Item-No. 1575-LCD

LCD*box*

for

LTR*6*

Connection, Operation & Adjustment

Please read the following instructions and safety warnings carefully BEFORE you commence with the installation of the unit.

24 Month Limited Warranty
The manufacturer of this unit warrants this product to be free from defects in material and workmanship for a period of 24 (twenty-four) months from the date of purchase. During that period, we will repair or replace, at our option, any unit supplied through us that does not meet these standards. You will be required to provide proof of purchase (receipt or invoice). Defects caused by abuse, misuse, or accident, etc. are not covered under this warranty. Under no circumstances will the purchaser be entitled to consequential or incidental damages. If you attempt to dissassemble, modify, or repair this unit in any way yourself it may void the warranty. For service to your MiniPitchController send it post paid and insured to the address stated on the front page of this manual (please ensure adequate and safe packaging).

WARNING!
This item is not a toy and therefore not suitable for persons under 16 years of age.
Please adhere to your country's safety guidelines during construction and operation of this item.
We are not liable for any personal injury or damage of any kind resulting with the assembly and/or use of our products as we are neither able to delegate nor verify the assembly and/or use of these items.

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LCDbox (optional, item no. 1575-LCD)

This box allows various parameter readings and configurations of Pitch and Depth Controller LTR6 such as complex mixers, filters, servo throw etc.

The LCDbox is connected via a 6-pole wire lead to LTR6. The black marking of the connector faces the middle of LCDbox; on the LTR6 the black marking faces the bottom.

Connect LCDbox to LTR6. Immediately after receiver is switched on the display of LCDbox will show the LTR's firmware version. If nothing shows either the connection has been setup improperly or display contrast needs to be adjusted.
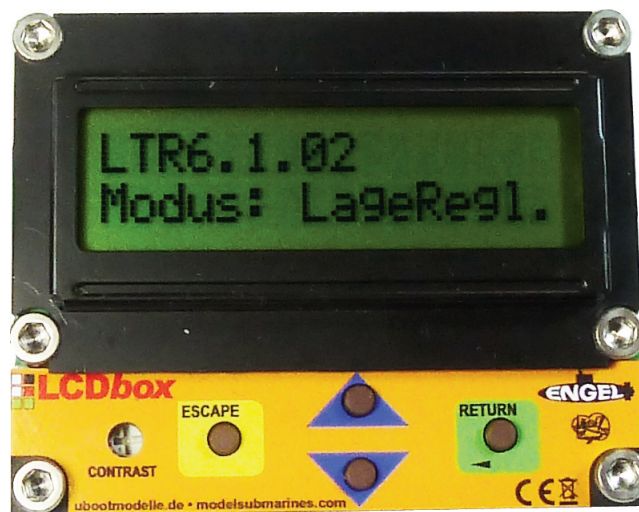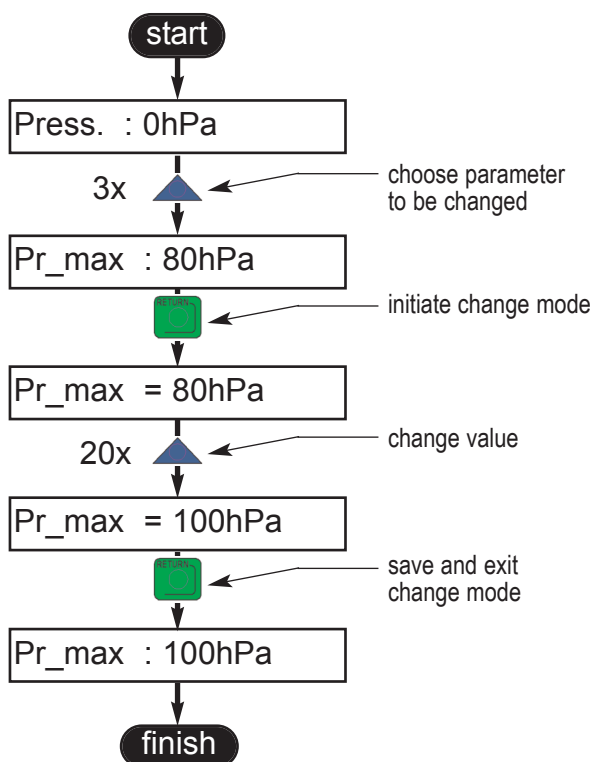
For navigating through the menue the LCDbox is fitted with four buttons:

▲ and ▼ change value of parameter.

🟩 opens" a parameter so that value can be adjusted; this is indicated by „=". Then press „RETURN" to save change in parameter and terminate change mode („=" dissappears).

🟨 Press „ESCAPE" for terminating change mode without saving changes made in parameter.

The following example illustrates how to set value to maximum depth of 100 cm:

Mixer Mode

Configurations for servo outputs to be made by LCDbox are very diverse (LTR is the output of Pitch-&Depth Controller):

4 Servo X-Rudder

Default setting E2 = RUDDER

A1 = LTR + E2
A2 = LTR - E2
A3 = - LTR + E2
A4 = - LTR - E2

IF E2 remains UNUSED A1 and A2 form two equal outputs of Pitch-/Depth-Controller and A3 and A4 are inverted.

2 Servo Mixer

Output 1: LTR
Output 2: -LTR (inverted)
Output 3: LTR + E2
Output 4: LTR - E2

Output 3 and 4 in combination form a X-mixer for X-rudder configuration operated by 2 servos with rudder by E2.

Menue Settings

Name	Description
Start	Shows for 2 sec. Version no., start no. and date of firmware
Mode	Version Mode (off, pitch, depth relative, depth absolute)
in1	input 1 in % and as bar chart -100% = 1.0 ms 0% = 1.5 ms 100% = 2.0 ms
in2 in3	same as in1
out1	output 1 in % and as bar chart "RETURN" jumps to servo parameters
o1 zero	center position output 1
o1 max	maximum limit output 1
o1 min	minimum limit output 1
o2 o3 o4	same as o1 each output with individual settings
Inclino	Reading "inclinometer" "RETURN"-"RETURN" sets neutral point to actual value
Press.	Reading "Pressure Sensor" hPa ~ cm water column
Pr_set	Set depth (as pressure) calculated from E1 and E3
Poti	Amplification of pitch control 3% … 800%, pole reversible
Pr_max	maximum value for set pressure default value 80 hPa
K_pr	Amplification of depth control default value 66%

Switchable Settings

Name	Description
language	Deutsch (german), english
default controller	Active controller IF output 2 is "open": manual, pitch control, depth control
data logger outp	"1" activates ongoing release of actual settings and readings on an external data logger
Mixer	Configuration of mixer on outputs as well as on specific controller modes
LCD light	"1" turns LCD backlight on (not for LCDbox)

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