

DOCUMAX 3300 Answer Back

Overview

The DOCUMAX 3300 Answer Back feature gives the user the ability to program an answer back message that the printer will send to the host computer. This can be useful when testing to see if the printer is available and ready for operation before transmitting a print job. Features include:

1. Programming of up to 32 characters to be transmitted to the host computer on request.
2. AnsOnCD (Answer on Carrier Detect) feature which allows the printer to send the answer back message when pin 8 of the RS232 connector is toggled from an inactive to active state.
3. AnsOnEQ (Answer on Enquiry) feature which allows the printer to send the answer back message upon receiving a decimal 5.
4. Print Answerback feature which will cause the printer to print the answer back message for visual verification.
5. Access to the Answerback menu through DOCUMAX's **Quick Access** key feature.

The following sections describe these features in detail. Please refer to the DOCUMAX Users Manual for information on programming features and front panel operation.

Entering an Answer Back Message

Messages can be programmed in two ways: Through DOCUMAX's Feature Mode using the front panel keys or down line programming through the communications ports.

Front Panel Operation

Answer back features are located in Menu M5 Serial Cntrl.

1. Press and release the Quick Access key until 'AnswerBack' is displayed in the LCD.
2. Use the Value ▲ and Value ▼ keys to scroll through the current message. If there is a message in storage, the LCD will display 'Char xx = yyy-zz' where:

- xx = the current character location in the message (1-32).
- yyy = a value in decimal representing the character to be transmitted (1-127). Value 0 is a termination character. Values 3 and 5 are reserved and will not be displayed.
- zz = the ASCII character. Control codes and special characters will be displayed according to the chart at the end of this document.

The LCD display flashes 'End Of Message' when the end of the current message is reached. This does NOT indicate the end of the message buffer. This value can be changed (step 3).

3. When the desired character position is displayed, press the 'Enter' key. At this point the 'yyy-zz' values will be flashing in the LCD.
4. Use the Value ▲ and Value ▼ keys to select the desired character value.
5. Press the 'Enter' key to save the character value.
6. Repeat steps 2 - 5 until the desired message is programmed.

The message 'Message Full' will be flashing when the answer back message is full (32 characters) and the bell will ring 3 times. At this point, no more characters can be added to the message.

Down Line Programming

To program the answer back from a computer, send the following sequence to the printer:

```
<Esc>Zn1....n32<0>
```

The user does not have to program all 32 characters. The terminating NULL (<0>) will end the message.

Example: <27>ZAnswerback<0>

Modifying an Answer Back Message

The answer back message can be modified using steps 1 through 6 of 'Entering an Answer Back Message' or sending a new down line sequence.

Clearing an Answer Back Message

The answer back message can 'effectively' be cleared by programming character 1 to a NULL <0> value. This can be done using the Feature Mode or Down Line programming method. The message is also cleared when the user resets NVRAM which resets all of memory to factory defaults. Factory default for the answer back message is all characters to NULLs.

Printing an Answer Back Message

To print the answer back message:

1. Press the 'Quick Access' key until 'Print AnswerBack' is displayed in the LCD.
2. Press the 'Enter' key.

The answer back message will also print when a Profile is printed (see users manual).

Answer Back Qualifications

The following conditions are required for the printer to send the answer back message:

- Condition 1. The Answer Back message is only available in LA 120 mode (menu M2 Personality).
- Condition 2. AnsOnCD Enable (menu M5 Serial Cntrl) - The printer will send the answer back message when pin 8 of the RS232 connector is toggled from an inactive to active state.
- Condition 3. AnsOnEQ Enable (menu M5 Serial Cntrl) - The printer will send the answer back message when a decimal 5 is received on either the serial or parallel ports.

Additionally, the printer will not send the message if it is 'Off line' or in a 'Paper Out' condition.

