

INTERPRETER Interface

DATAWIN OMR

Programming manual

Edition 030227_01

Programming Manual

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General

This program is developed in order to enable any user to connect their DATAWIN reader to (almost) any computer. After power-on, before the feed command, it is possible to send the reader a list of commands to suit your computer interface. The commands are described in this document.

How to use it?

The reader is entirely under computer's control and doesn't proceed by itself to a logical control of the read data.

The computer sends to the reader the configuration, reading and ejecting commands. These parameters are not registered in the reader.

The reader sends the read marks to the computer according to defined in definition file.

The reader sends error messages (no document to be read, no clock-marks on document...) to the computer, which has to take the decision on the processing follow up.

The reader is entirely guided by the computer.

The communication protocol is fixed but it can be modified via serial interface.

CHAPTER 2: The feeding commands

L command

'L' Hex value : 4C H
Read a document and send the data in defined format.
No error messages will be sending.

A line is sent if at least one track is marked.

'I' Hex value: 6C H
Same format as 'L' command, but the error messages will be sent.

A line is sent if at least one track is marked.

CHAPTER 3: The ejection commands

G command

'G' Hex value: 47 H
Eject the sheet to the good "Gut" output tray

'g' Hex value: 67 H
Same as 'G' command.

S command

'S' Hex value: 53 H
Eject the sheet back to the input tray for all the manual DATAWIIN readers. For the readers with two output trays, the document is sent to the "bad" output tray.

's' Hex value: 6B H
Same as 'S' command.

W command

'W' Hex value: 57 H
Resend to the host the data of the last reading document (this command can be used many time, while the sheet remain not ejected).

A command

'A' Hex value: 41 H
Clears the definitions area.

I command

'I' Hex value: 49 H
Start command for downloading a definitions file.
(for more information read "DEFINITION.DOC")

E command

'E' Hex value: 41 H
This command will make a reader warm start.

CHAPTER 5: Information

V command

'V' Hex value: 56 H
Ask the reader to send the software version number to the host.

Example:

A60 INTPR 010301 S132

'i' Hex value: 69 H
Ask the reader to send error or status code

CHAPTER 6: RS 232

Default Baud-rate: 19200 8 N

SP – Position in Parameter file “?_INTPR.TXT”

Bit 0 – 2 = baud rate 7(2400), 6(4800), 5(9600), 4(19200), 3(38400)
Bit 3 = with parity
Bit 4 = parity even
Bit 5 = 7-bit
Bit 6 = with CTS-handshake
Bit 7 = with XON/XOFF handshake

Example

3D = 9600 7 E
04 = 19200 8 N

Error messages

If the host command was 'l' (lowercase) and a function goes wrong, the reader responds with one of the following error messages.

M00	No document existing
M01	Document is existing Attention: only valid for 'l'-command
M02	The input tray is not empty (manual reader)
M08	Bad feeding
M70	Too thick (automatic reader)
M20	Output tray full (automatic reader)

Example: After a lowercase read command or status command

M00<CR><LF>

Error messages

With uppercase 'L' command no error message will be sent, and the "no clock mark on the document error" is processed as follow.

Definition error codes

M10	No form definition done. No parameters loaded.
M11	Unknown document (wrong number of clocks, or no clocks)
M12	Unknown document (wrong number of barcodes)
M13	Unknown document (wrong or missing identification zone)