

V683 GPS Watch

User Manual V2.1



CONTENTS

CHAPTER I PREFACE.....1

I、 OVERVIEW	1
II、 NOTICE	1

CHAPTER II DEVICE DESCRIPTION2

I、 BRIEF INTRODUCTION.....	2
II、 PRODUCT CHARACTERISTICS	2
III、 PRODUCT SPECIFICATIONS.....	3

CHAPTER III USAGE PREPARATION4

I、 ACCESSORIES	4
II、 APPEARANCE AND INTERFACE	4
III、 CHARGE THE BATTERY	5
IV、 INSTALLATION OF SIM CARD	6

CHAPTER IV COMMANDS APPLICATIONS AND OPERATION 7

I、 LOCATION INQUIRY	7
II、 RETURN CHINESE ADDRESS FOR SINGLE POSITIONING.....	8
III、 RETURN GOOGLE MAP SCREENSHOT LINK FOR SINGLE POSITIONING	9
IV、 RETURN GOOGLE MAP LINK FOR SINGLE POSITIONING	9
V、 SET AUTHORIZATION NUMBER.....	10
VI、 ADJUST RECEIVER VOLUME	10
VII、 SOS FOR HELP FUNCTION	10
VIII、 CHANGE USER PASSWORD.....	11
IX、 CHANGE TIME ZONE SETTING	11
X、 CHANGE GPRS USER NAME	11
XI、 CHANGE GPRS SERVICE PASSWORD	12
XII、 SET APN (ACCESS POINT NAME)	12
XIII、 SET SERVERS IP ADDRESS AND PORT NUMBER	12
XIV、 SET THE DATA UPLOAD INTERVAL TIME	12
XV、 INSTRUCTION TO UPLOAD CURRENT POSITION IMMEDIATELY.....	13
XVI、 LOW BATTERY ALARM	14
XVII、 GEO-FENCE FUNCTION	14
XVIII、 READ THE BASE STATION INFORMATION.....	18

XIX、AUXILIARY FUNCTION.....	18
CHAPTER V NOTICES	20
CHAPTER VI WARRANTY	21
I、WARRANTY SCOPE:.....	21
II、EXEMPTION CLAUSES.....	21

Chapter I Preface

I、 Overview

V683 is a perfect combination of GSM and GPS technologies. The advanced technologies of the product in GSM and GPS fields are verified by its accurate dimension and simple appearance. It represents a typical design integrating the communication product and GPS positioning.

We provide professional safety-guarding and car-positioning products and solutions.

Before you use the product, please take some time and go through this instruction manual to understand operational details and receive better services.

II、 Notice

1. Please read this user manual carefully and always use correct operation methods to prevent any possible errors.
2. This uses manual is for reference only. If some contents and operation steps are inconsistent with those for the actual product, the latter will prevail. If this type of products has any updating, our company will not inform you.
3. The defaulted password of this product is 0000.

Chapter II Device Description

V683 as a personal remote positioning device made up of GPS module and GSM/GPRS module, is compact in dimensions with high accuracy. On the basis of GPS satellites and under dynamic conditions, it can provide you with accurate and correct location information. With such features, it can be used to protect and look for our old people and children. It can also be used for safety purpose and other purposes, such as remote positioning to protect property safety.

I、Brief Introduction



Brief Introduction Figure 1

II、Product characteristics

1. In-built GPS Module
2. Internet positioning service center, used to receive and send positioning information
3. GPS personal or team orientation
4. GSM/GPRS modem supports Quad frequency bands, i.e. 850/900/1800/1900 MHz
5. High-sensitivity, new workmanship and the most advanced GPS chip
6. Can work effectively in limited space such as urban canyon

7. Low energy consumption
8. Fast signal acquisition
9. Support a single orientation and continuous tracking
10. Supports single positioning and continuous tracking
11. Supports fast dial button
12. Supports the location information inquiry by SMS and Internet
13. May monitor without disturbing the tracked person and realizes real-time tracking
14. Can position the holder by call or SMS
15. In emergency, press the SOS button to have an accurate positioning

III、Product Specifications

1. Technical Specifications

GSM module	GSM 850/900/1800/1900 MHz Quad frequency
GPS Chip	U-Blox
GPS sensitivity	-163dBm
GPS center frequency	L1, 1575.42MHz
GPS positioning accuracy	5-25m
GSM positioning accuracy	100-500m
Speed accuracy	0.1 m/s
Time accuracy	Synchronous with GPS
GPS Datum	WGS-84
Hot start	< 1s
Warm start	< 38s
Max. altitude	18000m
Max. speed	515m/s
Gravitational acceleration	< 4g

