

### GENERAL INFORMATION

This document describes the functioning of the eight message inputs (user1 to user8) on a CybTouch 8, or CybTouch 12.

This procedure is valid only for CybTouch numerical controls installed with a software version **V6.1.x** or higher.

### SOFTWARE INSTALLATION

Using the link below, check the software version installed on your CybTouch.

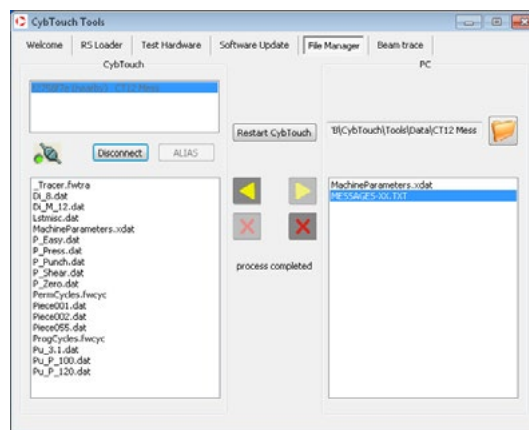


→ Other menus → Service → Service → Information →



If the version is too old, update it using CybTouchTools (refer to the CybTouchTools User Manual for more information).

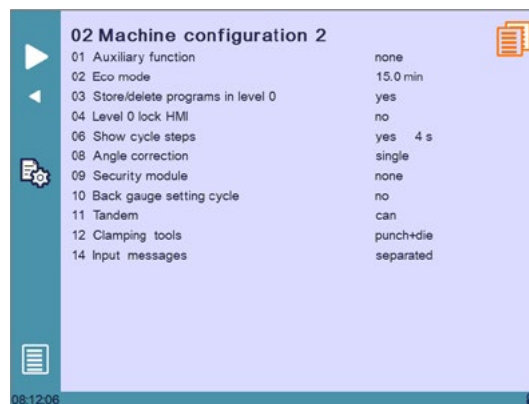
From CybTouchTools (or a USB memory stick), transfer the file "**MESSAGES-XX.TXT**" to the CybTouch.



### CONFIGURATION

Parameter P02.14 has three available choices:

- none, where there is no management and inputs are not configurable.
- **Separated mode**, where each input corresponds to a specific message.
- **Coded mode**, where inputs are like bits, and their sequences determines the message.



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## Inputs

Inputs are considered active when there is 24 VDC on them in normal configuration, or when there is 0 VDC on them in inverted configuration.



The choice to invert an input or not is made like usually directly in the input configuration page.

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## Separated mode

In this mode, each input is independent. While it is possible that several inputs are activated at the same time, only the one activated the last is displayed on the screen.

However, if an input is supposed to stop the cycle, it will stop the cycle no matter in which position it was activated.

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## Coded mode

In this mode, the message displayed depends on the sequence of inputs that are activated, knowing that to each input corresponds a specific value :

• User input 1	+1
• User input 2	+2
• User input 3	+4
• User input 4	+8
• User input 5	+16
• User input 6	+32
• User input 7	+64
• User input 8	+128
• Total	Value of the code

Example :

If inputs 1,2,3 and 6 are activated, the code will be  $1+2+4+32 = 39$ .

To prevent input transition problems, every time an input changes states, the new code is calculated and treated after a fixed delay of 100ms.

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## ERROR MESSAGES

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### Files containing messages

The original database file is the **MESSAGES-XX.TXT** file, and it is in English. It is however possible to create other language files. These resulting files will have to named as follows: **MESSAGES-???.TXT**, with **??** being the language code used in the CybTouch. For example, the file **MESSAGES-IT.TXT** is the file to the Italian language.

When a message is called and the file corresponding to the language of the CybTouch does not exist, the latter will then revert to the English version of the message in the **MESSAGES-XX.TXT** file.



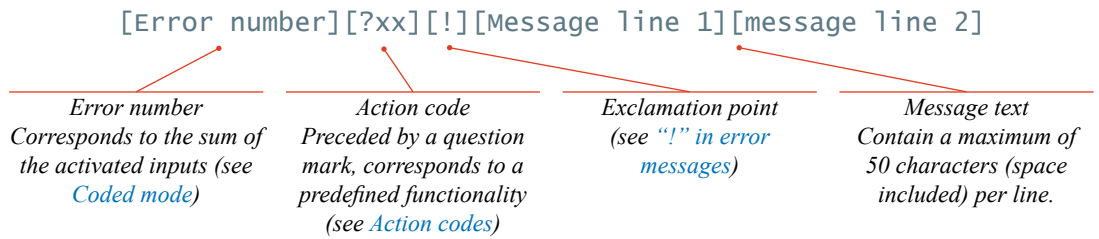
The language code is the one displayed in the language selection menu of the CybTouch User Preference's page.

Supported formats are ANSI and UTF-8 (with BOM).

All these files are to be transferrer onto the CybTouch (see [Software Installation, page 1](#)).

