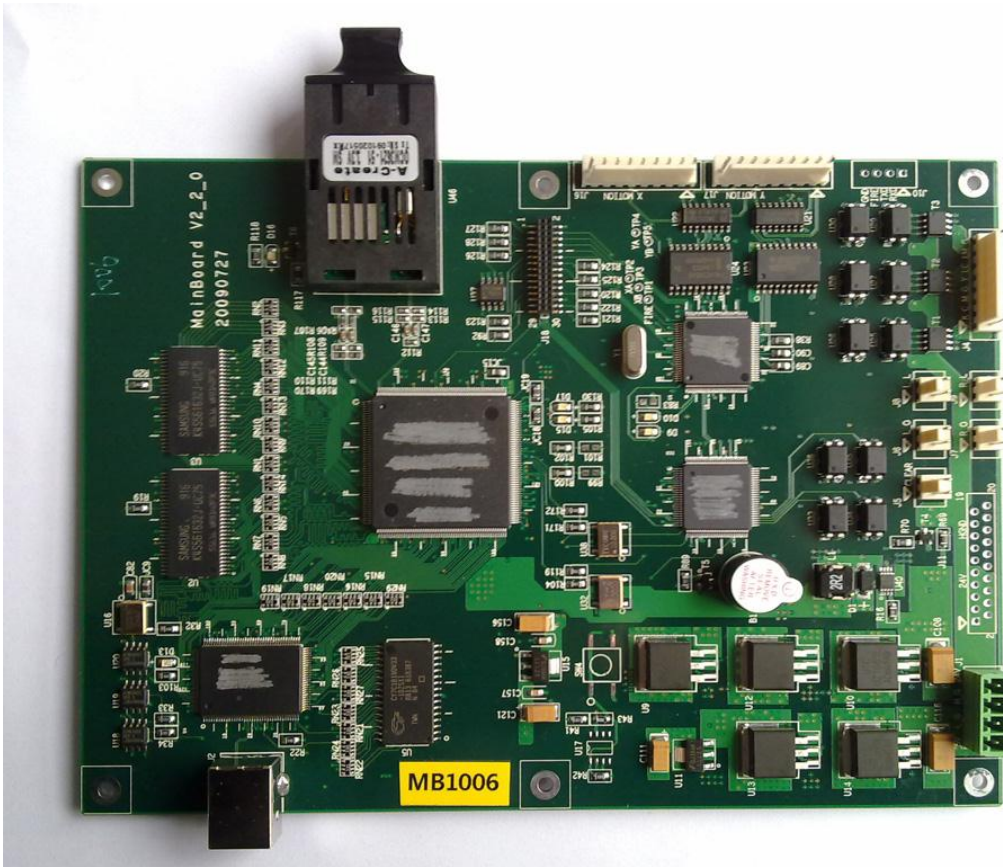

Printer control system quick install manual (Konica)

1. Product list

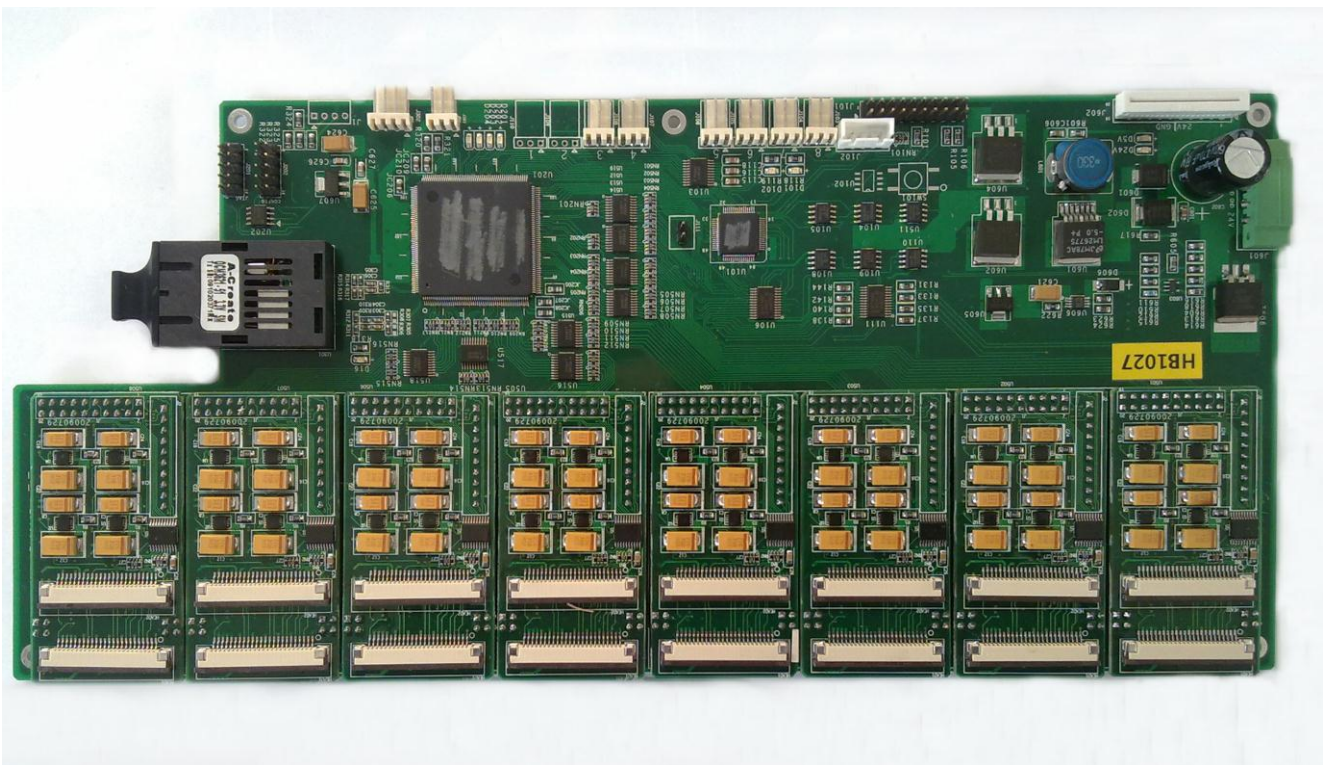
√QHH Printer control system MotherBoard



√Printer control system CarriageBoard (KM512)



√Printer control system CarriageBoard (KM256)



√ Connector plugs 2Pin x5 units



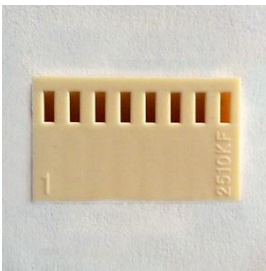
√ Connector plugs 3Pin x7 units



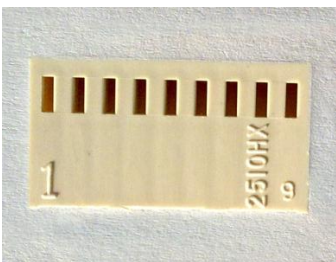
√ Linear Encoder connector plug 4Pin x 1 unit



√ Pump power connector plug 8Pin x1 unit



√ Stepper Motor Driver connector plug 9Pin x2 unit



√ MotherBoard power connector plug 4pin x1 unit



√ CarriagerBoard power connector plug 4pin x1 unit



√ Optical fiber and cable: Connect MotherBoard and CarriageBoard x 1 unit



√ Head connect cable x8 unit(KM512) or 16 unit(KM256)



√ KM512 Head adapter x8 unit



√ KM256 Head adapter x16 unit

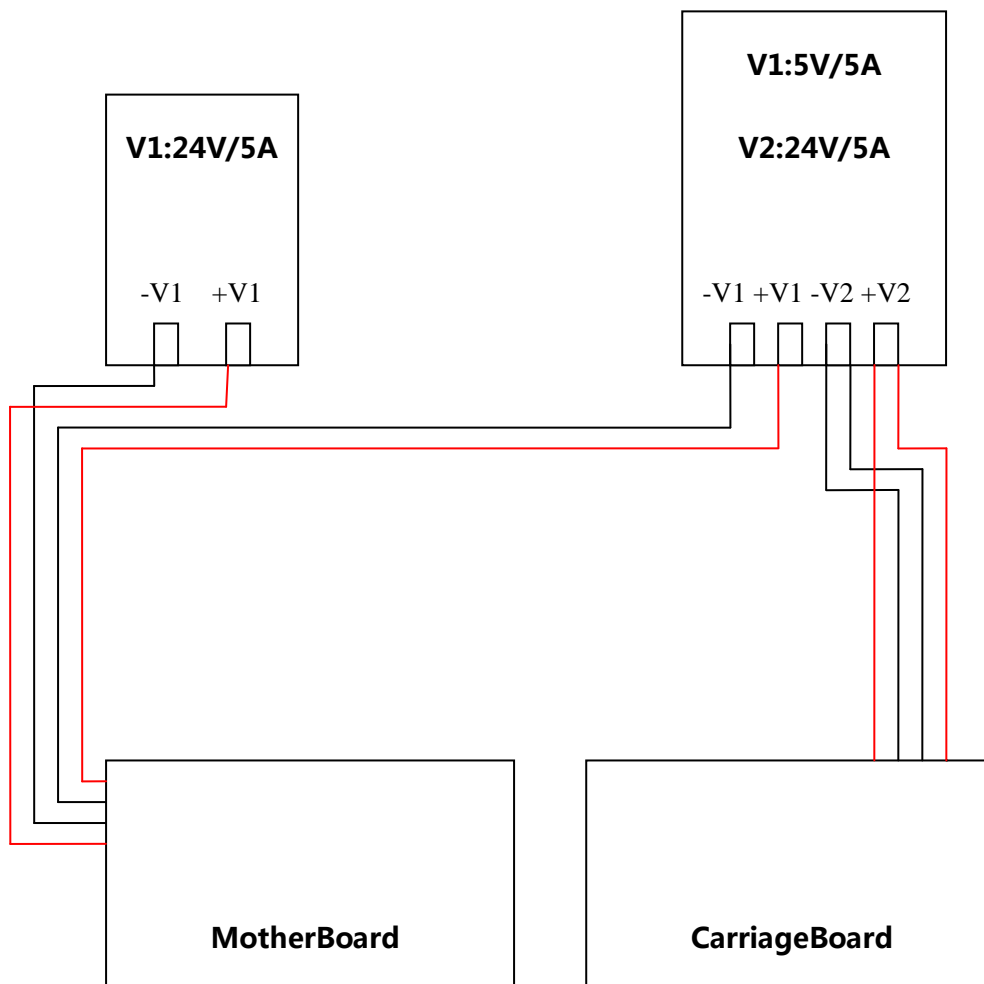


√ Connector Plugs needle



★ If above lists any item of fitting has the damage perhaps the short situation, please as soon as possible contact us.