2. Others

Operating temperature	-20---65°C
Humidity	5%---95%
Dimensions	64.5mm×45.5mm×17.5 mm (main unit)
Voltage	Rechargeable 550mAh battery
Power supply	DC4.2V
Standby time	>48h
Buttons	Power on/off button, SOS button; Call 1, Call 2, Call 3

Chapter III Usage Preparation

I、Accessories

1. V683 Main unit
2. USB Cable (recharge and upgrade)
3. Adapter
4. Battery (2pcs);

II、Appearance and Interface

1. Appearance and Buttons

Five buttons are equipped with this watch:

- A: serves for power on and power off;
- B: is used for speak when MIC users on call;
- C: is the I/O socket, use for charge and upgrade;
- D: is an emergency dial (SOS) button, resisted, returns, interface switching;
- E: is the third preset number, menu, answer, determined,
- F: is the second preset number.
- G: is the first preset number;
- H: is the horn, voice and ring output.

As shown in [Appearance Figure 1].



Appearance Figure 1

2. Interface Definition



Interface Figure 1

GSM signal strength is indicated on the upper left corner of the main interface as showed in [Interface Figure 1].



Time Displayed Figure 1

Press the right lower key to switch the interface, as showed in [Time Displayed Figure 1].

III、Charge the Battery

1. Please use up the battery and discharge it for 2-3 times and then charge the battery for at least 12 hours for initial use, in order to keep the quality of the battery.
2. The normal charging time of this product is 3-4 hours.
3. Put the battery into the inside of the terminal and connect the charger to 100V/220V AC power supply to charge the battery. Then the power indicator on the upper right corner of the terminal screen will keep strolling as showed in [Battery Figure 2]



Battery Figure 1

4. When the battery is fully charged, the power indicator will stop strolling; if the battery is charged on switch-off mode, the following [Battery Figure 2] indicates the charging is finished:



Battery Figure 2

Notes:

1. Please always use the charger offered by the supplier. Dangers damages of the product caused by usage of any unconfirmed charger will not be compensated and repaired.
2. The battery should be charged in time when the terminal automatic shutdown or being alarmed with low power.
3. The standby duration and call duration offered by the supplier is calculated in perfect functional mode, in practice, working hours of the battery may vary due to difference of internet service, functional mode and usage mode.
4. Disconnect the terminal and charger as soon as possible after the battery is well charged.

IV、 Installation of SIM Card

Open the back cover, then you will see the place where the SIM card is placed. Then push the SIM card into the slot until it comes into its proper position completely and consolidate it with the dome sheet nearby. Choose SIM card:

1. The type of the SIM card is GSM card(get it from local mobile operator);
2. Ensure sufficient money is within the SIM card in order to pay the communication fee.
3. Prepare a SIM card for mobile phone; make sure that the card has opened such functions of Caller ID and sending and receiving SMS. If service real-time tracking is in need, then GPRS function should be open.

Chapter IV Commands Applications and Operation

I、 Location Inquiry

1. SMS Inquiry

Send command “666+password” to the terminal, the terminal will return a piece of detailed latitude and longitude message, detailed information:

Lat: latitude direction (+/-) latitude value (accurate to 5 digits after decimal point)

Long: longitude direction (+/-) longitude value (accurate to 5 digits after decimal point)

Speed: speed KM/H (accurate to 2 digits after decimal point)

Direction: course direction (accurate to 2 digits after decimal point)

Date: YYYY-MM-DD

Time: HH:MM:SS (Greenwich Mean Time)

BS: Base station information

FIX: positioning status (A/V) (A means Available, V means Unavailable)

ID: IMEI (IMEI number)

STATE: message status

- Example of valid data message:

Lat: +22.50500

Long: +114.01000

Speed: 0.00KM/H

Direction: 315.00

Date: 2008-04-25

Time: 16:39:45

BS: 25ee0dff

Fix: A/V

ID: 353686009002030

STATE: SMS

2. Platform Inquiry (The platform matters please contact the sales personnel)

Step 1: Log onto the platform (Please contact with the service provider to get the

platform address).