## Message structure

The messages in the TXT file are structured as follows:



Here below is an example of the content of a MESSAGES-XX.TXT file:

```
1      Input Message nb 1
      Second line (not displayed if no ! on first line)
2      !Input Message nb 2
      Second line pop-up
3  ?1 !Input Message nb 3
      Second line pop-up
4  ?1 !Input Message nb 4
      Second line pop-up
5  ?1 !Input Message nb 5
      Second line pop-up
6  ?1 !Input Message nb 6
      Second line pop-up
7  ?1 !Input Message nb 7
      Second line pop-up
8  ?1 !Input Message nb 8
      Second line pop-up

21x generic message from 210 to 219
      Second line (not displayed)
```

*A message is composed of 2 lines of text, preceded by a blank line (the first line of the file is thus typically empty)*

*The line begins with the message number (error number) in decimal*

*In the section, only ? (followed by a numeric code) and ! are taken into account. Note that spaces are ignored before an !, but not after.*

*Text of the message. A maximum of 50 characters on a single line can be displayed. All characters exceeding that limit are ignored. If the text is longer, it has to continue on the second line. Spaces at the beginning of this second line are also ignored.*



The message 0 cannot exist.

A message without text will close a pop-up window if one is open.

## Action codes

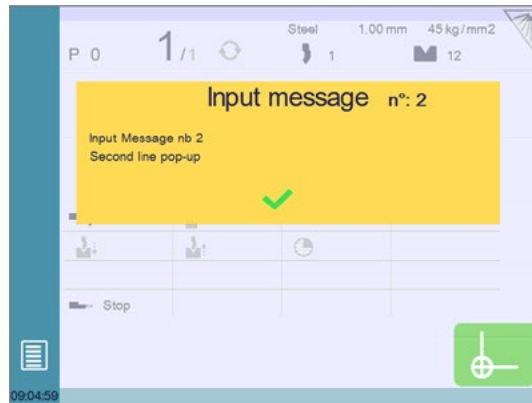
There are for the moment three different actions codes:


- 0 – No action, the message is just displayed.
- 1 – The message is displayed for two seconds.
- 2 – Upon reception of the message, the cycle will be stopped. This “Stop cycle” stops the movements of the beam and the axes.

Action codes can be added. For example, action 3 (= action 1 + action 2) corresponds to a “Stop cycle” where the message is closed after 2 seconds.


## “!” in error messages

Messages containing an “!” before the message text itself (see [Message structure](#)) are displayed in a pop-up window as shown here.



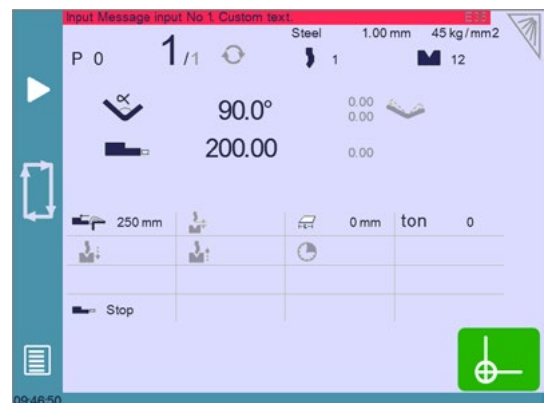
The pop-up window remains displayed until the  button is pressed. The machine will however not start directly by pressing the pedal. The cycle has to be restarted, i.e. a few manipulations are necessary.

If a second message is sent to the CybTouch, it will replace the first one only if it has already been displayed for at least 2 seconds.

If a message containing only “!” is sent, it will close the pop-up window (same as the  button). This functionality allows the security module to:

- Display a pop-up window.
- Close a pop-up window.
- Display a pop-up window for a certain time.

When the text of an error message does not contain an “!”, it will be displayed at the top of the screen like a typical CybTouch error message. The corresponding text is displayed in black on a red background.



## Lines beginning with “;”

When a line begins with a ;, its content is considered as a comment, an explanation. Anything at all can be written after a ;.

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## Messages not found in the TXT file

If the error number, coded or separated, does not exist in the file, the error message **Input Message n° [nnn]** is displayed, **nnn** being the received error number.

It is however possible to change the way such a case is processed using the concept of group (see next chapter, and especially the [Particular case](#)).

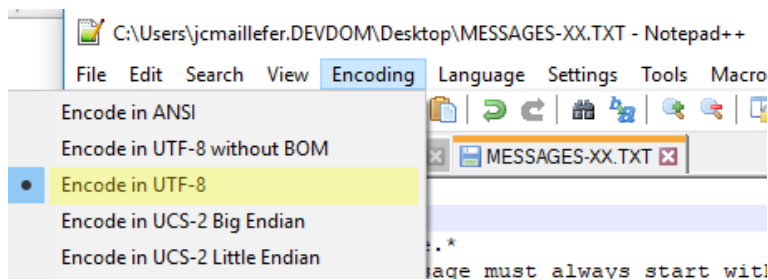
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## Characteristics of the UTF-8 format

The UTF-8 format allows you to use all Unicode characters.

For technical reasons, the CybTouch does not contain a full Unicode generator. It may be possible that for some languages, some specific characters may not be present. If so, they will be replaced by a black square when they need to be displayed.

This problem can be easily fixed by sending the complete file to Cybelec. Missing characters will be automatically listed and included in a new version.



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## Group messages

It is possible to create groups of messages, allowing to have the same message text for a specified range of message numbers. It is possible to give a specific definition to one or more messages within a group. The character x is used to define the scope of the group.

Example: in the TXT file, one can find messages 121, 124 and 12x. The text of message 12x will be displayed for all messages from 120 to 129, except messages 121 and 124, which despite being in the group, have a specific definition and thus their own message.

### Particular case

Programming at the end of the file a message with **0xxx** as number will take care all the messages that were not found. The text of this message can then be a comment like "**number not found**" for example, or simply "!", which will close any active pop-up window, or will have no effect at all if none is open.