1. URiSCAN PRO II Serial Format

A. URiSCAN PRO II Computer Interfacing

URiSCan PRO II is interfaced by RS232C interfacing with Host PC and then reading data.
The different point with other equipment is not to give and take the signal between the external PC, which means that it do not use HANDSHAKE, CHECKSUM, ASK, NAK.
If BAUD Rate, Data Bits, Stop Bits, Parity Bits are available, it will be interfaced with external equipment. You can get the data, once the setting value is set with the general hyper terminal of PC.

B. Interfacing Code system

When the data communication is begun, STX(0x02) is sent and then all sorts of data are sent to ASCII mode. The order of the data will be sent as same as the order of being printed out and LF (0x0d) and CR (0x0a) will be sent on the each end of each line. Lastly, ETX (0x03) will be sent in the end of the data communication.

(0x02 ~ data, . . . data, LF(0x0d), CR(0x0a),

data, . . . data, LF(0x0d), CR(0x0a),
“
“
data, . . . data, LF(0x0d), CR(0x0a)

Data, . . . data, LF(0x0d), CR(0x0a) ~ 0x03)

The beginning and the end of the data will be seperated.

*** Caution ***

Though STX(0x02), ETX(0x03), LF(0x0d), CR(0x0a) is the value of HEX, other data will be sent to ASCII code.
Output ITEM is GPH 5, Nephro 6, GEN 8, GEN 7, GEN 6, GEN 9L, GEN 9SG,GEN 10SGL, GEN 11, GEN 7L.
You can interface it in the each hospital, after calibration.

C. This indicate the Format form of each items, when interfacing as follows.

The format form is as follows and the volume of the line is different in each items.

Date :OCT-01-2000 15:15:06	STX + 26 Byte + CR_LF
ID_NO:0037-1234567890123456	27 Byte + CR_LF
Ward :	6 Byte + CR_LF
NAME :	6 Byte + CR_LF
BLD +++ 250 RBC/ul	25 Byte + CR_LF
BIL +++ 3.0 mg/dl	25 Byte + CR_LF
URO +++ 8.0 mg/dl	25 Byte + CR_LF
KET - neg	25 Byte + CR_LF
PRO ++++2000 mg/dl	25 Byte + CR_LF
NIT + pos	25 Byte + CR_LF
GLU - neg	25 Byte + CR_LF
p.H 9.0	25 Byte + CR_LF
S.G >=1.030	25 Byte + CR_LF
LEU +++ 500 WBC/ul	25 Byte + CR_LF
VTC +++ 50 mg/dl	25 Byte + CR_LF
COL LT.Yellow	15 Byte +CR_LF
CLA Clear	15 Byte +CR_LF+ETX

Description

'ID_NO:'The'0037' is number of specimen and unless user change it, this number will be go to '9999'.

'Ward:' , 'NAME' is never used and this is only used for interfacing.

Each item name has different three number and it will be printed out from the 8th number to 15th number.

The unit will be printed out from 19th to 23rd and 24th.

In case of 'P.H', three different number will be printed out from 13th.

In case of 'S.G', five different number will be printed out from 11th and in case of '<=1.005, >=1.030', seven different number will be printed out from 9th.

In case of 'COL', the result will be printed out from 5th.
In case of 'CLA', it will be printed out from 5th and 15 different number will be sent.

The order of interfacing or Printing out can be changed to set in user's own way.
(Press button 7 and put the password '1111111' and then press button 'enter' in the main menu.)

2. Uriscan Pro II Serial Communication

A. In the main menu of Uriscan Pro II,

5.When you choose the 'serial communication' menu. You can see the menu display as follows.

***** 5. Serial Communication. *****

1. Set Communication with Host

1. Status On
2. Set Baud Rate 9600
3. Serial Data Form

Data Stop Parity Line

8 1 None 3

2. Set Barcode Reader : On

In this menu, in order to interface with external Host PC, set the 1st munu status 'On'.
(Process: With pressing button '1' continuously, can change the status 'On/Off'.)
In case of change of Status, Baud Rate, Data Form, use direction key or number key.

When you receive the data from barcode reader or PC, please set the Barcode reader status 'On'.

In Main Menu, you can only get the data from barcode in 2-1 menu.

Before the test, you can get 100data from barcode reader.

The number of ID can get in one time is 16 different numbers and also characters of letter can be put by barcode reader.

When getting the data from PC, In Main Menu, you can only get the data from barcode in 2-1 menu.

B. RS232C Pin formation of UriScan Pro II

RS232C Pin formation(9pin): 2(TXD), 3(RXD), 5(Ground)

2(TXD) : Data sent from analyzer, connect to 3(RTX) of external equipment

3(RXD) : Data sent from analyzer, connect to 2(RTX) of external equipment

5(Ground) : The line for maintenance, connect to 5(Ground) of external equipment

If you know the formation of Pin well, you can apply it for other pin formation.
STX(start), ETX(End), CR/LF(Change the line)

10m and less is suitable for the length of the cable and please do not connect two cable together. This is because it can make some noise and interfaced in abnormal.

The upper parts of the pins on the rear parts of the analyzer is for interfacing with external equipment and below parts of the pins is for barcode reader.

Normally, Code 39 is used for Barcode.