Step 2: Click the terminal of the ward, then the location of the ward will be displayed on the map.



Platform Inquiry Figure 1

II、Return Chinese address for single positioning

Instruction format 1: 667+user password

For example: 6670000

Instruction format 2: 667+user password+MAP

For example: 6670000MAP

Instruction format 3: 667+user password+MAP,WWW,HHH,ZZ

For example: 6670000MAP,640,480, 15

Description:

Send instruction 1, it will immediately read GPS information and return Chinese address information to the sending number. For example:

- Within 31 meters southwest of Shangjuhaoyuan east gate on Jingtian East Road in Shenzhen, Guangdong.

Send instruction 2 and a website will be returned. Open it to view current position and screenshot: For example:

- <http://www.gps068.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=240&h=320>

Send instruction 3 to user-defining size and zoom of screen shot. WWW is picture width, HHH is picture height and ZZ is zoom level. (Note: WWW value and HHH value are less than 1000. It is recommended that ZZ value is 1-20. Adjusting ZZ

is to adjust zoom level of screenshot). For example:

- <http://www.gps068.com/cngps/mapaddr.asp?lng=114.09998&lat=22.55709&z=15&w=640&h=480>

Default size of screenshot is 240*320.

The instruction is only valid in China mainland.

III、Return Google map screenshot link for single positioning

Instruction format 1: 668+user password

For example: 6680000

Instruction format 2: 668+user password, WWW, HHH, ZZ

For example: 6680000,999,999,15

Description:

After the device receives instruction 1, it will read GPS information immediately and return Google map screenshot address of local position. Open the website to view position information.

Example of screenshot website is as follows:

- <http://maps.google.com/maps/api/staticmap?center=22.557118,114.100010&z=15&size=240x320&markers=22.557118,114.100010&sensor=true>

Send instruction 2 to user-defining picture size. WWW stands for picture width, HHH stands for picture height and ZZ stands for zoom level (Note: WWW value and HHH value shall not exceed 1000 and ZZ value is recommended to be 1-20).

Default size of screenshot is 240*320.

IV、Return Google map link for single positioning

Instruction format: 669+user password

For example: 6690000

Description:

When the device receives the instruction, it will read GPS information immediately and return Google map link of local position to the number. User can use PDA or smart phone to view local position on Google map.

Website example:

- <http://maps.google.com/maps?f=q&hl=en&q=22.554765,114.104716&ie=UTF8&z=16&iwloc=addr&om=1>

Note:

If the server cannot be connected after the above stated 3 instructions (667/668/669) is sent or due to other cause, the following messages will be returned.

1. If the server cannot be connected, it will return: SERVER BUSY, PLEASE TRY AGAIN LATER.
2. If GPS is not available, it will return GPS UNAVAILABLE, PLEASE TRY AGAIN LATER.
3. When you use Google map in China mainland, there may be deviation between the positioned position and the actual position in special cases.

V、Set authorization number

Instruction format: *new number 4-20digits*user password with 4digits*serial number (1-3) **

For example: *13900000000*0000*1**

Note:

The initial password is: 0000, V683 can be stored three cell phone number at most. When V683 receives the command and will return confirmation message after success. Then the new number replaces the existing number, then send acknowledgement information "SET USER NUMBER (1-3) OK" to the sender after success.

VI、Adjust Receiver Volume

While making phone calls, the user could press upper (G) or center left button (F) to adjust the volume.

VII、SOS for Help Function

If a preset number is set, when the person encounters emergency and presses the SOS button for 3 seconds at least, the terminal will dial the three preset numbers in turn and then upload the GPS data to server with Status "SOS". [SOS Interface Figure 1] is SOS alarming interface:



SOS Interface Figure 1

VIII、 Change user password

Instruction format: 777+new password (4 digits) + old password (4 digits)

For example: 77712340000

Description:

The terminal receives the instruction and return confirmation message after success. The message is “SET USER PASSWORD OK”.

IX、 Change time zone setting

Instruction format: 896 + user password 4 digits + D + NN: MM

For example: 8960000E08:00

Description:

After receiving the instruction, V683 will return confirmation message: TIME ZONE SET OK, CURRENT: E08:00.

- D: takes E (+) or W (-) to indicate east or west time zone respectively.
- NN: takes hours
- MM: take minutes.