2. PowerSupply



CarriageBoard 24V and MainBoard 5V powersupply' s GND connect

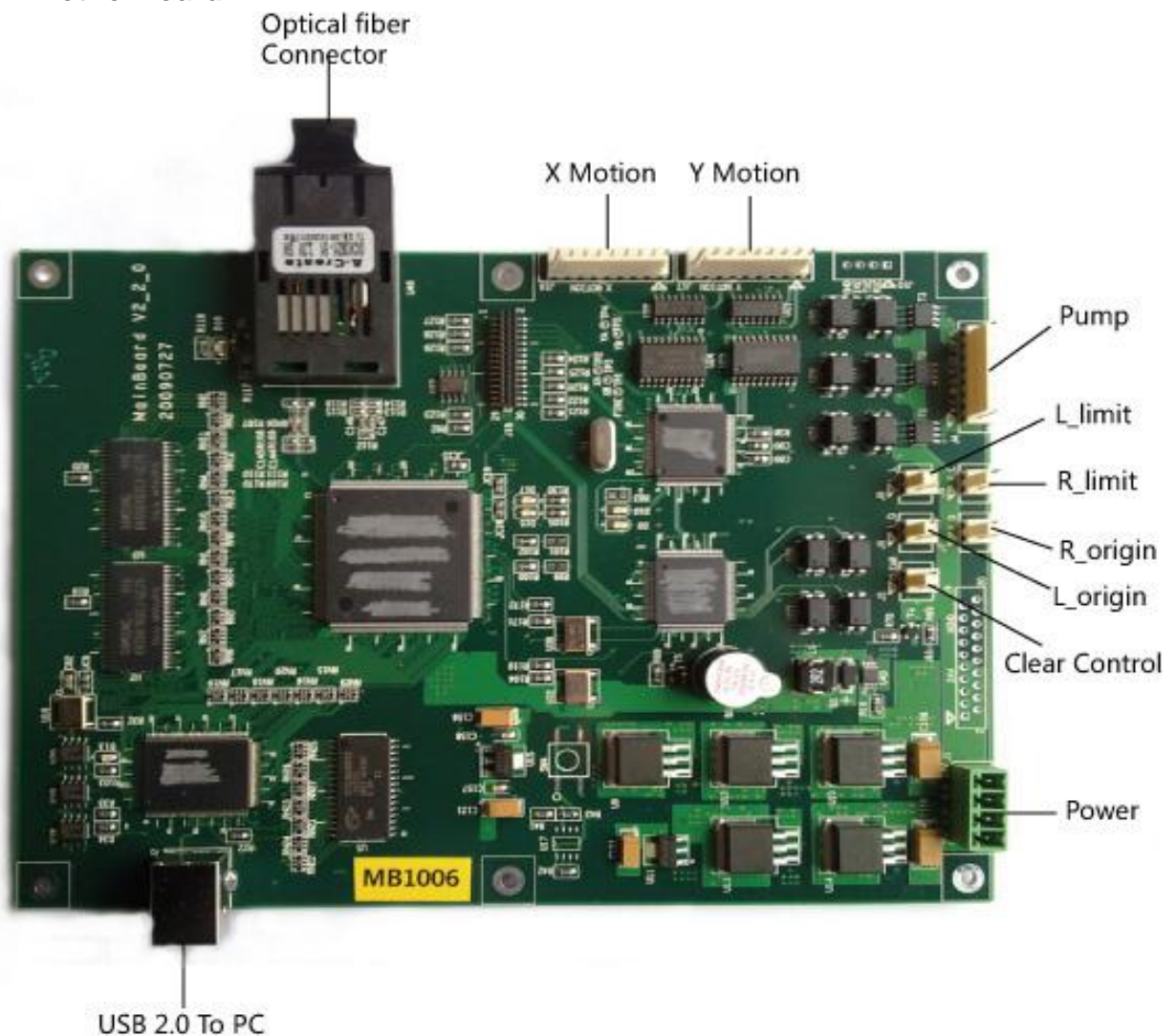
3. Hardware Installation

QHH Printer Control System description

QHH Printer Control System include three parts: MotherBoard; CarriageBoard and Control software. Use USB2.0 port connects to PC.

3.1 System each parts' guise and connector plugs

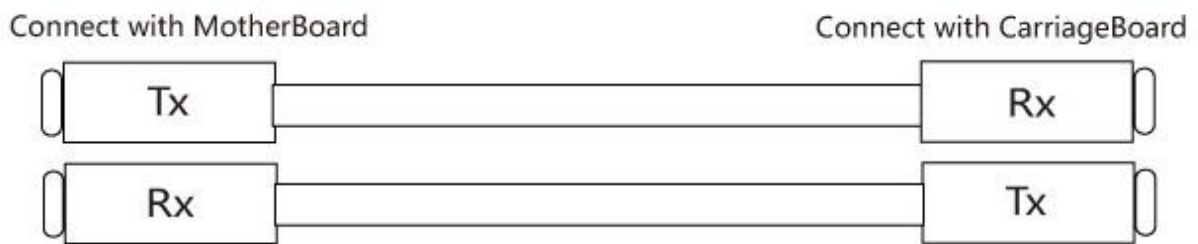
3.1.1 MotherBoard



3.1.2 MotherBoard connector plugs and connect define

U46: Optical fiber Connector

Detailed info, see figure:



J1: Power

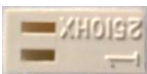


Connect define:



!!! Starting before, please first test the connection of J1 is correctly.

J5: Clear Control



Connect define:



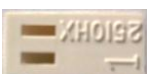
J6: L_Origin



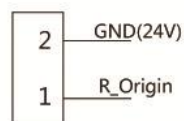
Connect define:



J7: R_Origin



Connect define:



J8: L_Limit





Connect define:

J9: R_Limit



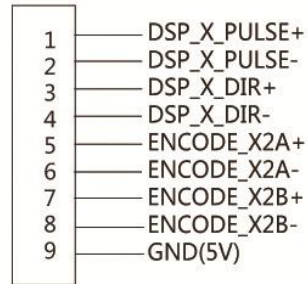
Connect define:



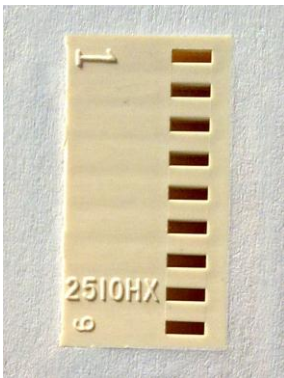
J16: X_Motion



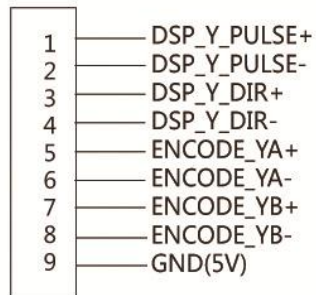
Connect define:



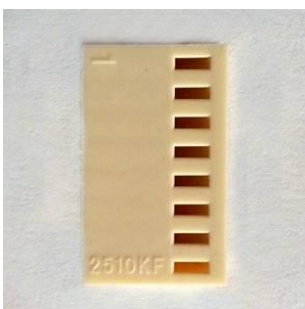
J17: Y_Motio



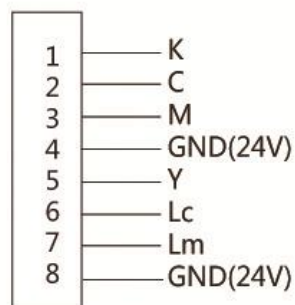
Connect define:



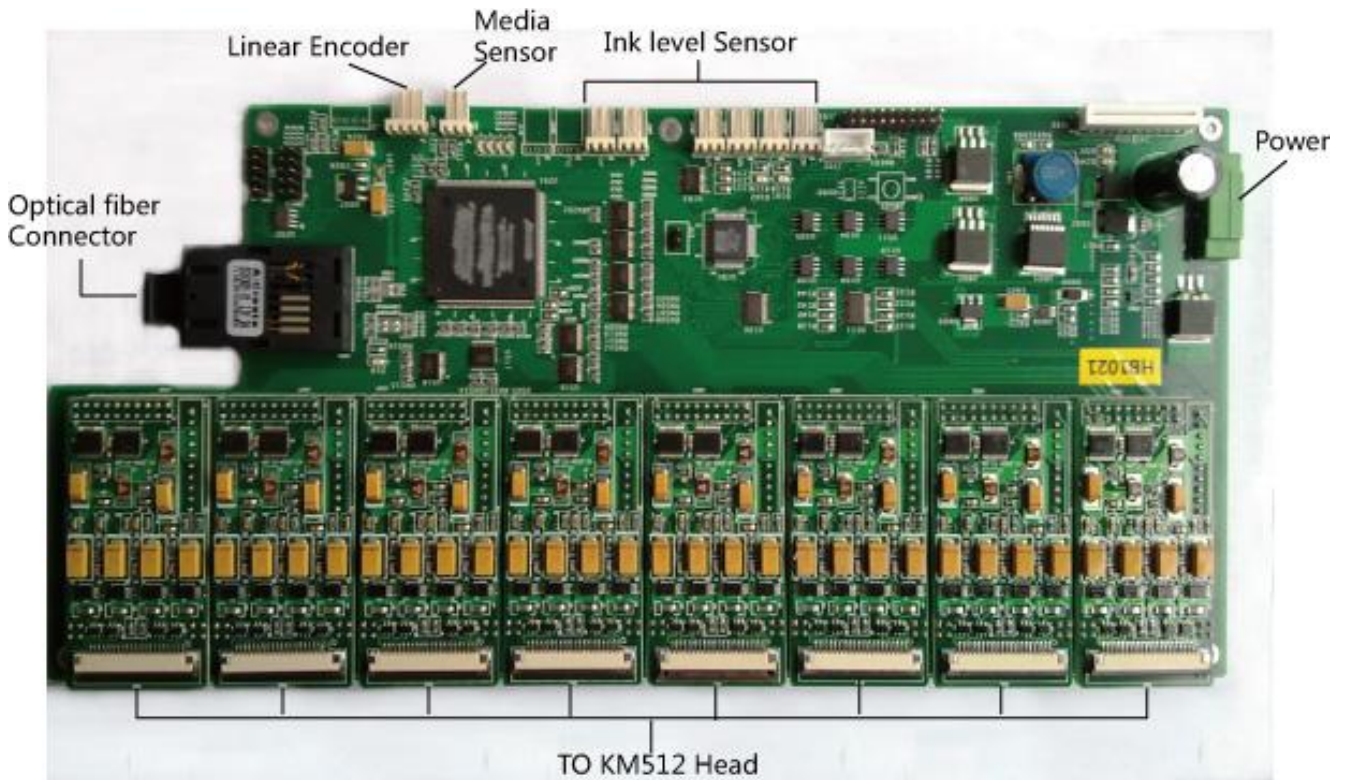
J4: Pump



Connect define:



3.1.3 CarriageBoard

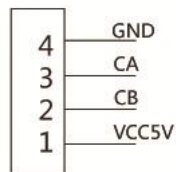


3.1.4 CarriageBoard connector plugs and defines

J302: Linear Encoder



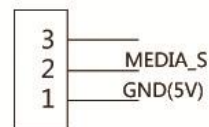
Connect define:



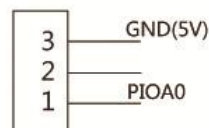
J303: Media Sensor



Connect define:



J103: Ink Sensor



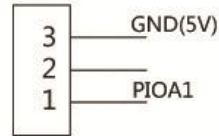


Connect define:

J104: Ink Sensor



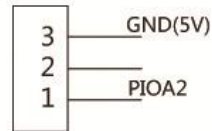
Connect define:



J105: Ink Sensor



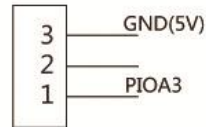
Connect define:



J106: Ink Sensor



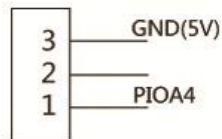
Connect define:



J107: Ink Sensor



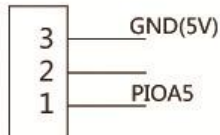
Connect define:



J108: Ink Sensor



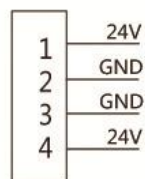
Connect define:



J601: Power Supply



Connect define:

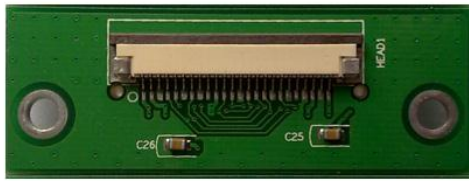


!!! Starting before, please test the CN3 power supply connected correctly!

Connect Cable: Connect HeadBoard to Head Adapter

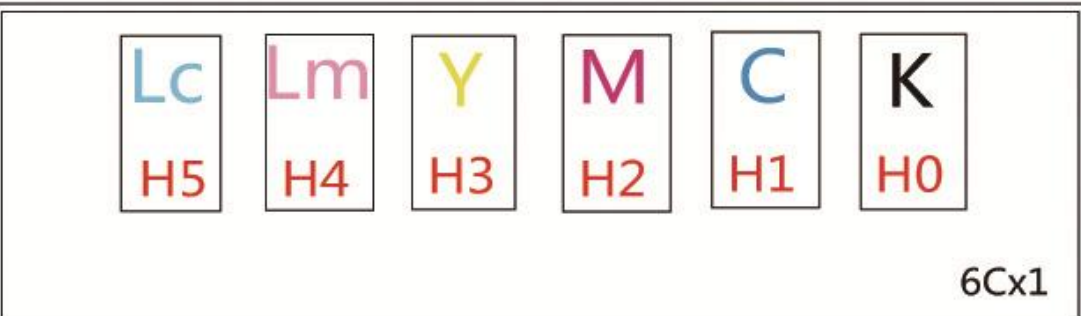
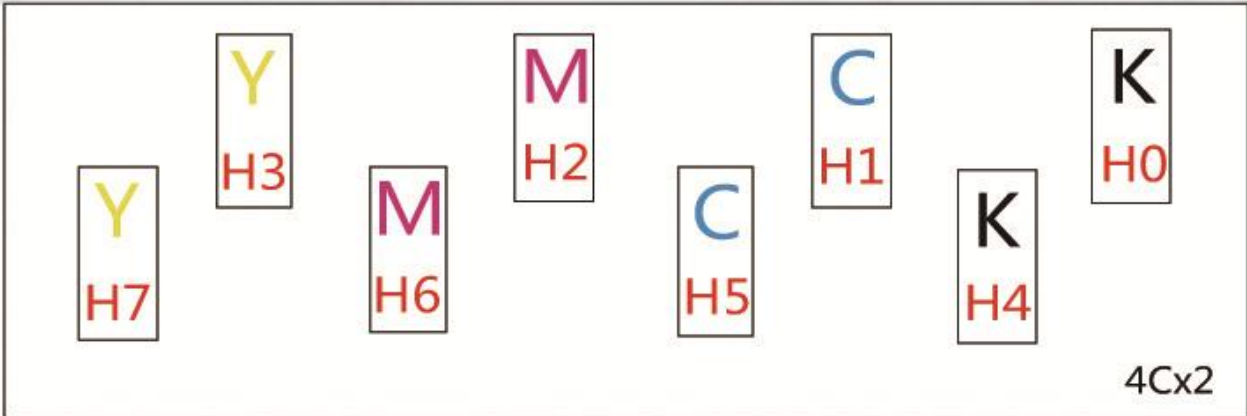
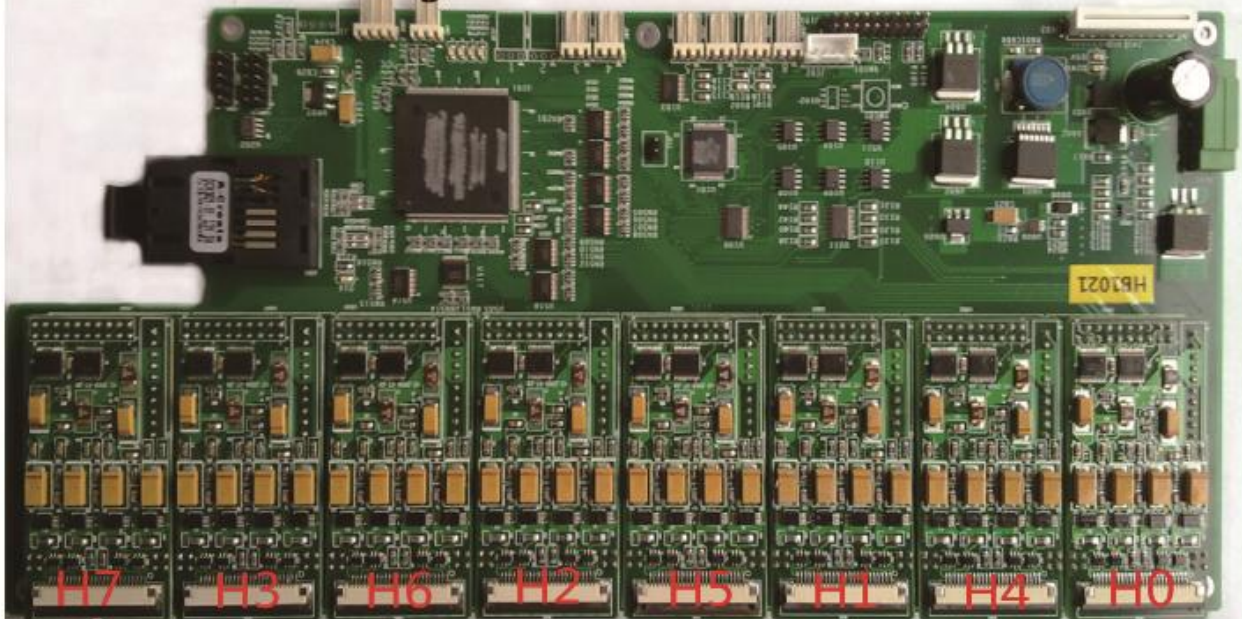