TABLE A
ASCII Character Table

00 - N_{U^*}	19 - D_3	38 - &	57 - 9	76 - L	95 - ...	114 - r
01 - S_H	20 - D_4	39 - '	58 - :	77 - M	96 - `	115 - s
02 - S_X	21 - N_K	40 - (59 - ;	78 - N	97 - a	116 - t
03 - E_X	22 - S_Y	41 -)	60 - <	79 - O	98 - b	117 - u
04 - E_T	23 - E_B	42 - *	61 - =	80 - P	99 - c	118 - v
05 - E_Q	24 - C_N	43 - +	62 - >	81 - Q	100 - d	119 - w
06 - A_K	25 - E_M	44 - ,	63 - ?	82 - R	101 - e	120 - x
07 - B_L	26 - S_B	45 - -	64 - @	83 - S	102 - f	121 - y
08 - B_S	27 - E_C	46 - .	65 - A	84 - T	103 - g	122 - z
09 - H_T	28 - F_S	47 - /	66 - B	85 - U	104 - h	123 - {
10 - L_F	29 - G_S	48 - 0	67 - C	86 - V	105 - i	124 -
11 - V_T	30 - R_S	49 - 1	68 - D	87 - W	106 - j	125 - }
12 - F_F	31 - U_S	50 - 2	69 - E	88 - X	107 - k	126 - \Rightarrow
13 - C_R	32 -	51 - 3	70 - F	89 - Y	108 - l	127 - \Leftarrow
14 - S_0	33 - !	52 - 4	71 - G	90 - Z	109 - m	
15 - S_1	34 - "	53 - 5	72 - H	91 - [110 - n	
16 - D_L	35 - #	54 - 6	73 - I	92 - \	111 - o	
17 - D_1	36 - \$	55 - 7	74 - J	93 -]	112 - p	
18 - D_2	37 - %	56 - 8	75 - K	94 - ^	113 - q	

* The N_U character cannot be used in the answer back message.

Note: The following characters cannot be used when programming from down line:
 E_X (decimal 3) and E_Q (decimal 5)

MODEM CONTROL

This section describes the operation of DTR/XON/XOFF handshaking protocols when used with and without Modem control. These features are located in menu M5 Serial CNTRL.

DTR Protocol

When feature DTR - DTR Synchronization is disabled, the DTR signal will always be in the READY condition.

When feature DTR - DTR Synchronization is enabled and Modem Control is disabled, the DTR signal will operate as a normal handshaking signal and will indicate a BUSY condition when any of the following conditions exist:

- o fifo full
- o paper is out
- o the printer is offline
- o the parallel interface is active (receiving data)

When feature DTR - DTR Synchronization is enabled and Modem Control is enabled, the DTR signal will operate as a modem control signal and will only indicate a BUSY condition when any of the following conditions exist:

- o paper is out
- o the printer is offline
- o the parallel interface is active (receiving data)

XON/XOFF Protocol

When Handshk XON_XOFF - XON/XOFF Synchronization is disabled, no software handshaking occurs.

When Handshk XON/XOFF - XON/XOFF Synchronization is enabled and Modem Control is disabled, XON/XOFF handshaking occurs as follows:

XOFF is sent when

- o fifo goes full
- o paper goes out
- o the printer goes offline
- o data activity is initiated on parallel interface

XON is sent when

- o fifo goes not full AND paper in AND printer online
- o paper in occurs AND printer online AND fifo not full
- o printer goes online AND paper in AND fifo not full
- o parallel data activity ceases AND fifo not full AND paper in AND printer online

When Handshk XON/XOFF - XON/XOFF Synchronization is enabled and Modem Control is enabled, XON/XOFF handshaking occurs as follows:

XOFF is sent when

- o fifo goes full

XON is sent when

- o fifo goes not full

When XOFF Ctrl Single is selected, an XOFF will be sent only once in response to multiple or reoccurring busy conditions. When XOFF Ctrl Robust is selected, XOFFs will continuously be sent in response to multiple or reoccurring busy conditions.

When XON Ctrl Single is selected, an XON will be sent only once when the printer is changing from a busy to ready condition. When XON Ctrl Robust is selected and the printer is in a ready condition, the printer will continuously send an XON character at approximately 4 second intervals.