Note:

1. Please set the local time zone as your region;
2. Default value is 00:00 (UTC).

X、 Change GPRS user name

Instruction format: #801#user password# new user name##

For example: #801#0000# username##

Description:

After receiving the instruction, V683 will return confirmation message: CHANGE USERNAME OK.

XI、Change GPRS service password

Instruction format: #802#user password# new service password (4 digital or 8 digital) # old service password##

For example: #802#0000#1234(or 12345678) #0000(or 00000000) ##

Description: After receiving the instruction, V683 will return confirmation message: CHANGE PASSWORD OK.

XII、Set APN (Access Point Name)

Instruction format: #803#user password#APN##

For example: #803#0000#CMNET##

Description:

After receiving the instruction, V683 will return confirmation message: SET GPRS APN OK.

Note:

1. As different GSM/GPRS service providers provide different APN, please select instruction format 1 or 2 in accordance with the APN provided by your local service provider.
2. APN is CMNET at the factory or after reset. APN is constituted by 2~35 characters which may be alpha, number, dot (.), underscore (_) or hyphen (-). APN user name and APN password are respectively constituted by 2~30 characters which may be numbers or alphas.

XIII、Set Servers IP address and port number

Instruction format: #804#user password #IP address #port##

For example: #804#0000#210.83.225.181#6998##, or

#804#0000#www.gps068.com#6998##

Description:

After receiving the instruction, V683 will return confirmation message: SET SERVER IP AND PORT OK.

XIV、Set the data upload interval time

Instruction format: #805# user password# sampling interval T# uploaded data

quantity each time N##

For example: #805#0000#10#6##

Description:

After receiving the instruction and confirming that user password is correct, V683 will send confirmation message to the sender “SET GPS SAMPLING TIME AND QUANTITY OK”.

Note:

1. Sampling time T takes second as unit, whose defined domain is [10, 59999].
Uploaded data item number N for each time has a defined domain of [1, 50].
2. If data is not sent to the server due to network problem or other cause, the data will be backed up automatically and sent to the server again after network resumes to normal. Data status is AUTO.
3. If “uploaded data quantity N for each time” is 0, the device will turn off timing upload and send confirmation message to the sender: GPRS TIMER STOP.

XV、Instruction to upload current position immediately

Instruction format: #806# user password##

For example: #806#0000##

Description:

After receiving the instruction, V683 will send confirmation message to the first preset number: “START GPRS UPLOAD” and send data in current storage to the server. Uploaded data status is SMS.

- Upload format:

#IMEI number # user name # service password # status # data quantity [CR]
[LF]

#base station information \$ GPRMC..... [CR] [LF]## [CR] [LF]

For example:

#123456789000001#SR-6869BE#0000#SMS#1

#25ee0dff\$GPRMC,083955.180,A,2233.4249,N,11406.0046,E,0.00,315.00,2512
07,,A*6E ##

Note: Status of immediately uploaded data format is SMS.

XVI、 Low battery Alarm

If working voltage of V683 is lower than the set value, and the device will upload the GPS data to the server and Status is LP. The information will be sent for 3 times with an interval of 1 minute.

XVII、 Geo-fence function

Geo-fence of the device has the following two modes: round geo-fence and square geo-fence.

Round geo-fence takes the set coordinates as center of circle and uses set semi-diameter to determine fence scope. Square geo-fence uses 4 known latitude and longitude points to determine a square fence.

When the function is activated, once V683 steps beyond fence scope, it will upload GPS data to the server and the STATE: OS. At the same time, the first preset phone number will be called. If it fails (the phone is turned off or cannot be connected), the second and the third phone number will be called in sequence.

When V683 enters fence scope again, it will upload the GPS data to the server and the STATE: RS. At the same time, the first preset phone number will be called. If it fails (the phone is turned off or cannot be connected), the second and the third phone number will be called in sequence.

1. Setting of round geo-fence scope

The user may at his discretion select the following formats to operate according to the input different formats of coordinates.

Instruction format 1:

003 + user pass word E/Wdddmm.mmmmN/Sddmm.mmRzzz.z

For example: 0030000E11406.0024N2233.4230R0.1

When receiving the instruction, V683 will return confirmation message to the sender: SET GEO-FENCE OK and turn on geo-fence function.

Description: E: east longitude; W: west longitude; N: north latitude; S: south latitude. Here E and N are used to explain as an example. Please select corresponding coordinate formats in accordance with actual geographic position. Each section's meaning of the example is as follows:

Edddmm.mmmm is longitude information with degree and minute as unit, among which ddd stands for degree and mm.mmmm stands for minute (4 digits after

decimal point is maintained and zero cannot be omitted).

Nddmm.mmmmm is latitude information with degree and minute as unit, among which dd stands for degree and mm.mmmmm stands for minute (4 digits after decimal point is maintained and zero cannot be omitted).

zzz.z is radius with definition domain of [0.1, 999.9] and unit of KM.

Instruction format 2: 004 + user password E/Wddd.dddddN/Sdd.ddddRzzz.z

For example: 0040000E114.10004N22.55705R999.9

When receiving the instruction, V683 will return confirmation message to the sender: SET GEO-FENCE OK and turn on geo-fence function.

Description: E: east longitude; W: west longitude; N: north latitude; S: south latitude. Here E and N are used to explain as an example. Please select corresponding coordinate formats in accordance with actual geographic position. Each section's meaning of the example is as follows:

Eddd.ddddd is longitude information with degree as unit, among which ddd.ddddd stands for degree (5 digits after decimal point is maintained and zero cannot be omitted).

Ndd.ddddd is latitude information with degree as unit, among which dd.ddddd stands for degree (5 digits after decimal point is maintained and zero cannot be omitted).

zzz.z is radius with definition domain of [0.1, 999.9] and unit of KM.

Instruction format 3: 005 + user password+Rzzz.z

For example: 0050000R0.1

Description: After receiving the instruction, V683 will extract current longitude and latitude information as fence coordinate from the latest GPS data and takes R value as radius. It also turns on geo-fence and send confirmation message to the sender after success: GEO-FENCE ON.

Note: zzz.z is radius with definition domain of [0.1, 999.9].

2. Instruction to turn on round geo-fence

Turn on geo-fence: 211 + user password

After receiving the instruction, V683 will return confirmation message: GEO-FENCE ON.

3. Turn off round geo-fence instruction: 210 + user password

After receiving the instruction, V683 will return confirmation message: GEO-FENCE OFF.

Note:

1. Fence radius shall not exceed its defined domain. When decimal digit is 0, please add 0. For example, when R is 1, please enter 1.0.
2. If calling status is off, message will be sent to preset user instead of calling him.
3. Degree and minutes is of sexagesimal system, i.e., 1d=60m.

4. Setting of square geo-fence scope

Instruction format: 006 + user password + GX, IO/I/O, E/W longitude upper limit + N/S latitude upper limit, E/W longitude lower limit + N/S latitude lower limit.

For example: 0060000G1, IO, E114.10004N22.55705,E115.10006N23.55706

After receiving the instruction, V683 will return confirmation message: SET SQUARE GEO-FENCE GX (IO/I/O) OK.

Description: GX is geo-fence X, whose value range is [1, 16]. IO means warning for both outgoing and incoming fence; I means warning for incoming fence; O means outgoing fence. Longitude and latitude value take degree as unit. 5 digits after decimal point shall be reserved and 0 shall not be omitted.

IO means warning for both outgoing and incoming fence; I means warning for incoming fence; O means outgoing fence.

Note:

1. After setting is completed, fence is turned on automatically. Now, default fence type is IO, i.e., warning for both outgoing and incoming fence.
2. If calling status is off, message will be sent to preset user in SMS mode instead of calling him.
3. Value set by the instruction is not subject to power off or switch on/off until change instruction or restoration operation is received again.
4. After restoration, longitude value is indicated by 0. Fence is in cutoff status.

5. Turn on square geo-fence

Turn on all square geo-fence: 311 + user password

For example: 3110000

Turn on single square geo-fence: 311 + user password +GX

For example: 3110000G5

Description:

The instruction is used to turn on all square geo-fence and turn on single square geo-fence. GX stands for geo-fence X, whose value range is [1, 16]. After receiving the instruction, V683 returns confirmation message: SET ALL SQUARE GEO FENCE: ON. When turning on single square geo-fence, it returns confirmation message: SET SQUARE GEO FENCE GX: ON.

