

## Introduction of Veba P01 temperature Printer

Temperature Printer from Veba is a type of temperature recorder widely used in the food handling, food keeping, and temperature monitoring and recording during the wine processing. It has the direct drive of the printing machine output, with reliable and stable functions. Moreover, it has other functions, such as recording a lot of information with high accuracy and convenient cooperation, alarming, and adjusting the recorded parameters, etc. Once off power, the data recorded would not disappear.



Printing-paper Change

[SEL] : Signal for Print state

[LF]: Signal for Power

### 1. Panel:

#### 1.1 Display:

1602 LCD displays two recorded real-temperature values and alarm states. Fig. is as follows,

“T” for the first temperature,

“Car.” Input of the license plate number

Er.s: Error of sensor

Alarm: NO No alarm.

Alarm: H Temperature above the upper-limit

Alarm: L Temperature below the lower-limit

T: 26.5°C Alarm: No  
Car: AR8888

T: Er.s Alarm: No  
Car: AR8888

#### 1.2 Instruction for Signal:

Rec. The signal light flashes, meaning the recorder is recording the temperature. Otherwise the signal light is off.

Alarm The signal light flashes, meaning the temperature is above or below the limit or there is an error parameter.

Power The signal light is on, meaning temperature recorder is power-on.

Signal light of the printer

[SEL] : Flashing for lacking of paper, staying on for printing now or waiting for printing, and distinguishing for pause of the printing process

[LF]: Signal for Power

#### 1.3 Key-press

Press [SET] a long time for the menu of parameter adjustment.

Press [▲], [▼] for set-value change

[Print], the shortcut key for printing.

[SEL] : Signal for Print state

Button: Printing-paper Change

[LF]: Signal for Power

## 2. Parameters

Press [SET] a long time for parameter adjustment, and display Password. Then input the password of the parameter [▼▼▲▲▲]. Press [SET] for entry into parameters. Choose parameters with ▲▼ and then press [SET] to confirm. Use ▲▼ or [SET] to modify the parameters and then press [SET] for the previous menu or choose Exit for the previous menu.

### Parameters Table

Parameter	Range	Default	Note

Print Set	Start_time	MM-DD-YYYY HH:mm	5	Beginning-time for Printing
	End_time	MM-DD-YYYY HH:mm	5	Finishing-time for Printing
	<b>Print curve</b>			User-Defined Printing
	Print data			User-Defined Printing
	Exit			Exit
Alarm_Set	Alarm_H	-40-125C/-40-257F	60	First Upper-limit Temperature
	Alarm_L	-40-125 C/-40-257F	-10	First Lower-limit Temperature
	Alam_delay	0 ---999 minute	10	Alarm Duration Time
	Temp_differ	1—20 C/F	2	Alarm Temperature Difference
	Exit			
System_Set	Uint	C/F	C	Temperature Unit Selection
	Cal	-10—10	0	Temperature Calibration
	Rec_Sycle	00-9999	10	Recording Cycle
	System_time			System Time
	Print_num	1----2900	50	Printing Times for Shortcut Printing
	Company Name	Max 16 letters		Company Name
	Car_reg	Max 16 letters		Car registration Number
	Back light	Auto/Open	Open	Back light is Open Auto. Back light is Auto.
	Exit			
Ini Parmeter	Ini	Cencel/OK	1	Cancel initializing internal parameters OK: Initializing internal parameters
Deletion record	Deletion record	Cencel/OK		Cancel deleting all the recordings OK: Deleting all the recordings
Exit				Exit setting and return to normal.

### 3. Operation Instructions

#### 3.1 Record Printing

3.1.1 Curve Printing: Press [Print] on the panel, and the instrument would automatically print 50 records before the present time. (If there is no record data, the instrument will only print the temperature range.)

3.1.2. Print more temperature record curve. When the recorder is in the normal working condition, press [SET] more than 3 seconds and it will show "Password:". Then press [▼▼▲▲▲] keys one by one, and [SET] to enter the first-level menu of the program. Choose parameter [System\_Set] with ▲ or ▼, and press [SET] for confirmation and entering the second-level menu. Choose parameter [Print\_num] with ▲ or ▼. After the modification, press [SET] to confirm the modification. Press ▲ or ▼ to modify the parameter value, and after the modification, press [SET] for confirmation and return to the second-level menu. Choose [exit] key with ▲ or ▼ to return to the upper-level menu. Then press ▲ or ▼ to choose [exit] to exit the parameter operation and to return to the temperature display interface. Finally, press [Print] key on panel, and the instrument would print the adjusted temperature record curve.