Head Adapter:Connect KM512 Print Head

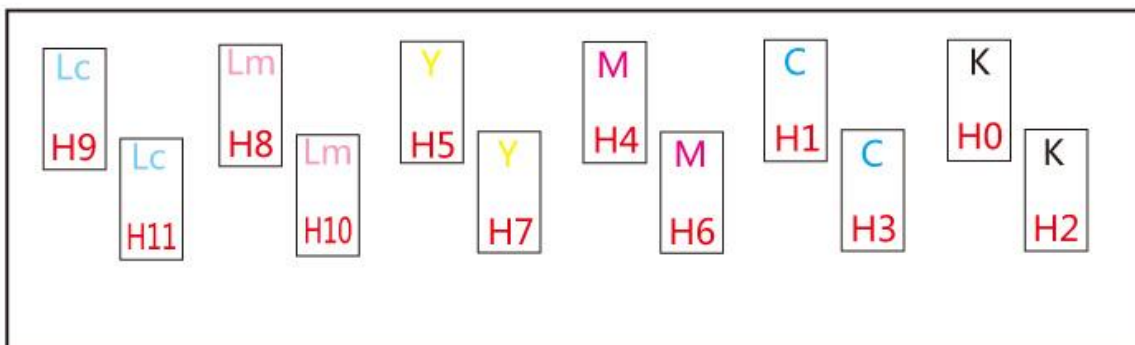
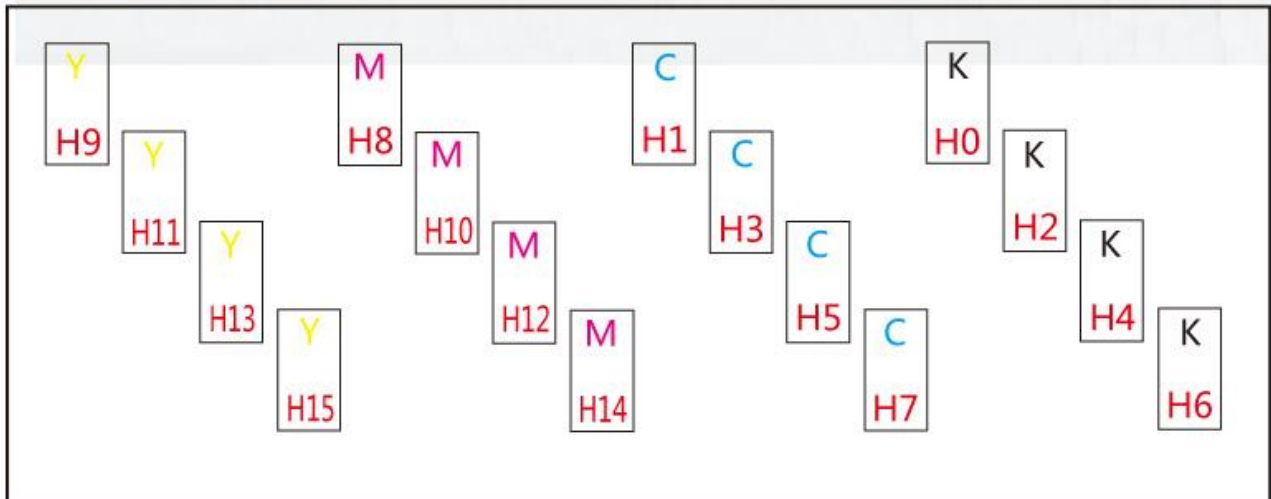
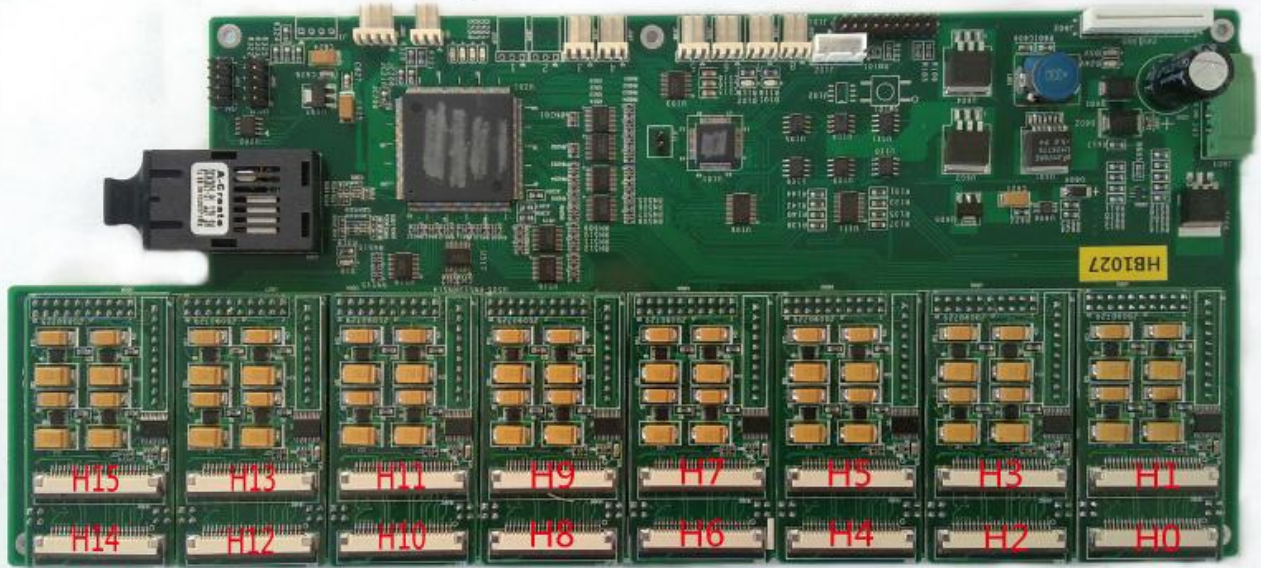


3.2 CarriageBoard and Head connect define

KM512 CarriageBoard and Head Connect Define



KM256 CarriageBoard and Head Connect Define



4. Printer Manager Software

About the Printer Manager

QHH(勤恒和) Printer Manager Software provided has set the machine parameter, the calibration printer head, update the firmware and clean the printer head functions.

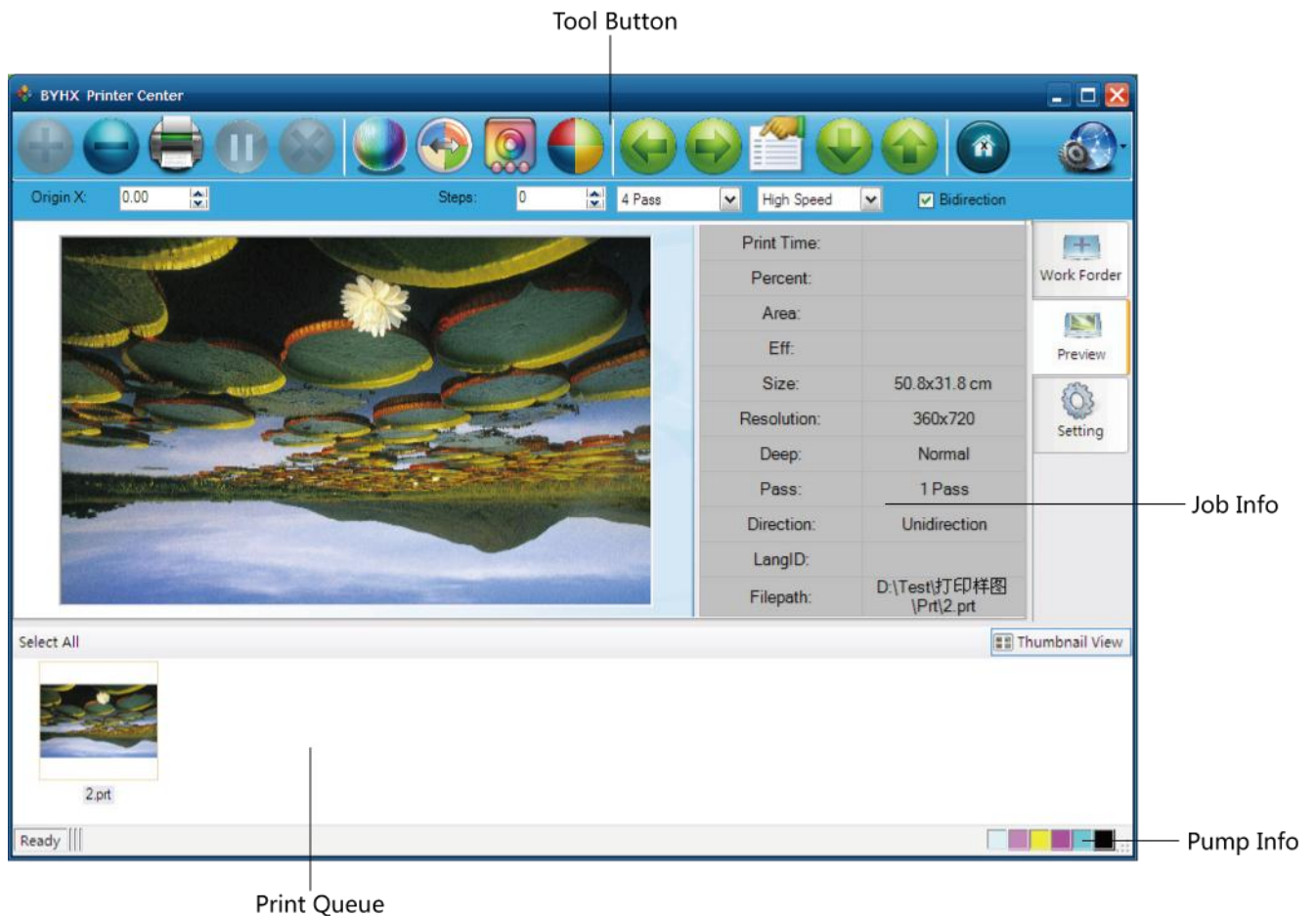
4.1 Software Installation

According to following step install Printer Manager software:

1. Run Setup.exe
2. Install software according to the screen prompt.

The software needed the system to install Dotnetfx.2.0 or above the version, in the installation process to be able to install this software automatically.

