



Multi-Handy 3010 (3160-00-67.00)

Quick Start Guide

This guide is intended to enable the user to programme (if needed), and use the Multi-handy 3010 unit. This document contains the following sections:

- A) Initialisation**
- B) Programming**
 - a. Channels**
 - b. Display**
- C) Memory**

If you have any questions or queries please do not hesitate to contact us using the details given at the end of this guide.

A) Initialisation

1. Turn the unit on, whilst on the loading screen, in quick succession press 1, 2, then 3. A screen will appear saying: init – complete, yes – enter, no – C. Press enter.
2. Choose the language you would like to use, (scroll using the arrow keys). When the desired language is highlighted press enter to choose.
3. The unit should now be initialised. The time and date can also be set on the unit. This is achieved by pressing the menu button, scrolling down to device menu and pressing enter.
4. Scroll down the device menu to the date/time option and press enter.
5. To set the date, when the date line is highlighted press enter and type in the appropriate date. Press enter to move to the month, etc. Until the date is set. Now repeat for the time.

The initial set-up procedure is now complete, it is not necessary to repeat this procedure every time the unit is switched on.

B) Programming

a. Channels

Note: If ISDS sensors are being used, (these are identified by a red ring around the sensor, and a sixth pin in the centre of the connection port), there is no need to manually set the input channels (K1 and K2), instead connect the sensors and leads as required, and switch the unit off. Wait until the unit is completely off, and then switch the unit on again. The ISDS will automatically set the channel parameters for you. (Note ISDS must be turned on, this is located on chapter number 4-3-1-0)

1. In order to use the channels correctly it is necessary to configure them for the appropriate sensor you shall be using.
2. Press the menu button and scroll to the channel menu, then press enter.
3. Select the channel you wish to configure, (either K1, K2, K3 or K4), and press enter.
4. A menu screen will appear with options for the channel. This menu is common for channel K1 and K2.
5. The first option (common on all menus) is the measuring variable option (meas. var.), this will set the units for the required channel. Press enter when this line is highlighted and use the scroll buttons to move through the available units. Press enter when the desired selection is highlighted.
6. The second line requires to know the sensor type (Sens. Type). There are 2 options 0-20mA, or 4-20mA, this information is usually located on the side of the sensor being used. Press enter to allow yourself to scroll through the options and enter again to confirm the selection.
7. The third and fourth options set the minimum and maximum values which that channel has the capability to reach, eg if a 200bar pressure transducer is being used then the maximum possible is 200 bar and not the pressure experienced in the line which could be lower. Set these by pressing the enter key when the line is highlighted and then type the figure in using the key pad. Press enter when finished.
8. The final option is the zero point, (not available with temperature channels). This is a calibration utility and should be used when the sensors are connected. Once the sensors are in, there may be a slight reading even if one should not be present. By using the zero-point, the unit will zero the readings and tell you what the offset is.
9. To set the digital channel (K3), firstly follow instruction 5. Then a second option asking for a sensor type will be available. This will state with/without direction on the digital signal. Finally input a calibration value. This should be found on the calibration certificate, (or will automatically set if ISDS sensors are used).
10. To set the calculation channel (K4) firstly follow instruction 5. Then there is an option to align the difference between the channels. This is a similar function to the zero-point as described in instruction 8.
11. The channel should now be set. Press C to return to the channel selection menu and repeat the procedure for the other channels as required. If complete press C to return to the main menu.

B.a. Display

1. In order to view the required channels on the screen and allow the screen to optimise itself, the channels you wish to view need to be selected.
2. On the main menu, scroll to display menu and press enter.
3. The menu should have 5 categories, the first of which will select the channels viewed on the screen. Highlight select chan, and press enter.
4. Select the channels you wish to view, (scroll through yes/no), press enter to confirm selections and C to revert back to the display menu.

5. The next option is whether the minimum and maximum values should be displayed for each channel. Press enter and as before scroll through the required channels, press enter to confirm the selection and C to revert to the display menu.
6. (The third option deletes the mins and maxs once the unit has run)
7. The fourth and fifth options, allow the user to customise the screen in terms of contrast and display rate (how fast the display updates with new information). Press enter to open a category and change the details accordingly. Pressing enter to confirm the selection. Press C twice to revert to the operating screen.

C. Memory

1. When taking a test it is often required to store the test. This is achieved by setting up the memory to record given data.
2. Press the menu button and select memory menu from the main menu, and press the enter button. This will bring up the memory menu.
3. Scroll down to input parameters, and press enter. This will allow the user to input the desired memory parameters.
4. The first menu will allow the user to select the channels they wish to store. With this line highlighted press enter. Scroll through the list and select the required channels to store using the enter button. Press C once finished to return to the previous menu.
5. Scroll down to scanning rate and press enter. This will allow the user to select the rate at which the data will be recorded. Set the data and press C to return to the previous menu.
6. Scroll down to storage time. Here the user can input how long the unit is required to store data. Enter the data, pressing enter to confirm after each selection. Then press C to return to the previous menu.
7. Finally the user is required to set the trigger, or what input factor will begin the storage. Scroll down to trigger and press enter to access the menu.
8. Press enter on the 1st line, and use the arrow keys to scroll to the desired trigger (either key, or a specified channel). When the required trigger is selected, press enter to confirm the selection and return to the trigger menu. If Key is selected as your trigger no other menus will appear, and to start the test, the trigger button is located on the start button (-· bottom lhs of the key-pad). (Stop is located to the rhs of this key, this is used to stop the test before the set time). If the trigger is set as a channel then select the required options. Eg if you require the unit to trigger when p1 passes above 200bar. Select p1 as the trigger, and then higher from the type trigger menu. Then select 200 in the trigger value menu.
9. There is also a pre-trigger function This will store a given % of data before the test triggers. Eg. If the test time is set to record 50 seconds of data, and the pre-trigger is set to 50%, the unit will record from 25 seconds before the trigger is pressed to 25 seconds after. If the pre-trigger was set to 100% it would record 50 seconds before the trigger is activated; if the pre-trigger is set to 0% then the unit would record 50 seconds after the trigger is activated.
10. Once everything is set, press C twice to return to the memory menu.

11. Scroll down to view parameters, and press enter. Check the input parameters from the test. If everything is ok, press C to return to the memory menu and continue. If not, access the relevant menus and modify the data.
12. If the unit is ready to take the test and all leads are set-up, scroll to start memory and press enter.
13. The test is automatically given a name. This corresponds to the time and date at which the option start memory was selected. This can be changed if required. To do so, press enter and type in the required text.
14. There is also an option to add notes to the test, for instance a serial number. This can be changed in the same manner as the name.
15. To begin the test scroll to start and press enter. The unit is now prepped and ready to begin when the trigger is activated.
16. Once the test has been taken, up to 4 more tests can be taken. The data from which can be transferred by use of the RS232 cable to the HydroWin software provided.
17. If the user requires to delete tests and free memory, this is achieved by pressing menu from the operating screen and scrolling to memory menu. Once in this menu, scroll to delete memory. This will give you the option of deleting all the record at once, or one by one. Scroll to the all or the desired test and press enter. Then you will be asked to confirm, press enter.

This has taken you through the procedure of setting up the unit, and taking and recording tests. If any further information is required please contact below.

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