ACU, located under the small cover on the panel, is only available if an EME sequence is defined and configured.

During operation:
If the ACU battery indicator indicates low power, connect the charging cable - see (J) on opposite page.

Charging the battery

When charging you have two options:

A Primary option:
Switch the unit off during charging, and then switch it on again when you are going to use it.

B Secondary option:
Leave the ACU switched on - ready for operation during charging.

When the ACU is located in a control room, it may be continuously charged even if the suitcase is closed.

To start charging:
1. Connect the cable to the 230 Vac connector at the front of the ACU - see opposite page (J).
2. Connect the other end of the cable into a 115/230 Vac mains supply.
   - Normal charging time from "bottom to top" may take 7-8 hours when ACU is switched off (see A mode in "When charging.." paragraph). Green charging lamp indicates that the internal ACU battery is fully charged.
   - When the ACU is fully charged, it may be operational for up to 10 hours. If the system is powered up only when it is needed, then we will increase the operation time significantly.
   - If the ACU is stored, it is important that the battery is fully charged. It must be recharged at least every 12 months.

APOS can be operated either by using the touch screen (see on-line help) or the trackball (G) - see opposite page.

Ready for operation!

**ACU 30 Quick Reference Guide**

For detailed operation description, see online help. For description of the ACS500 system, see the ACS500 Instruction manual.

### ACU 30 front panel

- **A** Connector (with protection cap) for Serial line. For service personnel only. (For program downloads and configuration purposes).
- **B** Connector (with protection cap) for Dunking transducer cable.
- **C** Connectors for USB and LAN. For service personnel only. (Connection to network and possible APOS/PC program download via USB.)
  - Placed behind a waterproofed cover. Turn the pegs to open.
- **D** Power ON/OFF switch.
- **E** EMERGENCY SEQUENCE - EME button and LEDs.
  - Placed behind a cover. Turn the peg to open. Only available if an EME sequence is defined and configured.
- **F** EXECUTE button - the button has two functions:
  1. To be used together with APOS when performing valve operations.
  2. To be used together with the EME button when performing an EMERGENCY SEQUENCE. Placed behind red flap. Lift the flap to open. To operate the switch, push it upwards.
- **G** Trackball - used to position the cursor on the screen. A trackball movement moves the cursor.
  - Left button: Used to click on buttons, operate menus and select displayed symbols.
  - Right button: Used to display menus and pop-up windows.
  The most common trackball operations are; pointing, clicking and dragging.
- **H** Stand-by wake up, with two LEDs indicating status.
- **I** Display light (+/-) adjustment.
- **J** Power connector - male 3-pins connector for the mains cable.
  - This cable (see L) is used to connect the ACU to a standard 230 Vac mains supply, to recharge the internal battery.
- **K** Gas lift springs - to keep the ACU lid open when the unit is in use.
- **L** Battery charge cable in lid folder - supplied with the unit.
- **M** Battery status indicator. The battery should last for approx. 10 hours of continual use, and will take approximately 7 hours to recharge from fully discharged.

### User levels

The APOS is - regarding functional possibilities and operation, configured in the following two user levels:

- **Operator:**
  - This level is used for the daily normal operation.

- **Service:**
  - This level requires password, and is for service personnel only.

### ACU 30 maintenance

Maintenance will primarily include keeping the unit clean and charging the battery.

### Support

All Kongsberg Maritime products:
- **Phone 24 hour:** +47 815 35 355
- **E-mail:** km.support@kongsberg.com

HiPAP, HPR, Transponder and ACS:
- **Phone 24 hour:** +47 992 03 808
- **E-mail:** km.support.hpr@kongsberg.com