#### Instructions:

1. After the modification of the parameter [Rec\_cycle], the temperature record cycle would be changed. The value marked by Rec\_cycle on the curve printing fig. would thus change to the modified value. (see the following fig.)

2. The printed curve is the latest record.

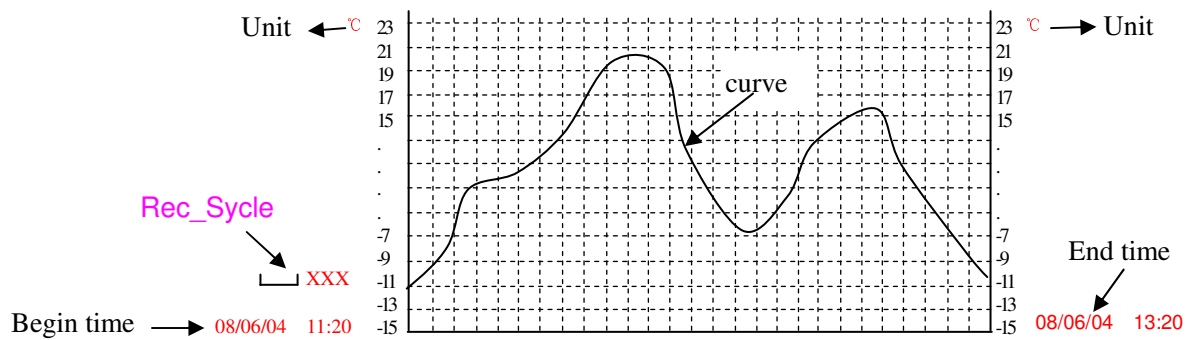
3. When printing the history curve of the temperature, the data curve printing could only be done by the same interrecord gap [Rec\_cycle]. After adjusting the interrecord gap, the previous data must be deleted.

4. If there is any power cut during the temperature recording process, the printed curve will

not be continuous.

5. When printing the curve, the instrument will automatically determine the minimum printing value according to the recorded temperature value. The maximum temperature difference printed is 38 units (If the unit is  $^{\circ}\text{C}$ , the temperature difference is  $38^{\circ}\text{C}$ , while if the unit is  $^{\circ}\text{F}$ , the temperature difference is  $38^{\circ}\text{F}$ .) If the temperature surpasses the maximum, the curve could not be printed.

6. During the printing process, if you want to pause the working process, press [SEL] key on the panel printing machine, and the process will be paused. Meanwhile, the signal light would be off. Press this key again, the printing would continue and the signal light is on. If the signal light is flashing, it means lacking of paper, and needs replacement.



### 3.1.3. User-defined Time for Printing

When the recorder is in the normal working condition, press [SET] more than 3 seconds, and it will show "Password": press [▼▼▲▲▲] keys one by one, and [SET] to enter the first-level parameter of the program. Choose the parameter [Print Set] with ▲ or ▼ keys, and press [SET] for confirmation and entering the second-level menu. Choose parameter [Start\_time] (the starting time of printing) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification. Press ▲ or ▼ to modify the parameter value, and then press [SET] for confirmation and return to the second-level parameters. With ▲ or ▼, choose parameter [End\_time] (the finishing time of printing), and press [SET] for confirmation and return to the second-level parameters after the modification. You can change the parameter value with ▲ or ▼, after which you could press [SET] for confirmation and then return to the second-level parameters. Choose [Print curve] with ▲ or ▼ keys, and the instrument would begin to print according to the defined time. At this time, the display screen will show "Send data" After printing, it will directly return to the temperature display interface. For example, the left bottom corner of the above picture is the starting time of printing, and the right bottom corner is the finishing time of printing. If the printing curve is a sectional curve, it means that there appears a power-cut phenomenon during the process.

### 3.1.4. Record Data Printing

When the recorder is in the working normal condition, press [SET] more than 3 seconds, and it shows "Password": press [▼▼▲▲▲] keys one by one, and [SET] to enter the first-level parameter of the program. Choose the parameter [Print Set] with ▲ or ▼ keys, and press [SET] to enter the first-level parameter of the program. Choose the parameter [Print Set] with ▲ or ▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Start\_time] (the starting time of printing) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification. Press ▲ or ▼ to modify the parameter value, and then press [SET] for confirmation and return to the second-level parameters. With ▲ or ▼, choose parameter [End\_time] (the finishing time of printing), and press [SET] for confirmation and return to the second-level parameters after the modification. You can change the parameter value with ▲ or ▼, after which you could press [SET] for confirmation and then return to the second-level parameters. Choose the parameter [Print\_data] with ▲ or ▼ keys, and press [SET] to confirm the printing. The instrument would automatically print the record data, and the display screen will show "Send data...". After printing, it will directly return to the temperature display interface.

