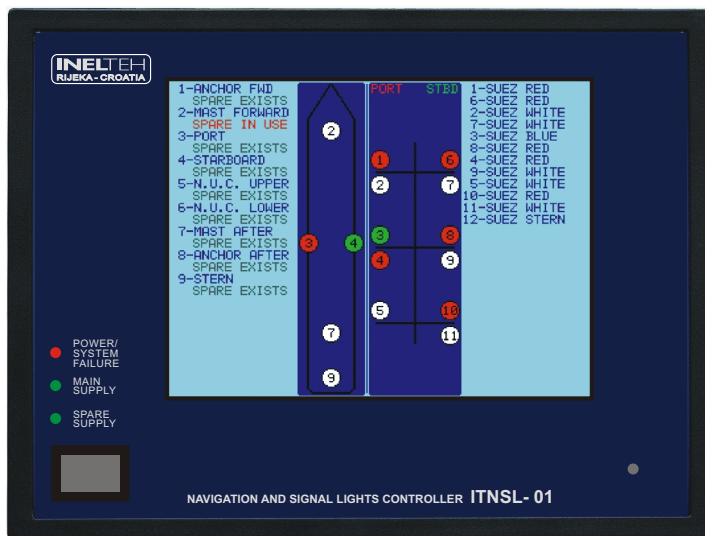# NAVIGATION AND SIGNAL LIGHTS CONTROLLER ITNSL-0I
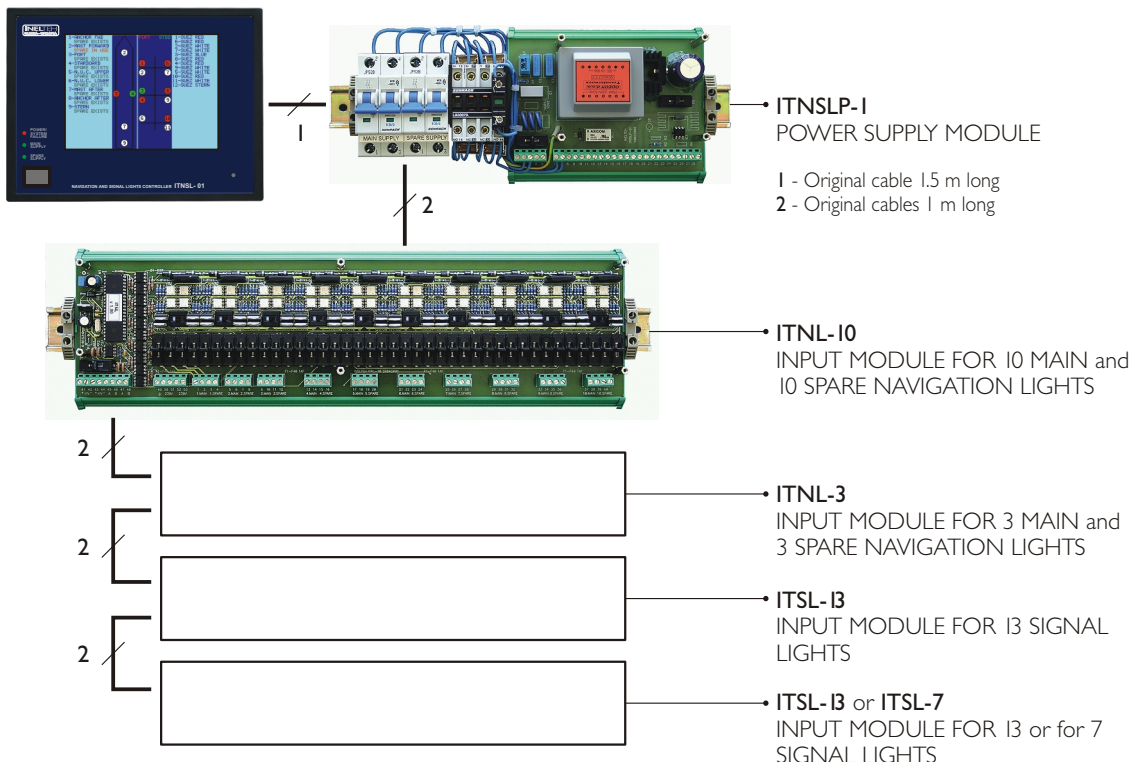
ITNSL-0I T is used to control operation of navigation lights on board ships. Audible and visual alarm is activated if there is a fault in circuit or lamp.

