AIDS to NAVIGATION

Catalogue

Control Systems

2005

Vers. 20030415R1

NOTE: The manufacturer reserves the right to introduce changes to the specifications without prior notification, as necessary.
Cybernetica AS
Department of Navigation Systems EKTA
Call +372 639 7991
Fax +372 639 7992
E-mail: ekta@ekta.ee
Akadeemia tee 21, 12618 Tallinn, ESTONIA
Visit our website at www.ekta.ee
The purpose of the E002 is to monitor and control a smaller number (up to 50) of lights distributed over a territory, not divided into the regions. Each light is equipped additionally with the communication controller for the monitoring purposes.

For the monitoring and control of the lights there is a Monitoring and Control Centre (Regional Centre) consisting of a computer, telecommunication modems and, of communication, monitoring and control software and database. All lights are connected with the Monitoring and Control Centre via communication channels.
Regional control centre E741 is a set of computer hard- and software which is constituting the working environment of a regional service centre. The main task of the regional centre is to keep the personnel of the service centre informed about the actual state of the lights and, to inform the vessel traffic services about all abnormalities and failures in the functioning of the aids to navigation.

**Features**

- monitoring and control of all lights within the service region
- automatic operation i.e. there is no need for operator attendance
- reception, processing and storage of emergency messages
- receiving of messages about the times of daily switching ON and OFF events of the lights dictated by the photosensor
- sending to the main control and monitoring centre of:
  - emergency messages
  - times of daily switching ON and OFF events of the lights
  - reports of the actual state of the lights
  - daily summaries of the region
  - changes of the specification of the lights
- receiving from the main control and monitoring centre messages about the changes of the characteristics of lights
- management of the service of lights
- sending information inquiries and commands to the lights
- storage in the data base of:
  - emergency messages
  - actual states of equipment units of the lights
  - installation data of the lights
  - communication schedules of the lights
- based on data stored in the data base it is possible to analyze the functional efficiency (reliability) of the lights
- receiving and storing of data of the telemetry equipment if such is installed in the lights
- additionally, there is a possibility to monitor equipment units, not included with the system of lights

**Computer of Regional Control Centre**

- Operating System - MS Windows NT 4.0 or higher
- Data Base Software PARADOX 7.0 or higher
- Distrib Memory Back-up Storage
- Data Base
- Processor >300Mz
- Remote Monitoring and Control Software of Aids to Navigation
- Monitor Keyboard COM Ports
- Front End Communication Software and Modems
- Communication Media - GSM cellular or public switched telephone network
- To Main Control Centre

**Communication Controllers of Lights**

Cybernetica AS
Department of Navigation Systems EKTA
Call +372 639 7991
Fax +372 639 7992
E-mail: ekta@ekta.ee
Akadeemia tee 21, 12618 Tallinn, ESTONIA
Visit our website at www.ekta.ee
Service program Lanserv Plus

Many parameters and features of the microprocessor controlled devices of EKTA are programmable by the individual, installing and/or servicing the systems. For doing this, a personal computer and a dedicated service program, called Lanserv Plus are needed. Lanserv Plus is executable on any PC-compatible computer, running under the operating system MS Windows 95 or 98.

Features

Main initial set-up of devices

- local LAN addresses
- flashing characters
- normal, warning and emergency voltage levels of power supplies
- photo sensor switching levels
- nominal voltage level of lamps or LEDs
- dial-up phone numbers
- lampchanger settings
- time schedule of communication with the control and monitoring centre
- synchronizing parameters of leading lights

Servicing the working system

- scanning the devices, connected to the local area network of the system in order to check the system integrity
- reading and checking the initial settings of devices
- changing the settings of devices, if needed
- reading status information of devices
- reading and analyzing errors of devices
- reading statistics

---

Department of Navigation Systems EKTA
Call +372 639 7991
Fax +372 639 7992
E-mail: ekta@ekta.ee
Akadeemia tee 21, 12618 Tallinn, ESTONIA
Visit our website at www.ekta.ee

ekta™
AIDS to NAVIGATION

Service program Lanserv Plus

Specifications

System requirements
- a PC-compatible computer (desktop or laptop)
- at least 16 MB of RAM
- ports: 1 serial port, 1 parallel port
- at least 20 MB of free disk space
- operating system MS Windows 95 or 98

Supported devices
- of the system E601, E603
  - flashers: E82061, E862, E863, E864;
  - communication controllers: E9202, E923, E924; E925
  - GPS controllers: E931, E934,
  - measurement modules E304, E304.1
- of the system E602
  - flasher: E175,
  - AC/AD converter E174,
  - Diesel generator controller E177,
  - International lantern TRB-400 (Tideland)

Connection the PC to the devices
- of the system E601, E603
  - using LAN adapter type E814 (RS485)
- of the system E602
  - using LAN converter type E401 (Echelon)

Security
- provided by usernames and passwords to be entered on program entry

Connecting the service PC to the devices