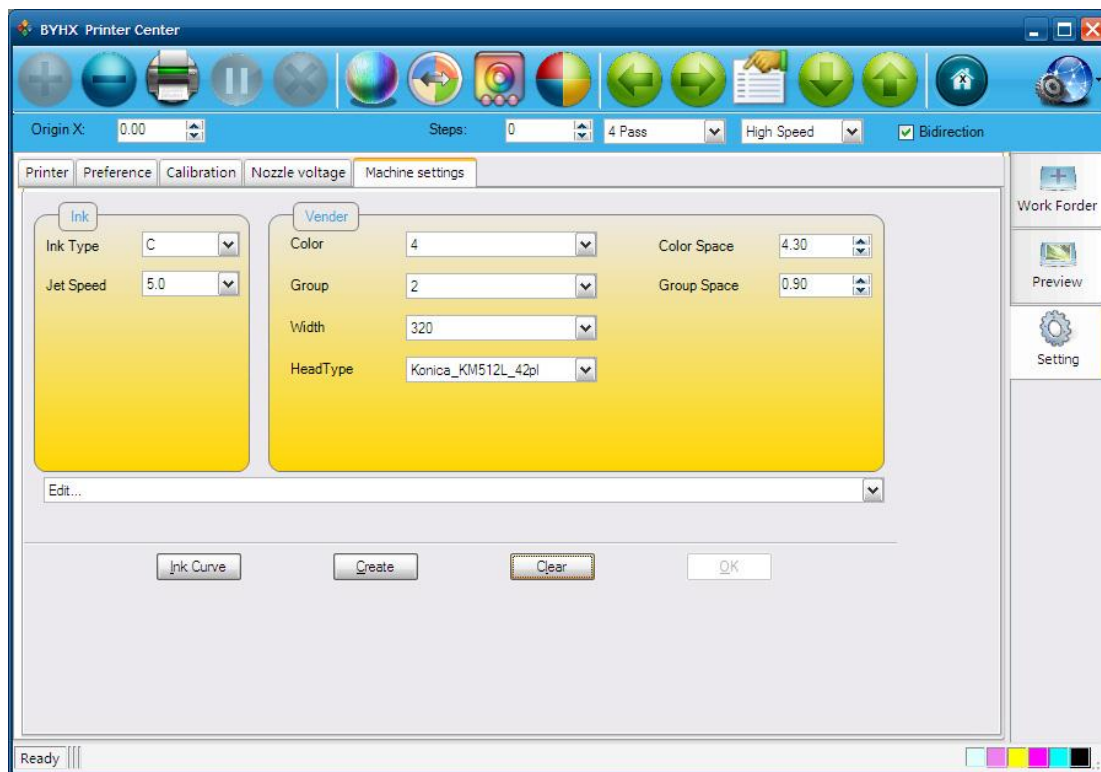
Software interface:



4.2 Machine Setting

Machine setting provided the system use flexibility; you can according to your machine set the different printer head type; the color number and the print head group number in the software, but don't need different firmware and control software.

After the software installed, first step must do machine setting, otherwise the machine can not start, enter the setting menu machine setting function and setting the printer hardware option:



Color (Color NO)

Select color number: 6 or 4

Group

Select printer head group number: 1; 2; 3; 4

Width

Select printer width: 1.8m; 2.5m; 3.2m; 3.3m

Color Space

Setting color space in accordance with the head installer position, the unit is centimeter.

Group Space

Setting Group space in accordance with the head installer position, the unit is centimeter.

Head Type

Select printer head type: M is 14pl and L is 42pl.

Ink Type

Select ink type: A; B or C.

Jet Speed

Select jet speed: 5.0; 5.5 or 6.0.

Ink Curve

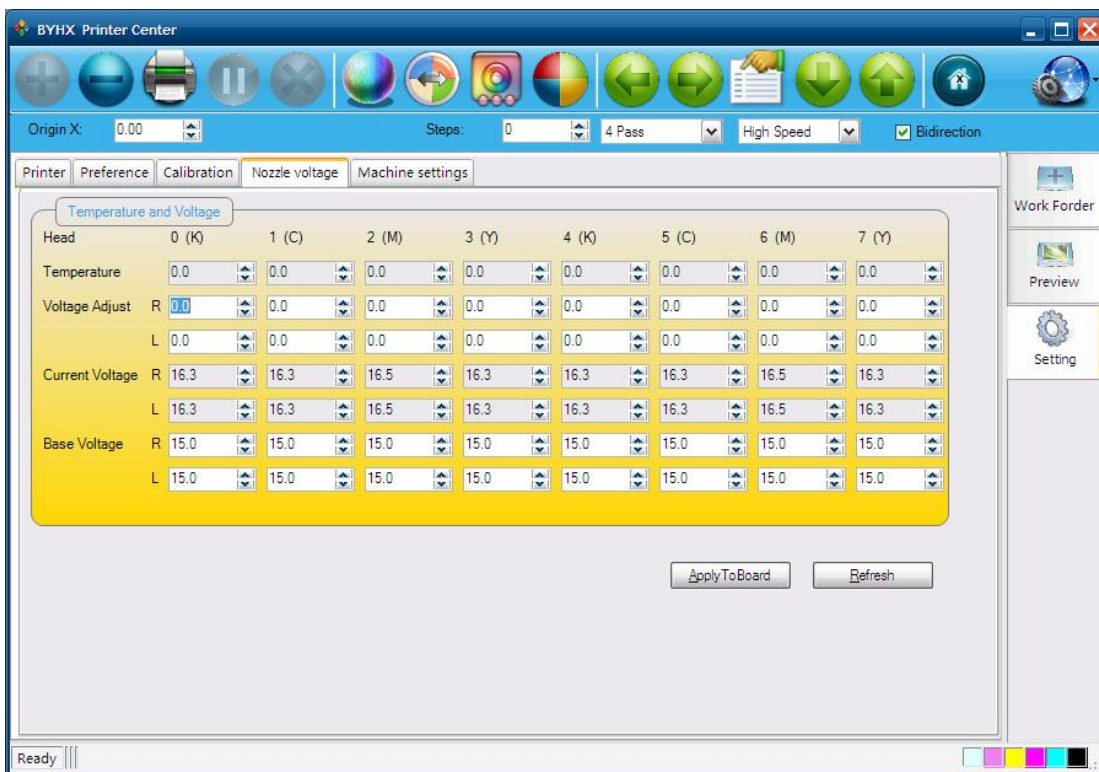
Write the type file of head to CarriageBoard: KM512 or KM256.

The color spacing and the group spacing can act according to the color and the group number which you choose, you also may own change.

After all setting complete, click create, the parameter will store in the motherboard.

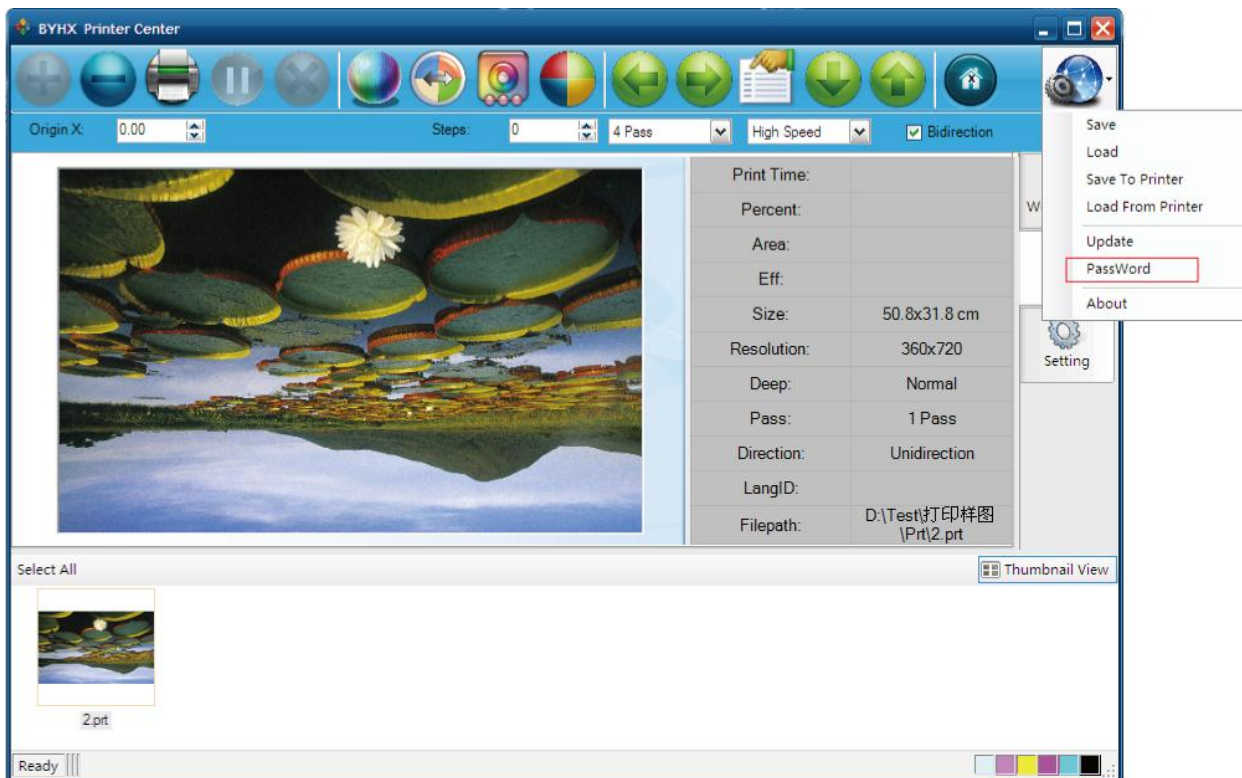
4.3 Nozzle Voltage

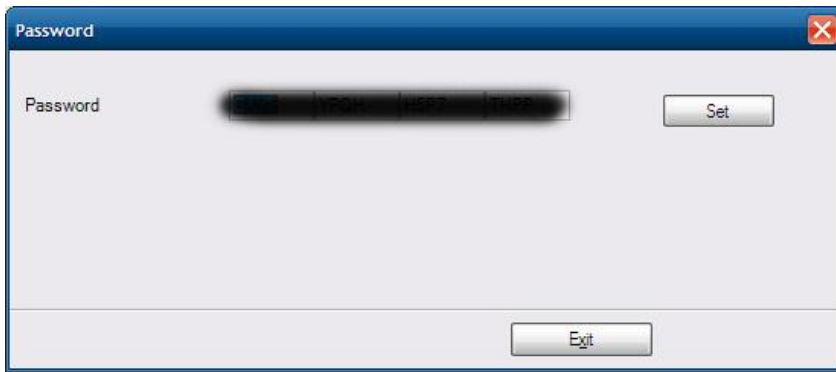
After machine setting, user should get the real setting. See figure:



In this step, you can set the base voltage of heads and read the heads' temperature, then apply to the board. You also can change the voltage adjust higher or lower to raise the quality of the print.

4.4 Password






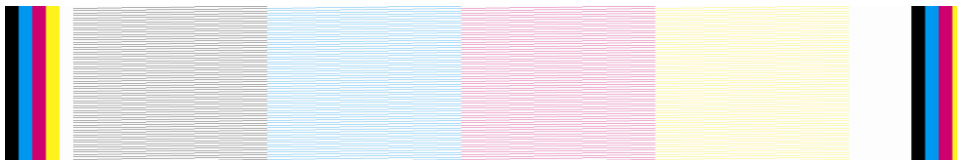
Set password to MotherBoard to limit the time and language.

4.5 Quickly printing a high quality job

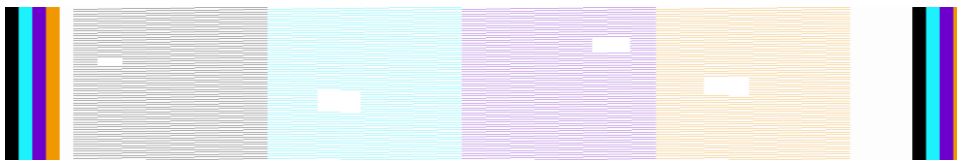
Step1: Head nozzle check

Click  button, check the test pattern, see figure:

OK

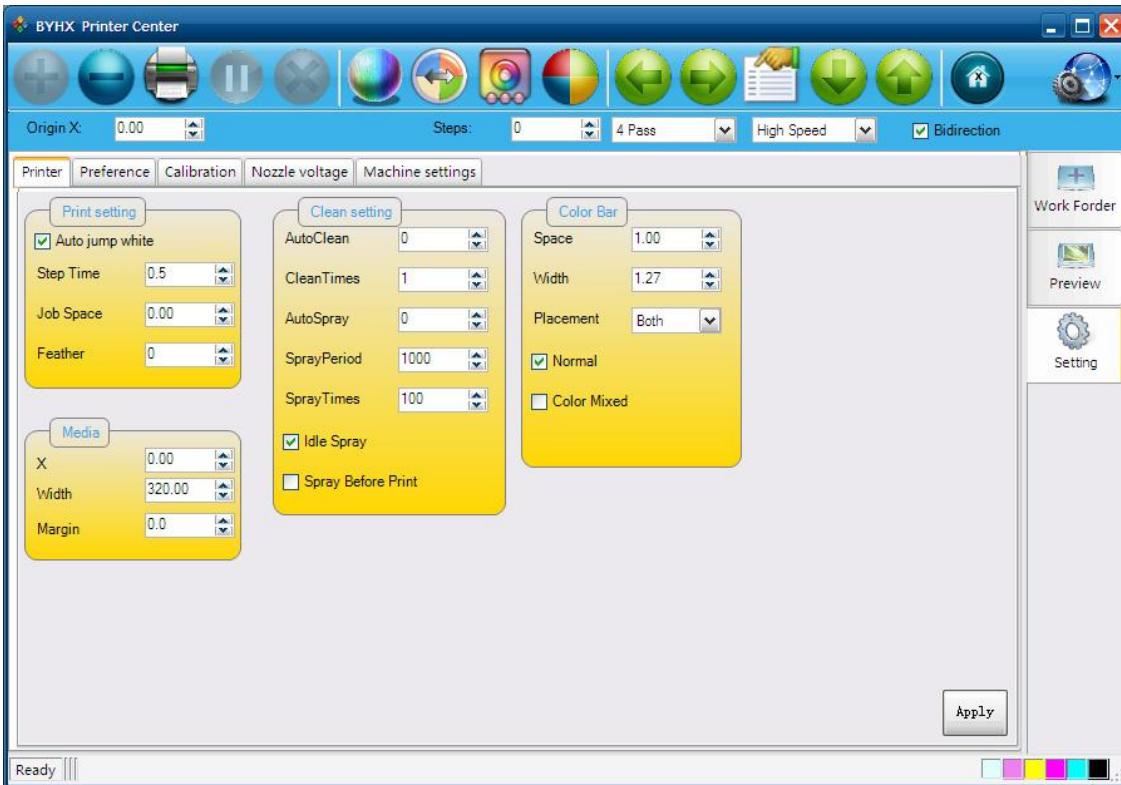


NG(need clean)




Step2: Cleaning the printer head

Cleans the nozzle have two types: one is automatic cleaning and the other one for manual cleaning.
Automatic cleaning: first setting auto cleaning times in the setting menu, see figure:

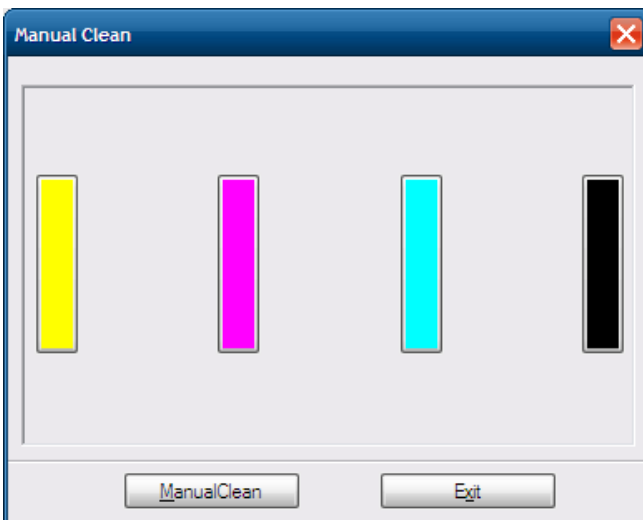


The cleaning times more, the clean time is longer, setting cleaning times according to the nozzle broken

status, then click  automatic cleaning button.


Manual cleaning: Click  manual cleaning button, pop-up the manual


Cleaning dialog box, see figure:



Click the color button and cleaning the corresponding head, and then print the pattern again to check.

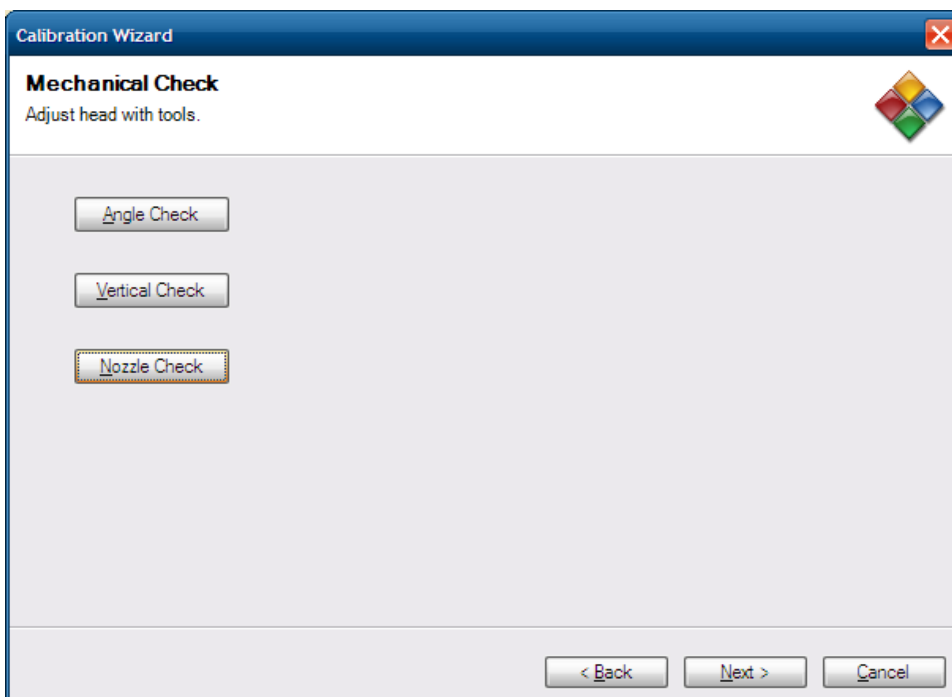
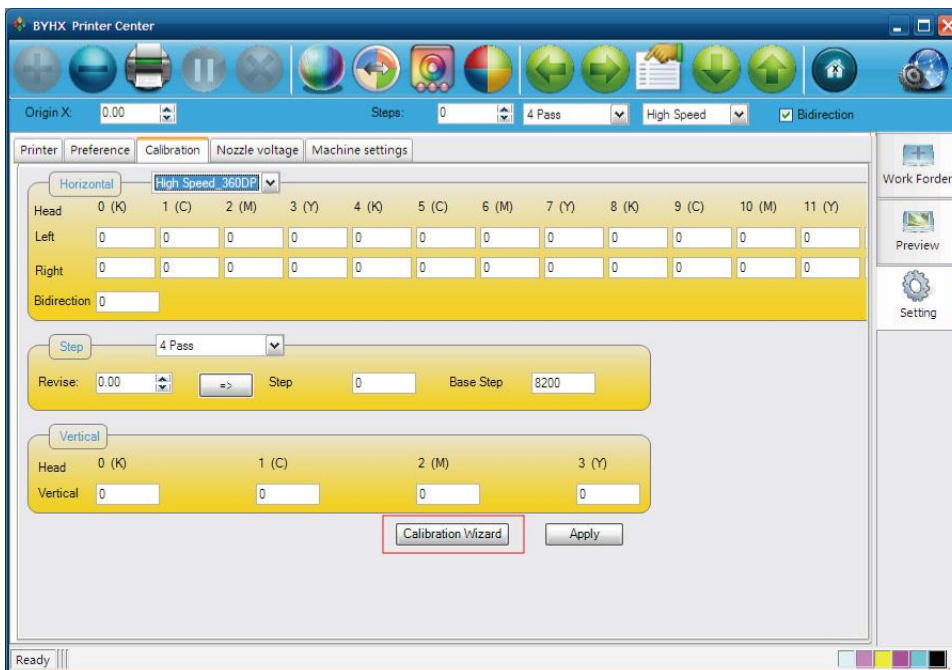
Step3: Setting print origin

Click  move button, Move carriage to the propriety position. Click

the  button setting the print origin.

