

Operator Message

Operator Interfacing

The CPP supports the storage of 8 operator or computer messages. Each message is limited to 80 characters.

To record a message, enter OPW x, where x is the desired message number 1-8. If a message is already stored in the message bin number, the CPP prints the stored message and awaits an operator response. Entering a carriage return or escape exits without changing the existing message. Entering CLR<cr> results in this message bin being cleared. Entering anything else erases the existing message and starts recording the new entries. A message is terminated with a carriage return or escape. The time and date is automatically stored with each message.

Messages can be printed by entering OPR x, where x is 1-8 or an A. An A instructs the CPP to print all stored messages.

Retrieving and entering messages can be conducted over comm ports number 1 and 4. Over comm port #1, this can be done when the CPP is brought on line with a \$ID, where the ID is a number, such as 1. This allows the user to communicate with the CPP. Then enter SETF which passes comm port #1 to comm port #4.

Computer Interfacing

Over comm port #1, a computer can retrieve and leave messages in the CPP message locker. The comm port is opened in a computer talk mode with a \$ID, where the ID is a little letter, such as h. The computer command is presented below.

Definition Of String Template

Presented below is a definition of the command string template.

`DC,III,VVV,NNN,[field,]CC<crlf>`

Where;

D_C is a greater than sign (>) or direction code, indicating that the string originated at the central,

III is a three byte remote ID code - 000 - 999.
(000 -009 reserved for global commands),
CPP default is 010.

VVV is a numbered command code indicating what is to be done. A VVV of 550 commands the CPP to return stored messages. A VVV of 551 commands the CPP to write the message contained in the field into an operator message bin. Sending a null message field, which is two commas, can clear a message bin.

NNN is used to select the message bin to return or write into. For example, 001 commands the CPP to return the message in bin 1, and 002 commands the CPP to return the message in bin 2.

[field,] is the message string, which is terminated with the comma before the checksum characters. Do not insert commas in the text message. The brackets are for clarity only and **should not be included** in the string.

CC is a checksum of the command. Sum all eight bit bytes (including delimiters and direction characters) into an initially cleared 8 bit register, take the two's complement, send in hexadecimal, most significant nibble, first. The checksum should be followed with a carriage return. Over comm port #4, the command may be invoked by sending a carriage return after the field instead of the checksum characters.

CPP Response

For a remote to respond it must properly detect the direction character, a comma or space delimiter, its station ID, a command that it understands, and either a correct checksum and carriage return, or a carriage return. The return string is very similar to that given above, but varies somewhat depending on what is being returned. The CPP always returns a checksum and a carriage return and a line feed <crLf>.

Retrieve Message

For a retrieve message query, such as >,010,550,001,B2<crLf>

The CPP response is the message in message bin #1, along with the time/date tag.

<,010,550,001,hh:mm:ss Y02-01-04 Please send money,CC<crLf>

Where Y indicates US date designation and an E indicates European date designation.

If the requested message bin has no message, the CPP response is as follows;

<,010,550,001,,CC<crLf>

The CPP follows the message string with the standard EOT string.

D_R,III,012,0,W,CC<crLf>

Where W is an EOT character (04 in hexadecimal).

Write Message

The command to write a message is;

>,010,551,001,Ron please call the office when you get on site,CC<crLf>

If the CPP properly executes the command it will return the standard EOT string. Otherwise, there is no response if it cannot process the command or detects an error in transmission.

D_R,III,012,0,W,CC<crLf>

Where W is an EOT character (04 in hexadecimal).