Equipment consists of the main unit **ITNSL-0I T** for flush mounting, input modules for lanterns connection and power supply unit **ITNSLP-0I** for mounting inside of bridge console. Modular concept save space on bridge console and allows easy system configuration.
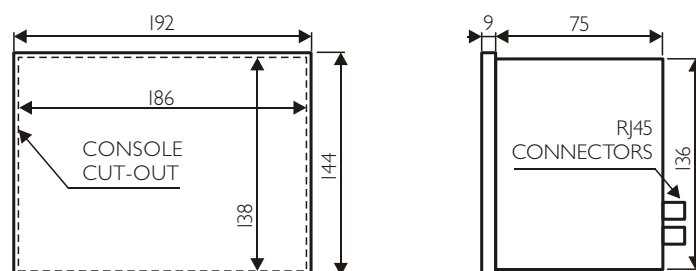
Due to big colour graphic LCD display for lights position and condition presentation and built-in software, **ITNSL-0I** is fully user programmable. Any sample can be programmed to meet specific ship requirement, even after installation.
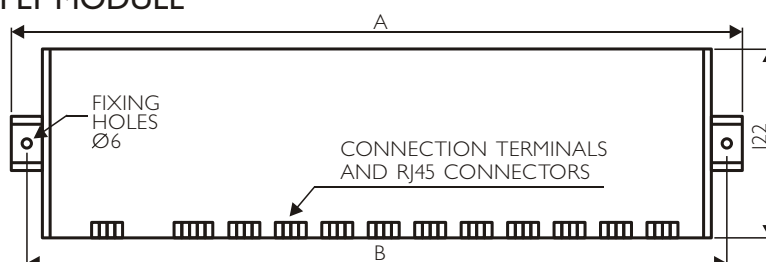

- Big colour LCD display with touch panel
- Fully programmable lights presentation properties (name, color, number, position, spare light existence)
- Programmable signal mast shape and viewing direction marking
- Switch-on group of lights by single button
- Switch-off all lights by single button
- LED lights can be connected
- Automatic switch-over to spare light in case of main light malfunction
- Programmable order of lanterns' circuit connection to input modules makes lights' presentation order on display and "connection diagram" fully independent
- Type approved by GL, BV, RINA and CRS

ITNSLP-I
POWER SUPPLY MODULE

I - Original cable 1.5 m long
2 - Original cables 1 m long

ITNL-I0
INPUT MODULE FOR I0 MAIN and I0 SPARE NAVIGATION LIGHTS

ITNL-3
INPUT MODULE FOR 3 MAIN and 3 SPARE NAVIGATION LIGHTS

ITSL-I3
INPUT MODULE FOR I3 SIGNAL LIGHTS

ITSL-I3 or **ITSL-7**
INPUT MODULE FOR I3 or for 7 SIGNAL LIGHTS

MAIN UNIT

INPUT MODULES and POWER SUPPLY MODULE

ORDER CODE	ITNSL-1T	ITNL-10	ITNL-3	ITSL-13	ITSL-7	ITNSLP-01
DIMENSION **A** (mm)		483	229	459	307	327
DIMENSION **B** (mm)		463	209	439	287	307
MAX. HEIGHT (mm)		70	70	70	70	110
WEIGHT (kg)	1.1	1.3	0.63	1.14	0.76	1.98
ORDER CODE	02-04-002	02-04-004	02-04-005	02-04-006	02-04-007	02-04-003

TECHNICAL CHARACTERISTICS

1. Power supply .... 230V +6%, -10%, 50/60Hz, connections for main and spare, automatic change-over, supply change-over signalization

2. Consumption .... 0.135A max, without bulbs

3. Maximal configuration .... 13 main and 13 spare navigation lights and 26 signal lights, automatic change-over to spare light (if exists)

4. Bulbs' power range .... 4-120W, flashing lights are allowed

5. LED lights are allowed (option) .... Main unit records operation time for each LED light by decreasing value entered as LED operation life. User enters operation life in hours when new LED light is installed.

6. Lights' switching on/off in case of emergency .... Slide switches mounted on input modules, connect 230V AC direct to bulbs, fuses remind in circuit

7. Alarm output .... 2 pcs of voltage-free C.O. contacts, 250V AC/ 1A, for broken light's circuit alarm, power/system failure alarm, and supply change-over alarm

8. External alarm accept input .... N.O. voltage-free contact, accepts only audible alarm

9. Lamps' configuration and condition presentation .... 5.7" TFT color LCD display, 320x240 pixels, 256 colors, touch panel

10. Programmable lights' presentation properties .... Light's name, color, number and position on display Definition of spare navigation light existence Signal mast shape and Port-Stbd marking

11. Programmable lights' groups .... At Sea, At Anchor, N.U.C., R.A.M. and Suez

12. Programmable order of lanterns' circuit connection to input modules
    That feature makes lights' presentation order on display and "connection diagram" fully independent. During outputs setting procedure any output can be assign to any lantern. However, navigation lanterns can be connected only to ITNL modules and signal lanterns only to ITSL modules.

13. Dimmer function for reducing LCD brightness

14. Power / System failure signalization