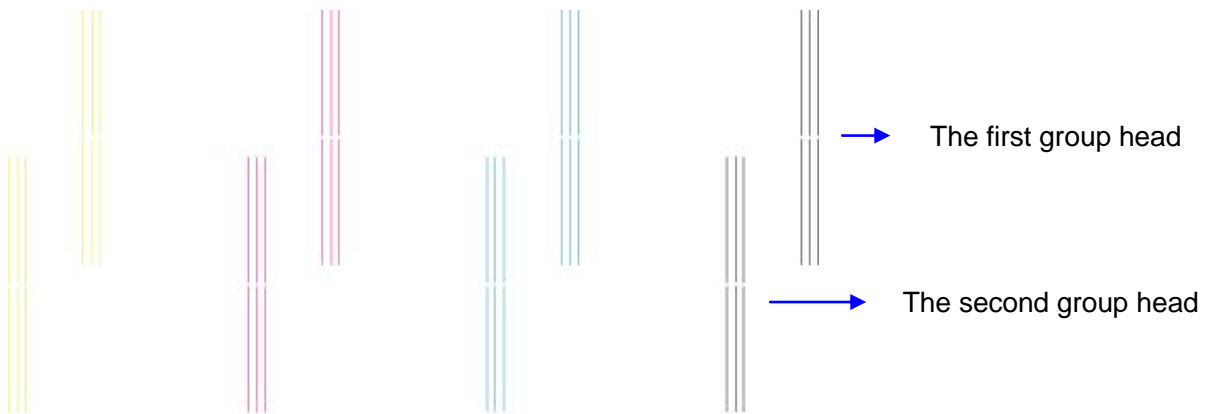
Step4: Calibration print head

Run Setting-Calibration-Calibration wizard function.

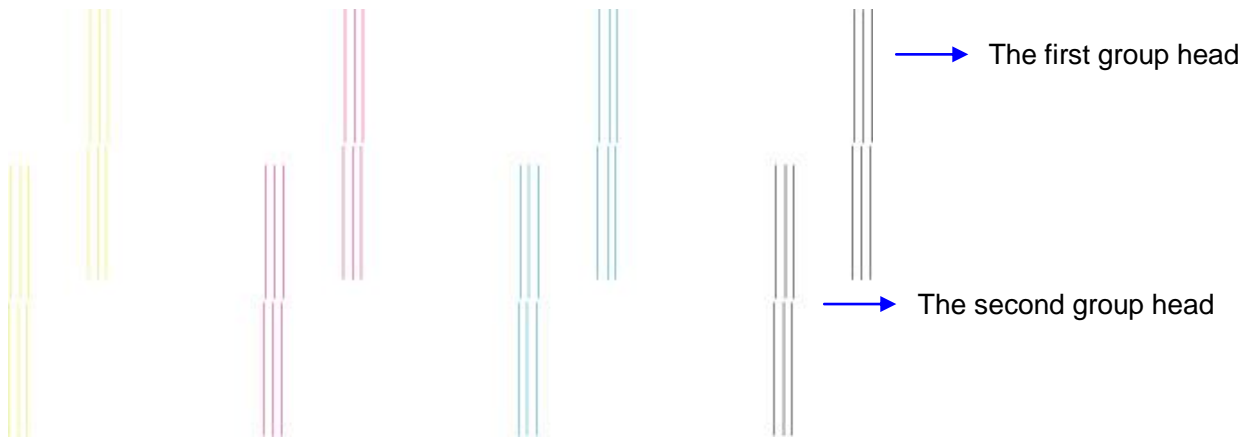


Angle Check, check the printed pattern, see figure:

OK

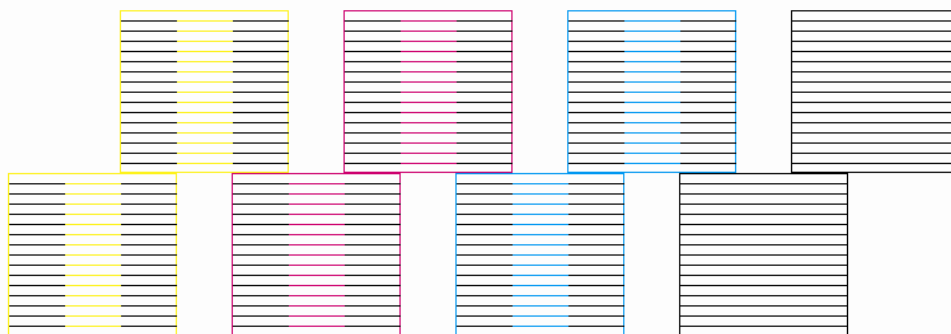


NG: The print head installment hasn't level, needs to do the physical position adjustment :



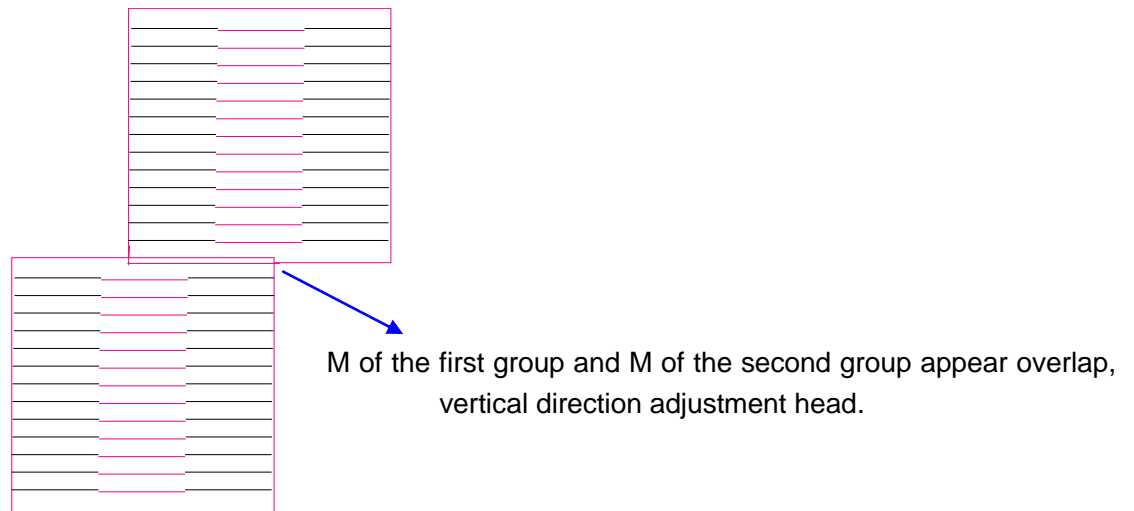
Vertical check, check the printed pattern, see figure:

OK:

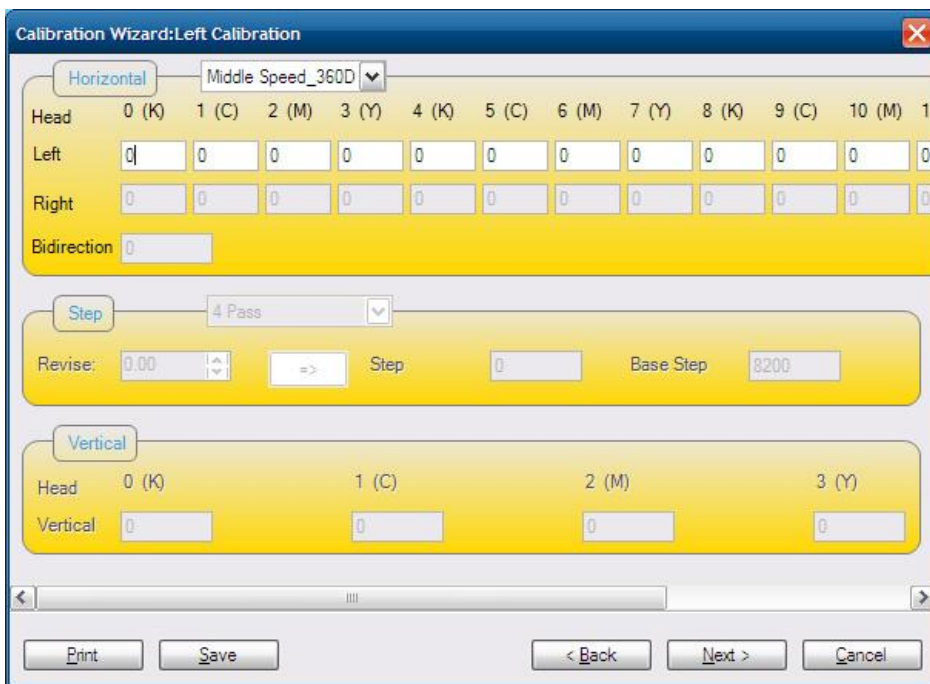


Mechanical Vertical Check

NG: The print head installment hasn't verticality, need to do the physical position adjustment:

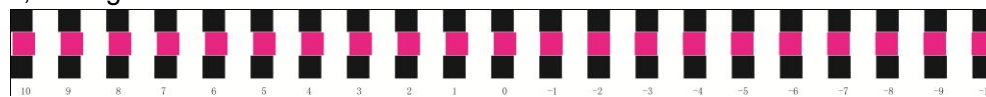


Click next:



Choice speed: High speed; Medium speed or low speed

The horizontal left calibration, perform the print, check the printed pattern, take M as an example, see figure:



This position M and K completely to uneven

The choice pattern to the uneven position, and input correspondence numeral, the method is adds together in the original foundation. Duplication this step, is most uneven until 0 position arrangement.

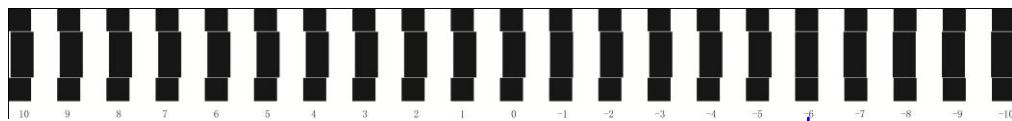
Click next, the horizontal right calibration, perform print, check the pattern, take M asan example, see figure:



This position M and K completely to uneven

The choice pattern to the uneven position, and input correspondence numeral, the method is adds together in the original foundation. Duplication this step, is most uneven until 0 position arrangement.

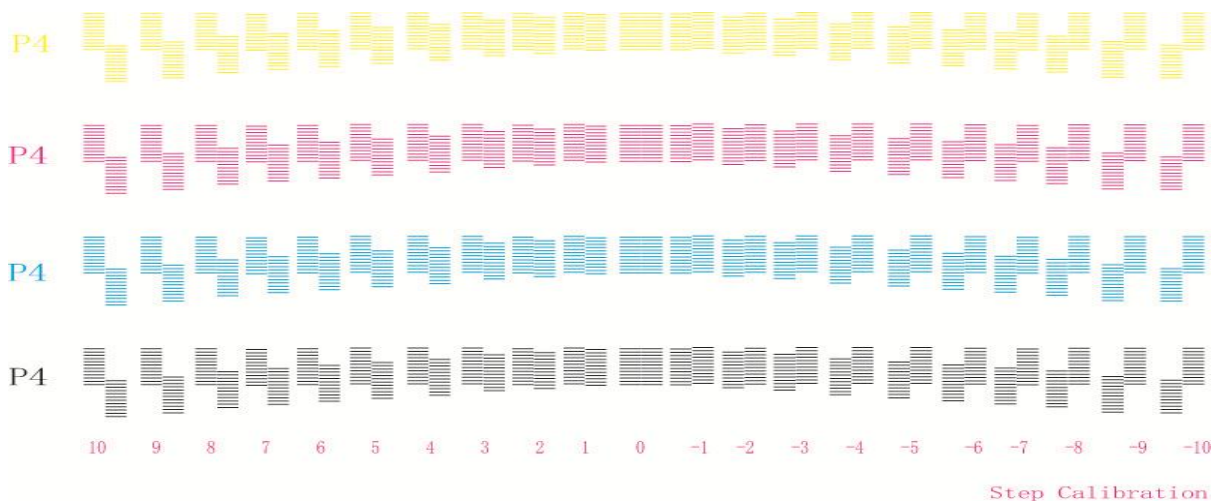
Click next, the Bidirection calibration, perform print, check the pattern, see figure:



This position K completely to uneven

The choice pattern to the uneven position, and input correspondence numeral, the method is adds together in the original foundation. Duplication this step, is most uneven until 0 position arrangement.

Click next, step calibration, choice the pass first, perform print ,check pattern, see figure:



The choice pattern to the uneven position, and input correspondence numeral, the methodis adds together in the original foundation. Duplication this step, is most uneven until 0 position arrangement.

Click next, complete the calibration

Step5: Printing already RIP job



Click add job, the support format is .prn and .prt. Click



printing is start.

5. Error code information

[0x400100E1]	Read EEPROM error.
[0x400100E2]	Write EEPROM error!
[0x400100E3]	Write EEPROM 2 times, the general report this error, the Main board did not respond to signals!
[0x400100E4]	The time limit should run out of!
[0x400100E5]	To limit the time there are 50 hours!
[0x400100E6]	Language and restrictions do not match!
[0x400100E7]	The contents of EEPROM error, EEPROM configuration did not complete!
[0x400100E8]	Wrong password!
[0x400100F1]	Invalid COM command
[0x400100F2]	Invalid COM parameter
[0x400100F3]	Move again!
[0x400100F4]	COM send time out
[0x400100F5]	COM data CRC error
[0x400100F6]	Encoder Error!
[0x400100F7]	Sensor error on measuring paper
[0x400100F8]	No paper
[0x400100F9]	PaperJam in Horizontal.
[0x400100FA]	PaperJam in Vertical.
[0x400100FB]	Index error
[0x400100FC]	Touch limit sensor
[0x400100FD]	Unknown Enum:COMCommand_Abort_StepEncoder
[0x02020000]	Updating.
[0x02020001]	Update successfully.
[0x02020002]	DSP begin timeout.
[0x02020003]	DSP data timeout.
[0x02020004]	DSP end timeout.
[0x02020005]	Wrong updater file foramt.
[0x02020006]	Ilegal update data.
[0x02020007]	Update checksum error.
[0x02020008]	Flash error.
[0x02020009]	Unknown Enum:CoreBoard_Updating_FX2NOEEPROM
[0x0202000A]	Unknown Enum:CoreBoard_Updating_FX2UPDATELOADER
[0x04020000]	unkown warning
[0x04020001]	EP0 overrun.
[0x04020002]	Pumping cyan.
[0x04020003]	Pumping magenta.
[0x04020004]	Pumping yellow.
[0x04020005]	Pumping black.

[0x04020006]	Pumping light cyan.
[0x04020007]	Pumping light magenta.
[0x04020008]	Time-limit password input mistake, contains the forbidden character. The password is ignored, please input again.
[0x04020009]	Illegal time-limit password. The password is ignored, please input again.
[0x0402000A]	Time-limit password and manufacturer ID mismatch. The password is ignored, please input again.
[0x0402000B]	Time-limit password and board ID mismatch. The password is ignored, please input again.
[0x0402000C]	First warning: 100 hours left against current time-limit password, please request a new password from the producer.
[0x0402000D]	Second warning: 50 hours left against current time-limit password, please request a new password from the producer.
[0x0402000E]	Last warning: After 1 hour, any printing will be stopped! Request a new password from the producer immediately!
[0x08020000]	Initializing ARM.
[0x08020001]	Initializing USB.
[0x08020002]	Initializing FPGA.
[0x08020003]	Initializing DSP.
[0x08020004]	Initializing HEADBOARD.
[0x08020005]	Initializing Spectra high voltage board.
[0x20020000]	EPO port is break.
[0x20020001]	USB1.1 connect.
[0x20020002]	Motion COM timeout.
[0x20020003]	Head board COM timeout.
[0x20020004]	Print data mismatch with fire.
[0x20020005]	Print data is less than fire number
[0x20020006]	Print data is more than fire number.
[0x20020007]	Print data is not equal with fire number.
[0x40020000]	Usb chip illegal reset.
[0x40020001]	Internal 1.
[0x40020002]	Internal 2.
[0x40020003]	Internal 3.
[0x40020004]	Internal 4.
[0x40020005]	Internal 5.
[0x40020006]	Internal 6.
[0x40020007]	Internal 7.
[0x40020008]	Internal 8.

[0x40020009]	Internal 9.
[0x4002000A]	Motion step 1.
[0x4002000B]	Motion step 2.
[0x4002000C]	Head board step 1.
[0x4002000D]	Head board step 2.
[0x4002000E]	LVDS error.
[0x4002000F]	Band direction error value.
[0x40020010]	DSP update fail.
[0x40020011]	EEPROM read failed.
[0x40020012]	EEPROM write failed.
[0x40020013]	Not initialized by factory.
[0x40020014]	Head board is reset.
[0x40020015]	Spectra high voltage board can not be initialized in step 1.
[0x40020016]	Head board mismatch with factory data set. Please reset factory data or change a new headboard.
[0x40020017]	Board manufactory ID mismatch with FW. Please update FW.
[0x40020018]	Serious Error: Exceeds the time against the time-limit password, please input a new password.
[0x4002001A]	USB1.1 connect.
[0x4002001B]	Serious Error: The language of the software setting does not correspond to authority. Please reset the software language or input the new language matching password again, and restart the printer.
[0x80020000]	Service Call: 0.
[0x80020001]	Service Call: 1.
[0x80020002]	Service Call: 2.
[0x80020003]	Service Call: 3.
[0x80020004]	Service Call: 4.
[0x80020005]	Service Call: 5.
[0x80020006]	Service Call: 6.
[0x80020010]	Service Call: 16.
[0x40030000]	USB communication error
[0x40030001]	Can not open USB device
[0x40030002]	Invalid file format
[0x40030003]	Print parameter error
[0x40030004]	Paper width too small.
[0x40030005]	Shakehand error between software and FW
[0x40030006]	Printer id not supported! Please upgrade software!
[0x40030007]	The current Version is {0}, please upgrade to version{1}
[0x40030008]	Language not support

[0x40030009]	Prt resolution mismatch with printer resolution!
[0x4003000A]	Not support resolution in prt!
[0x4003000B]	Not support file format!
[0x4003000C]	Can't print this job with current pass setting. Press ok to print this job with {0} pass.
[0x4003000D]	Prt color number mismatch with printer!
[0x4003000E]	Y lost feedback,or step not calibration!
[0x4003000F]	Get HW setting failed!
[0x40030010]	Unknown Enum:Software_Unknown
[0x04100001]	MainBoard Warning: Adjust voltage is not set, use the default values
[0x04100002]	MainBoard Warning: Base Voltage is not set, use the default values
[0x04100003]	MainBoard Warning: Spray Parameter is not set, use the default values
[0x04100004]	MainBoard Warning: User data (the type of ink, jet speed is not set, use the default values.
[0x80100001]	MainBoard Service Call: EEPROM read failure
[0x80100002]	MainBoard Service Call: EEPROM write failure
[0x80100003]	MainBoard Serious Error: Factory data is not set or set incorrectly.
[0x80100004]	MainBoard Internal error: I2C write FPGA error
[0x80100005]	MainBoard Internal error: I2C write FPGA error
[0x40120001]	HeadBoardService Call: EEPROM read failure
[0x40120002]	HeadBoard Service Call: EEPROM write failure
[0x40120003]	HeadBoard Serious Error: HeadBoard data did not write or format errors
[0x40120004]	HeadBoard Serious Error: HeadBoard data and user settings do not match
[0x40130001]	Can not find the data header
[0x40130002]	Header type is not 0,1,2
[0x40130003]	Read band, job header marked the first confusion
[0x40130004]	Fire is still to come after the completion of the band print.
[0x40130005]	Not enough Fire on the number of orders received by the end of print
[0x40130006]	the actual print data is greater than the data in Band header.
[0x40130007]	the actual print data is less than the data in Band header.
[0x40130008]	Internal 10.