TTC 400 Quick Reference Guide

Valid for v 2.0 and later. For detailed description of the TTC 400, see the TTC 400 Instruction manual (857-164788).

TTC 400 system

The Transponder Test and Configuration Unit - the TTC 400, contains all the necessary functions for testing and configuration of a transponder.

The TTC 400 is based around a splash-proof, small "all in one" and portable unit with carrying-handles and internal battery supply.

The transducer with cable connects to the front of the unit, and this is all what is required to perform a test / configuring of a transponder.

The TTC 400 is normally used for test and configuration of a transponder on deck.

Optionally use:

- Responder function
  TTC 400 can be used to test responders - dedicated responder cable must be used.
- Dunking transducer
  TTC 400 can be used together with a Kongsberg Maritime dunking transducer for test and operation at sea.

Connectors

- TD - Transducer for transponder test and configuration
- AC IN:
  - TTC 400 power (100 - 240) Vac
  - Ac power for battery charging
- RSP - for responder cable (responder trigger signal) for responder function test.

Transponders

The TTC 400 can be used for test and configuration of the MPT / SPT transponders using the 30 kHz band (MF).

NOTE: The ROV Positioning Transponder (RPT) and the Mini SSBL Transponders (MST), can be checked by INTERROGATE the TP channel. No other function or command can be used against the RPT / MST because these transponders have no telemetry interface.

Transponder safety

Due to safety rules, the "Safety information for transponder and transponder battery" must be read before handling transponders or separate transponder batteries.

Refer to the respective transponder instruction manual / Transponder Safety Data Sheet (859-164733).

Channels

The TTC 400 applies for:

- The High Precision Acoustic Positioning (HiPAP) channels.
- The Hydroacoustic Position Reference (HPR 400) channels.
- The Hydroacoustic Position Reference (HPR 300) channels.

Pushbutton functions

Arrows

↑	•Move the cursor upwards in the menu •Increase the required selection - Press the button: **one step at a time** - Press and hold the button: **Fast count** - SELECT the required menu input
↓	•Move the cursor downwards in the menu •Reduce the required selection - Press the button: **one step at a time** - Press and hold the button: **fast count** - SELECT the required menu input
→	•Select the Main Menu states •Move the cursor to the right •ENTER, next menu level appear
←	•CLOSE, go back one menu level •Returns the control to previous state level

Dedicated buttons

POWER Switch ON the system (TTC 400).

To switch OFF the system you must use the menu function POWER OFF.

If POWER OFF is not used, the system will be switched OFF automatically after 10 minutes.

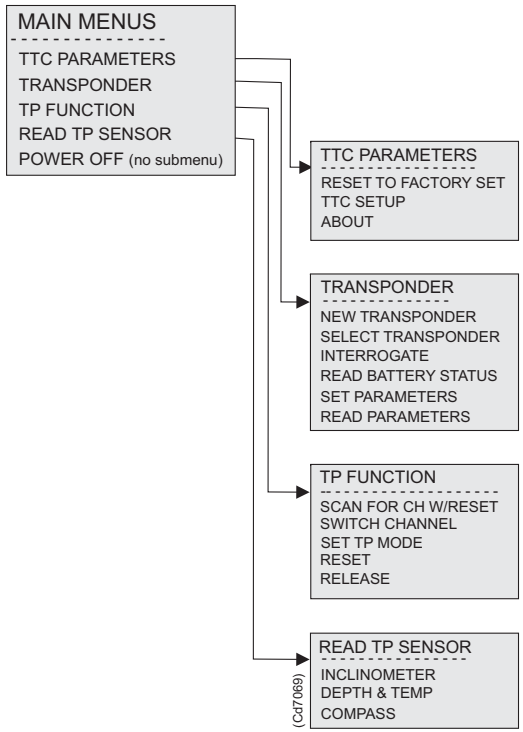
LIGHT Background light, toggle ON / OFF. The background light will automatically switch OFF after 1 minute if no operation. Press LIGHT to toggle the light ON.

HELP Short information on how to use the TTC 400.

Example

By pressing the up / down arrow the operator SELECT the main menu, and then pressing the right arrow the TTC 400 will ENTER the main menu's submenu.
A second level menu will appear on the display and the TTC 400 operator can SELECT the submenu. When pressing the LEFT button the TTC 400 will CLOSE or "Abort" the prepared command.

Menu



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How to use the TTC 400 with transducer

Getting started

1. Connect the transducer cable to the TTC 400 unit (A).

2. Place the transducer face to face with the transponder transducer (B).

3. Press the **POWER** button (C).

   - The MAIN MENU page is displayed.
   - ● Only three menu selections will be presented in the window at the same time.

This applies for both the main menu and the submenus. The selected command is always presented at the same menu line (the middle line).

4. Select the required menu. The selection is displayed in inverse video ●.

● Page content

Bat%	Indicates remaining battery capacity for the **TTC 400 unit** 100-0 %
SNo	Serial number - the default serial number is 2000
Ch	Channel - the default frequency channel is B12. Channels available see page 1.
Org	Original channel, ref channel
TTC	The TTC 400 unit
TP	Transponder
vXX	Transponder software version
Tx Power	Transmit power
Rx Gain	Receive gain

Acoustic status field

Status field	State of status
ACK OK	Acknowledge / Ok
NO ACK	No Acknowledge / No replay
XX	"Count down" while waiting for transponder reply.

Active function / command

The following applies when a function / command is executed:

- The system counts down **XX** in the status field, while waiting for reply.
- When the reply from the transponder / responder is received, **ACK OK** is written in the status field.
- If there is no reply from the transponder / responder, **NO ACK** will be written in the status field.

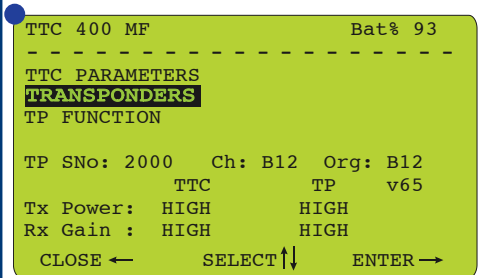
Operation

Set-up of a new transponder

Before any command can be given to the transponder, the **serial number** and **channel** must be selected.

If the transponder you are going to test / configure has been configured in the system (used before), you can use the SELECT TRANSPONDER command to activate the transponder. You just select the transponder from a list.

1. Select **TRANSPONDER** in the main menu and press **ENTER →**.



2. Select **NEW TRANSPONDER** and press **ENTER →**.
   - The system moves to the serial number input field.
3. Select the required serial number **TP SNo <xxxx>** and press **ENTER →**.
   - The system moves to the channel input field.
4. Select the required channel **Ch B<xx>** and press **ENTER →**.
   - The **Org** (original channel) will be updated accordingly.

The selected transponder is now active.

Select a transponder

From this page you can select one of the 20 latest used transponders.
The last used / selected transponder will be shown.

1. Select **SELECT TRANSPONDER** and press **ENTER →**.
   - The system moves to the serial number input field.
2. Select the required transponder serial number **TP SNo <xxxx>** from the list and press **ENTER →**.
   - The channel and original channel for the selected transponder is displayed.

The selected transponder is now active.

For more information about the test and configuration of a transponder / responder, see the TTC 400 Instruction manual.