6. Instruction to turn off square geo-fence

Turn off all rectangular geo-fence: 310 + user password

For example: 3100000

Turn off single rectangular geo-fence: 310 + user password +GX

For example: 3100000G5

Description:

The instruction is used to turn on all rectangular geo-fence and turn on single rectangular geo-fence. GX stands for geo-fence X, whose value range is [1, 16]. After receiving the instruction, V683 returns confirmation message: SET ALL SQUARE GEO FENCE: OFF. When turning on single square geo-fence, it returns confirmation message: SET SQUARE GEO FENCE GX: OFF.

Note: If multiple set square fences give warning at the same time. G1 will call and G2, G3, G4... will send position message instead of calling. As for the ex-factory configuration or in case of restoration, the status is RS by default.

Notice: Above stated geo-fences are optional. When the device receives geo-fence setting instruction, geo-fence function will be activated automatically. When geo-fence function is activated again after turned off, previous setting remains valid.

7. Set the number of returned base stations

Instruction format: 55X+user password (4 digits)

For example: 5510000

Description: After success to receive the instruction, the device will immediately return confirmation information: SET BASESTATION OK.

Note:

1. X is base station number with value range of [0, 6].
2. If X is 0, position information contains no base station information.
3. Default number of base station is 1.

XVIII、 Read the base station information

Instruction format: 111 + user password four

For example: 1110000

Description: When the equipment received this instruction, after the success to return to the following format information to the sender.

Data format: BS: base station information 1, station information 2, base station information... n

XIX、 Auxiliary Function

1. Read all the setting parameters of the device.

Instruction format: * RCONF#

For example: * RCONF#

Data formats:

- IMEI: IMEI number
- GEO-FENCE=
- RATE:
- SAMP: upload sampling interval, a number of article upload (time upload mode)
- SRV: the server IP address, the port number
- APN:,, APN, APN user name, the APN user password
- Timezone:
- U1: number 1
- U2: number 2
- U3: number 3.

2. Reset instruction

Instruction format: * RESET# pwd ##

For example: * RESET# 0000 ##

Description: Equipment received this instruction, the device will immediately

return the information: “RESTORE SYSTEM PARAMETERS INTO FACOTRY
DEFAULT OK”

3. Read electronic fence condition

Instruction format: *GSQGF#PW##

For example: *GSQGF#0000##

Function description: when the module received instruction, to return to the module of the electronic fence with the current situation.

Data formats: G1: ON, E114.10004 N22.55705, E115.10004 N23.54004, RS

4. Read equipment version

Instruction format: *SWVER#PW##

For example: *SWVER#0000##

Function description: when the module received instruction, return module save equipment version.

Data formats: SOFTVER: T1.00.007 F4 2010/02/06 RELEASE

5. Reset user password

When user forget the password, can use this command to reset the password.

Instruction format: *GPSW#PW##

For example: *GPSW#0000##

Description:

After success to receive the instruction, the device will immediately return the information: “ TEMPORARY PASSWORD:xxxx (PLEASE REPLY '777<new password>xxxx' TO CHANGE PASSWORD WITHIN 1 HOUR)”

Note:

1. XXXX: random temporary passwords.
2. The user can set the new password by 777 command.
3. Only the pre-set phone number can send this instruction;

Chapter V Notices

1. This device is of non-waterproof design.
2. This device must work with the cooperation of GSM/GPRS network.
3. Make sure that the SIM card has sufficient balance in order to avoid inconvenience in use.
4. This device will not be able to work in case of power-off and out of the service area, even if you are a registered user.
5. This device supports the dual positioning mode of GPS and GSM/GPRS.
6. Please use this device in a legal area, any illegal consequence will be borne by the user.

Notes: due to the high sensitivity of the GPS module adopted by this product, it is normal to be drifting with weak GPS signal.

Chapter VI Warranty

The following after services are provided in order to serve and satisfy the customers:

I、Warranty scope:

1. The product may be replaced free of charge within 30 days since purchase in the event that it is ineligible when normal operation (man-made sabotage excluded) and without dismantlement.
2. The product will be maintained and repaired by supplier free of charge within one year after purchase if it meets with trouble in normal operation due to ineligible quality and without dismantlement.
3. The product shall be repaired upon payment beyond warranty period.
4. The product shall be repaired after the authorization of supplier.

II、Exemption clauses

1. Any damage or malfunction of fittings incurred by user's improper operation, maintenance, or storage;
2. Any damage or malfunction caused due to majeure such as rain, natural disaster, etc.

The instruction manual subjects to successive update without prior notice. Please contact our sales manager or technicians if needed.