### 3.1.5. Cancelling the records

When the recorder is in the normal working condition, press [SET] more than 3 seconds, and it

will show "Password": press [▼▼▲▲▲] keys one by one, and then [SET] to enter the first-level parameter of the program. Choose the parameter [Deletion record] with ▲ or ▼, and then [SET] for confirmation and enter the second-level parameter. Choose the parameters [Cancel] or [OK] with ▲ or ▼ keys, after which choose [SET] to return to the first-level parameter. Then press ▲ or ▼ to choose [exit] to exit from the parameter operation and then return to the temperature display interface.

Note: In normal circumstances, pls do not do this operation for fear of the loss of the recorded data.

### 3.2 Operations of Alarm Temperature Setting

3.2.1 According to their own demands, the users could set the alarm temperature and the alarm time. When the temperature is above the limit, the signal light of the alarm on the panel would begin to flash. Meanwhile, there shows the specific characters of the alarm state in the display screen. The characters displayed are as follows:

"NO" ---the temperature did not surpass the limit, the normal state.

"H" ---the temperature is above the upper-limit.

"L" ---the temperature is below the lower-limit.

After alarm is finished, the recorder will record a new data immediately.

#### 3.2.2 Upper-Limit/ Lower-Limit Alarm Temperature Setting

When the recorder is in the working condition, press [SET] more than three seconds and it shows "Password": press [▼▼▲▲▲] keys one by one, and then [SET] to enter the first-level parameter of the program. Choose the parameter [Alarm\_Set] with ▲ or ▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Alarm\_H1] (the upper-limit of temperature T1) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification. Then press ▲ or ▼ keys to modify the parameter value, after which press [SET] for confirmation and also returning to the second-level parameter. With ▲ or ▼ keys, choose other parameters [Alarm\_H2] (the upper-limit of temperature T2)/ [Alarm\_L1] (lower-limit of temperature T1)/ [Alarm\_L2] (lower-limit of temperature T2). Press ▲ or ▼ keys to modify the parameters, and also [exit] to return to the upper-level menu. Then press ▲ or ▼ to choose [exit] to exit from the parameter operation and finally return to the temperature display interface.

#### 3.2.3 Upper-Limit/ Lower-Limit Alarm Duration Time Setting

When the recorder is in the normal working condition, press [SET] more than 3 seconds and it shows "Password" and then press [▼▼▲▲▲] keys one by one, and then press [SET] to enter the first-level parameter of the program. Choose the parameter [Alarm\_Set] with ▲ or ▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Alarm\_delay] (duration time of temperature alarm) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification. Then press ▲ or ▼ keys to modify the parameter value, and [exit] key to return to the upper-level menu. Then press ▲ or ▼ to choose [exit] to exit from the parameter operation and finally return to the temperature display interface.

#### 3.2.4 Upper-Limit/ Lower-Limit Alarm Temperature Deviation Setting

When the recorder is in the normal working condition, press [SET] more than 3 seconds and it shows "Password:", and press [▼▼▲▲▲] keys one by one, and then press [SET] to enter the first-level parameter of the program. Choose the parameter [Alarm\_Set] with ▲ or ▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Temp\_differ] (temperature difference between the deviation of the upper limit and the lower limit) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification. Then press ▲ or ▼ keys to modify the parameter value, and [SET] to exit from the modification. Then press ▲ or ▼ or [exit] to return to the upper-level menu. Finally press ▲ or ▼ to choose [exit] to exit from the parameter operation and return to the temperature display interface.

### 3.3 Input of Printing Company and Instrument Name

3.3.1 When the recorder is in the interface of temperature display, press [SET] more than 3

seconds and it shows “Password:” press [▼▼▲▲▲] keys one by one, and then [SET] to enter the first-level parameter of the program. Choose the parameter [System\_Set] with ▲or▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [CompanyName] (name of the company) with ▲or▼ keys, and press [SET] to confirm the parameter modification. If there is no need for modification, press [SET]+ ▲ to exit directly to the upper-level menu. Then press ▲or▼ keys to choose the relative character, and [SET] to the next character. When it comes to the last one, press [SET] to go back to the upper-level menu. Then press ▲or▼ to choose [exit] to exit from the parameter operation and return to the temperature display interface. Or press [SET] and ▲ keys to directly go back to the upper-level menu, and press ▲or▼ to choose [exit] to go back.

