

ERROR MESSAGES

Standard Error Message

? (question mark) is the standard error message in Max-FORTH. An error exists when Max-FORTH responds with a ? prefixed with one of the following:

- the most recently entered word which is not part of the Max-FORTH dictionary

or

- the most recently entered number which is not valid under the current BASE.

Example: Enter WRONG . WRONG is not a part of the Max-FORTH dictionary, therefore, Max-FORTH will respond with WRONG ? .

Enter HEX . Max-FORTH will respond with OK . TYPE 10H . Max-FORTH will respond with 10H ? since 10H is not a valid hexadecimal number.

STANDARD ERROR MESSAGE ROUTINE

Max-FORTH has a standard routine for handling errors depending on the value of the user variable WARNING which is not named in the dictionary of Max-FORTH V3.3 and older versions:

<i>WARNING value</i>	<i>Max-FORTH action</i>
less than 0	executes the word ABORT (as vectored through user variable UABORT)
0 (default)	prints an error message number n
greater than 0	assumes that a disk (RAMdisk) is in use, takes screen 1 and indexes into it for line to show with error.

ERROR MESSAGE DEFINITIONS

When Max-FORTH detects an error condition, it may respond with an error message which corresponds to an error message number shown in the Table below. Max-FORTH clears the stacks and executes QUIT as its last actions when an error is processed, except for the following messages:

NOT UNIQUE Has no effect on stacks, Max-FORTH execution continues normally.

HAS INCORRECT ADDRESS MODE Shows the name of the code word being defined, the name of assembler op-code word being interpreted, and the message number.

Max-FORTH ERROR MESSAGES

<i>Number</i>	<i>Message</i>	<i>Definition</i>	<i>Recovery Action</i>
0	?	Echoed word was the most recently interpreted. The word is not in the dictionary or is not a valid number.	Check the word's name for spelling error or define the named word. Check if the number is valid under current BASE or change BASE.
1	STACK EMPTY	Parameter stack is empty.	Use proper stack management. Correct use of numbers on the stack. Match available to number needed by current operation.
2	DICTIONARY FULL	Dictionary space is used up. FIRST HERE is less than \$A0	Increase dictionary space by moving FIRST, or by FORGETing disposable word entries.
3	HAS INCORRECT ADDRESS MODE	Address mode for assembler op-code is incorrect.	Correct the address mode.
4	NOT UNIQUE	The <name> of the word just defined already exist in the dictionary.	Latest definition of <name> will be used. See further explanation following table.
5-6		Not Assigned	
7	FULL STACK	The parameter stack is full	Use proper stack management. DROP or output some stack item
8-16		Not Assigned	
17	COMPILATION ONLY	The word just interpreted must be used inside of a definition.	Do not use the word outside a colon definition. Probably structure words such as DO, IF, BEGIN, etc.
18	EXECUTION ONLY	The word just interpreted must be used outside of a definition.	Do not use the word inside a colon definition. Probably words like .(etc
19	CONDITIONALS NOT PAIRED	Omitted words or incorrect nesting of conditionals	Correct or add the conditional pair. Probably IF used without corresponing THEN

20	DEFINITION NOT FINISHED	Definition is not finished or delimiter is missing.	Finish the definition or add delimiter. Probably, DO used without corresponding LOOP.
21	IN PROTECTED DICTIONARY	The word in question is below the FENCE	Quit trying to FORGET a protected word or move FENCE
22	USE ONLY WHEN LOADING	Incorrect use of the word -->	Do not use --> when not loading
23	NO NAME	Name expected in input, not found	Use appropriate <name> string. Probably a defining word expected a string to convert into a name

A further explanation may be useful in understanding the special "NOT UNIQUE" warning. This is a warning and not an error, per se. If the two definitions are an exact match, the latest definition will be used and the former definition will remain in the dictionary, but can not be found, since all searches of the dictionary stop at the latest occurrence found. This message may also occur when full sized name matches reduced-number-of-characters name in ROM. To save space in the ROM some words had a reduced number of characters stored in their name field. For instance, in the WORDS list, the word LOOP can be seen as "EE82 LOO_". This shows LOOP has only three significant characters in its name in the internal ROM, but is listed as having 4 total characters (as can be verified by the _ indicating an truncated character). Consider what happens when a new word is defined with the name LOOK. The new word's name matches LOO_. So the warning is issued. No problem occurs in this case, however. Both names can still be found. When LOOK is referenced the new definition is found in the dictionary search. When LOOP is used, the new definition LOOK is not considered a match because of the explicitly expressed characters. The P and K characters don't match. The earlier definition LOO_ does match. The three significant characters LOO match and the total length 4 matches as well. So both definitions can still be referenced, even though a warning message was issued.