D.3 Transmission Data Format

D.3.1 Description

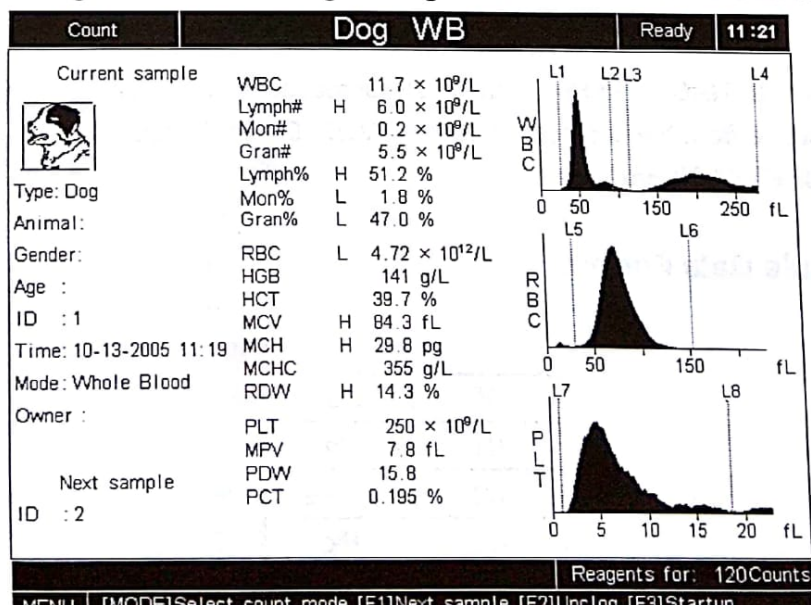### Symbols

[ENQ]	0x05
[STX]	0x02
[EOT]	0x04
[EOF]	0x1A
[ETX]	0x03
[ACK]	0x06
[NACK]	0x15
"A"	0x41
"B"	0x42
"C"	0x43
"#"	0x30-0x39
"*"	0x2A

If the Lot No., Month, Day, Year are empty in QC Edit menu, the "*" (2A Hex) will be transmitted to the host.

For all the data formats, if the data are marked "*", then "*" (2A Hex) will be transmitted to the host.

L1 Region to L8 Region are LI to L8 of eight histogram discriminators as shown in Figure D-2.

Programming

If the Handshake is off, the V•SIGHT will transmit the body of the text without acknowledging the presence of an external computer.

If the Handshake is on, the V•SIGHT will communicate with the external computer in following procedures:

1. The V•SIGHT sends an ENQ (05 Hex), then waits up to 4 seconds for the external computer to respond. If the external computer does not respond, then one more ENQ (05 Hex) is tried. If it fails again, the analyzer aborts the transmission and reports a transmission error;

2. The external computer must respond by sending an ACK (06 Hex). If any other response is received, another ENQ (05 Hex) will be sent by the analyzer (a maximum of two ENQ [05 Hex] will be sent);

3. The analyzer then sends:

   Body of text
   EOT (04 Hex)
   ETX (03 Hex)

4. Disconnection.

   The V•SIGHT sends an ETX (03 Hex), then waits 4 seconds for the external computer to respond. If no response is received, one more ETX (03 Hex) is sent, the V•SIGHT waits 4 seconds before giving up and gives alarm of communication error.

If the external compute responds ACK, the transmission is done successfully. If the external computer responds NACK（15 Hex）, the analyzer repeat the transmission from step 3. If the received response from the computer is neither ACK（06 Hex） nor NACK（15 Hex）, the analyzer sends ETX (03 Hex) again.

D.3.2 Sample Data Format

Animal Type:

00	Dog
01	Cat
02	Horse
03	Pig
04	Cow
05	Buffalo
06	Goat

07	Animal1
08	Animal2
09	Animal3
11	Rat
12	Mouse
13	Rabbit
14	Camel
15	Sheep
16	Monkey

For Cat, Dog, Horse, Rat, Mouse, Rabbit, Monkey and Cow

If handshake is enabled	[ENQ]
If handshake is disabled	[STX]
Body of the text start	
Text Identifier	"A"
ID	########
Sample Mode	#
Month	##
Day	##
Year	####
Hour	##
Minutes	##
WBC[10^9/L]	###.#
Lymph#[10^9/L]	###.#
Mon#[10^9/L]	###.#
Gran#[10^9/L]	###.#
Lymph%[%]	##.#
Mon%[%]	##.#
Gran%[%]	##.#
RBC[10^{12}/L]	##.##
HGB[g/L]	###
MCHC[g/L]	####
MCV[fL]	###.#
MCH [pg]	###.#
RDW [%]	##.#
HCT[%]	##.#
PLT[10^9/L]	####
MPV[fL]	##.#
PDW	##.#
PCT[%]	.###
Reserved	#############
AnimalType	##

Reserved	########
L1 Region	###
L2 Region	###
L3 Region	###
L4 Region	###
L5 Region	###
L6 Region	###
L7 Region	###
L8 Region	###
Reserved	################
WBC Histo (256 channels)	###
RBC Histo (256 channels)	###
PLT Histo (256 channels)	###
Body of the text end	
If handshake is enabled	[EOT]
If handshake is disabled	[EOF]
If handshake is enabled	[ETX]

For pig, Buffalo, Camel, Sheep and User-defined

If handshake is enabled	[ENQ]
If handshake is disabled	[STX]
Body of the text start	
Text Identifier	"A"
ID	########
Sample Mode	#
Month	##
Day	##
Year	####
Hour	##
Minutes	##
WBC[10^9/L]	###.#
Reserved	##################
Reserved	#####
RBC[10^{12}/L]	##.##
HGB[g/L]	###
MCHC[g/L]	####
MCV[fL]	###.#
MCH [pg]	###.#
RDW [%]	##.#
HCT[%]	##.#
PLT[10^9/L]	####
MPV[fL]	##.#

PDW	##.#
PCT[%]	.###
Reserved	#############
AnimalType	##
Reserved	########
L1 Region	###
L2 Region	###
L3 Region	###
L4 Region	###
L5 Region	###
L6 Region	###
L7 Region	###
L8 Region	###
Reserved	#################
WBC Histo (256 channels)	###
RBC Histo (256 channels)	###
PLT Histo (256 channels)	###
Body of the text end	
If handshake is enabled	[EOT]
If handshake is disabled	[EOF]
If handshake is enabled	[ETX]

For Goat

If handshake is enabled	[ENQ]
If handshake is disabled	[STX]
Body of the text start	
Text Identifier	"A"
ID	########
Sample Mode	#
Month	##
Day	##
Year	####
Hour	##
Minutes	##
WBC[10^9/L]	###.#
Reserved	###############
Reserved	#####
RBC[10^{12}/L]	##.##
HGB[g/L]	###
MCHC[g/L]	####
MCV[fL]	###.#
MCH [pg]	###.#

RDW [%]	##.##
HCT[%]	##.#
Reserved	#############
Reserved	#############
Animal Type	##
Reserved	########
L1 Region	###
L2 Region	###
L3 Region	###
L4 Region	###
L5 Region	###
L6 Region	###
L7 Region	###
L8 Region	###
Reserved	################
WBC Histo (256 channels)	###
RBC Histo (256 channels)	###
PLT Histo (256 channels)	###
Body of the text end	
If handshake is enabled	[EOT]
If handshake is disabled	[EOF]
If handshake is enabled	[ETX]

D.3.3 Standard L-J QC Data Format

If handshake is enabled	[ENQ]
If handshake is disabled	[STX]
Body of the text start	
Text Identifier	"B"
File No.	#
Lot No.	######
Month	##
Day	##
Year	####
WBC[10^9/L]	###.#
RBC[10^{12}/L]	##.##
HGB[g/L]	###
PLT[10^9 /L]	####
Reserved	#############
HCT[%]	##.#
MCV[fL]	###.#
MCH[pg]	###.#

MCHC[g/L]	####
WBC Limit[10^9/L]	###.#
RBC Limit[10^{12}/L]	##.##
HGB Limit[g/L]	###
PLT Limit[10^9/L]	####
Reserved	#############
HCT Limit[%]	##.#
MCV Limit[fL]	###.#
MCH Limit[pg]	###.#
MCHC Limit[g/L]	####
Body of the text end	
If handshake is enabled	[EOT]
If handshake is disabled	[EOF]
If handshake is enabled	[ETX]

D.3.4 Run L-J QC Data Format

If handshake is enabled	[ENQ]
If handshake is disabled	[STX]
Body of the text start	
Text Identifier	'C'
Month	##
Day	##
Year	####
Hour	##
Minutes	##
WBC[10^9/L]	###.#
RBC[10^{12}/L]	##.##
HGB[g/L]	###
PLT[10^9/L]	####
Reserved	#############
HCT[%]	##.#
MCV[fL]	###.#
MCH[pg]	###.#
MCHC[g/L]	####
Body of the text end	
If handshake is enabled	[EOT]
If handshake is disabled	[EOF]
If handshake is enabled	[ETX]

D.4 Transmission

D.4.1 Defining Transmission Settings

The data format is fixed for the transmission so that every byte to be transmitted has 7 data bits and 1 stop bit. Enter the "**Setup → Settings→ Print & comm.**" screen and edit the communication settings as instructed by **Chapter 5.3.2.**

D.4.2 Transmission at "Count" Screen

If the auto transmission function is on, once the analysis is done, the analyzer will automatically transmit the results to the external computer. If the auto transmission function is off, you can only transmit the results manually at the "**Review** "screen.

D.4.3 Transmission at the "Review" Screen

Select the results you want to transmit and transmit them to .the external computer as instructed by **Chapter 7.2.2. and Chapter 7.3.2.**

D.4.4 Transmission at the "QC Table" Screen

Transmit the results as instructed by **Chapter 8.4.2..**