3.3.2. When the recorder is in the interface of temperature display, press [SET] more than 3 seconds and it shows “Password:” press [▼▼▲▲▲] keys one by one, and then [SET] to enter the first-level parameter of the program. Choose the parameter [System\_Set] with ▲or▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Car\_reg ] (license plate number) with ▲or▼ keys, and press [SET] to enter the parameter modification. If there is no need for modification, press [SET]+ ▲ to directly go back to the upper-level menu. Then press ▲or▼ keys to choose the relative character, after modification, press [SET] to the next character. When it comes to the last character, press [SET] to go back to the upper-level menu. Then press ▲or▼ to choose [exit] to exit from the parameter operation and return to the temperature display interface.

### 3.4 Back Light Operation

3.4.1 This instrument has two back light functions, constant back light and automatic control of back light.

#### 3.4.2 Back Light Operation

When the recorder is in the interface of temperature display, press [SET] more than 3 seconds and it shows “Password:” and then press [▼▼▲▲▲] keys one by one, and then [SET] to enter the first-level parameter of the program. Choose the parameter [System\_Set] with ▲or▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Back light] (temperature difference between deviation of upper limit and lower limit) with ▲or▼ keys, and press [SET] to enter the parameter modification. Then press ▲or▼ keys to choose the parameter [Auto] (automatic control of back light) / [Open] (constant back light), and [SET] to do the modification. Then press ▲or▼ to choose [exit] to go back to the upper-level menu. Then press ▲or▼ to choose [exit] to exit from the parameter operation and return to the temperature display interface.

Notice: When the back light controls automatically and the back light is on, the back light will be automatically closed in 35 seconds. The back light can be open when pressing any button on the panel.

### 3.5 Adjustment of Temperature Unit

When the recorder is in the interface of temperature display, press [SET] more than 3 seconds and it shows “Password:” press [▼▼▲▲▲] keys one by one, and then press [SET] to enter the first-level parameter of the program. Choose the parameter [System\_Set] with ▲or▼ keys, and press [SET] to enter the second-level parameter. Choose the parameter [Unit] (unit of the temperature) with ▲or▼ keys, and press [SET] to enter the parameter modification. Then press ▲or▼ keys to choose parameter [C] (the unit C) / [F] (the unit F). Then press [SET] to confirm the modification and exit. Then press ▲or▼ to choose [exit] to go back to the upper-level menu. Press ▲or▼ again to choose [exit] to exit from the parameter operation and return to the temperature display interface.

### 3.6 Replacing the printing paper

When [SEL] on the printing machine is flashing, the printer needs to replace the paper. Press the button on the bottom panel, and the paper box is opened. Then put the paper into the paper box (with the grain side face up), and the head of the form must be put at least 10mm outside the printer. The paper is placed in the middle, and then put the cover on.

### 3.7 Recovering the Default

When the recorder is in the interface of temperature display, press [SET] more than 3 seconds and it shows "Password:" press [▼▼▲▲▲] keys one by one, and then press [SET] to enter the first-level parameter of the program. Choose the parameter [Ini Parameter] with ▲ or ▼ keys, and press [SET] to enter the second-level parameter [Ini]. Choose the parameter [Cancel] (stop the present operation) / [OK] (operation of recovering the default) with ▲ or ▼ keys, and press [SET] to confirm the parameter modification and return to the upper-level menu. Then press ▲ or ▼ to choose [exit] to exit from the parameter operation and return to the temperature display interface.

Note: In the normal condition, pls do not do this operation in fear of the instrument error.

### 4. Specification:

Model: Veba P01  
Temperature Range: -40~125°C -40~257 °F  
Relay Numbers: 1-DS18B20  
Accuracy: -10-100°C@±0.5°C ,Others: ±1°C  
Resolution: 0.1  
Temperature Display: LCD  
Alarm Output: Relay: 3A/220VAC  
Record Cycle: 1~9999min (selection of parameters)  
Printing Output: Micro-thermal Printing Output  
Power: (12~24VDC) or(100-240VAC) /3.5A (Optional)  
Record Amount: 2900 dots (MAX)

### Connection:

