LIS Connection Instruction

-------BW-3000 + BW-901 Urine workstation

Communication mode

Use COM connection to set parameters such as ports in software-configuration-other configurations.

After software auditing, messages are automatically sent to the set port.

Information format

※ This information will be stored in the software's LIS export path.

- **Format specification**

  Data initiator ‘$’

  Data terminator ‘!’

  Item spacer ‘&’

  The first two items represent the length of the characters that followed

  The first field represents the ID number and the item

  Chemistry represents dry chemistry item

  Sediment represents sediment item

  Physical represents the physical indicator item

  RBC Phase represents the erythrocyte phase item

- **$(Start bit) + Length of medical record number(2 bit , 01-99) + Medical record number + Test data + !(End bit)**

- **The test data format is as follows :**

  Number of item +

  Start bit(&) + Main item name length(2 bit , 01-99) + Main item name +

  Start bit(&) + Sub item name length(2 bit , 01-99) + Sub item name +

  Start bit(&) + Sub item result length(2 bit , 01-99) + Sub item result +

  Start bit(&) + Main item name length(2 bit , 01-99) + Main item name +

  Start bit(&) + Sub item name length(2 bit , 01-99) + Sub item name +

  Start bit(&) + Sub item result length(2 bit , 01-99) + Sub item result + and so on

- **For example：**

$06(null)30&09Chemistry&03URO&05+-3.3&09Chemistry&03BIL&04- 0
&09Chemistry&03KET&06+- 0.5&09Chemistry&03BLD&083+ 200.0
&09Chemistry&03PRO&06+ 0.3&09Chemistry&03NIT&01-
&09Chemistry&03LEU&04- 0&09Chemistry&03GLU&04- 0
&09Chemistry&02SG&051.025&09Chemistry&02PH&036.5
&08Sediment&10Normal RBC&041079&08Sediment&12Standing RBC&010
&08Sediment&14Dysmorphic RBC&0213&08Sediment&10Normal WBC&014
&08Sediment&04WBCC&010&08Sediment&08Pus Cell&010
&08Sediment&04CAST&010&08Sediment&03EPI&010
&08Sediment&05Sperm&010&08Sediment&07Crystal&010
&08Sediment&08Bacteria&010&08Sediment&05Yeast&014
&08Sediment&16Amorphous Urates&010&08Sediment&05Mucus&010
&08Physical&16Specific Gravity&051.020&08Physical&05Color&12Light Orange
&08Physical&09Turbidity&11Transparent&09RBC Phase&12Average Dia.&037.8
&09RBC Phase&13Abnormal Pct.&030.0&09RBC Phase&16Density of Dist.&030.1!

- **Field description are as follows:**

Character	Description
$	Start bit
06	Length of medical record number
(null)	Medical record number
30	Total number of items
&09Chemistry	Represents dry chemistry item, character length is 9
&03URO	Dry chemistry item name is URO, character length is 3
&05+-3.3	Dry chemistry item result is +-3.3, character length is 5
.....	.....
&08Sediment	Represent sediment item, character length is 8
&10Normal RBC	Sediment item name is Normal RBC, character length is 10
&041079	Sediment item result is 1079, character length is 4
.....	.....
&08Physical	Represent physical indicator item, character length is 8
&16Specific Gravity	Physical indicator item name is Specific Gravity, character length is 16

&051.020	Physical indicator item result is 1.020, character length is 5
……	……
09RBC Phase	Represents the erythrocyte phase item, character length is 9
&12Average Dia.	The erythrocyte phase item name is Average Dia., character length is 12
&037.8	The erythrocyte phase item result is 7.8, character length is 3
……	……
!	End bit