User Manual

Reverse Tap V20

REVERSE TAP

2

Warning

❖ **Power**
  - Do not use damaged power plug and cord
  - Do not touch power plug by wet hands
  - Otherwise there might be risk by electrical shock and fire

❖ **For installation**
  - Make sure to close all valves before installation
  - Otherwise, high pressure in gas or beverage container may cause injury
  - Install product on horizontal and smooth floor

❖ **Cleaning**
  - Do not spray water directly on circuit for cleaning. Do not use benzene,
    thinner and Sodium Hypochlorite for cleaning
  - Otherwise there might be risk by electrical shock and fire
.
❖ **Miscellaneous**
  - Do not disassemble, repair or alter this product at your discretion
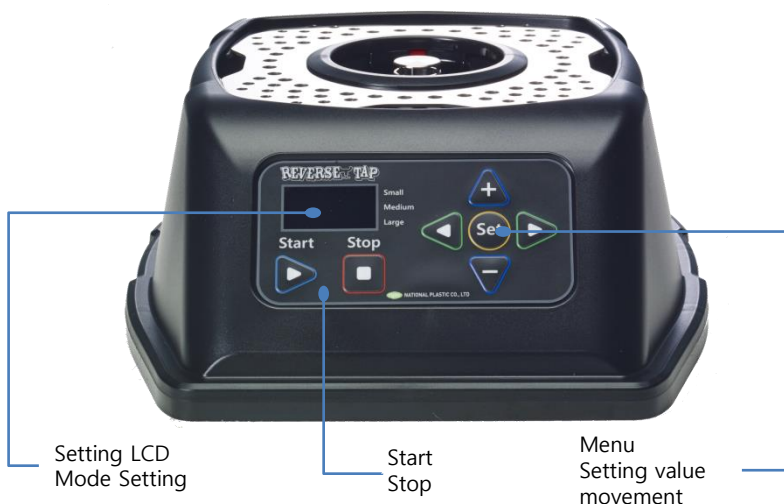 - If you need repair, make sure contact with service center

Cautions

❖ **Power management**
  - Turn off power when lightning strikes or when this product is not used
     for a long time
  - If there occurs strange smell or smoke in the product, make sure to turn
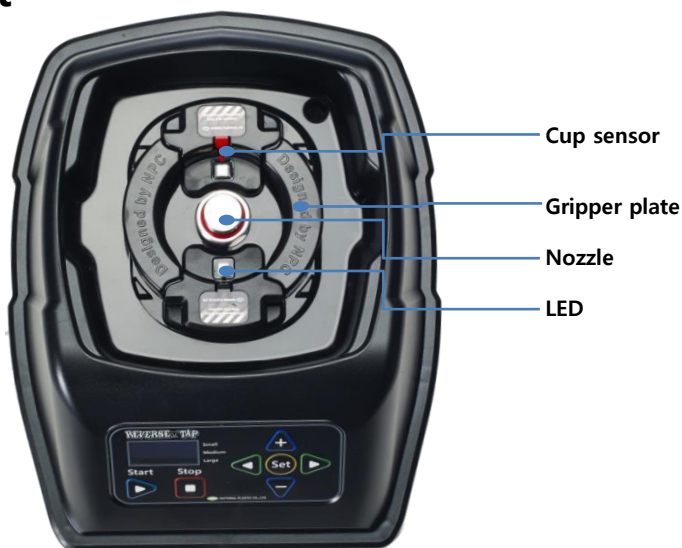   off power immediately and contact with service center

❖ **Safety check**
  - Electricity is not available.
  - Adapter is too hot
  - Electricity flows when product is running.
  - Other abnormality or malfunction exist
  - Make sure to turn off power switch and make contact with shop
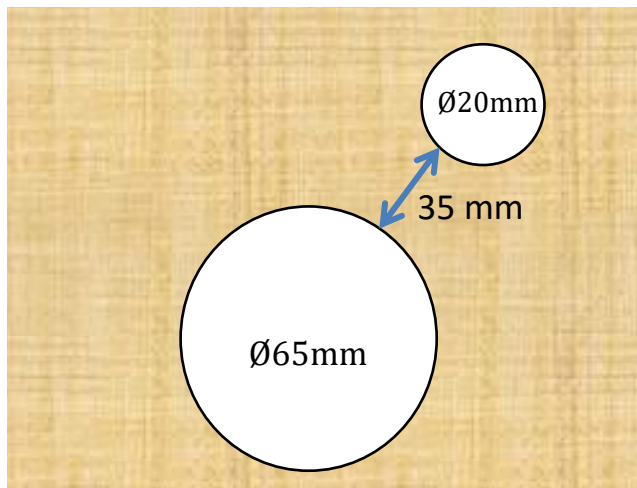   where you purchased this product, or service center

![REVERSE TAP]

❖Front side

Setting LCD
Mode Setting

Start
Stop

Menu
Setting value
movement

❖Outlet

Cup sensor

Gripper plate

Nozzle

LED

REVERSE TAP

❖ Check list before installation

● Pipe passage in installation table is required
➢ Three piping holes are required

Ø20mm

35 mm

Ø65mm

● Selection of installation location
  - Make sure that floor is plat and even
  - Make sure to check that floor is able to withstand weight of the product
  - Make sure that electrical connection is available
  - It's required that piping is easy and there is little moisture for installation location
  - Avoid locations where lots of heat exist or too cold location.

● Grounding
  - grounding is absolutely required to prevent electrical leakage or shock In case that there is ant abnormality on the product
  - No additional grounding is required if receptacle has its own earth terminal (Otherwise a receptacle requires grounding)
  - If there is no grounding on receptacle, make sure to connect grounding line to conducting area of the product and then connect it to metal water tap pipe or grounding line
  - Do not use receptacle whose grounding line doesn't exist. Otherwise micro current leakage may be generated.
  - For more detailed information in connection with installation, consult with shop where you purchased this product or service center

❖ **Beverage is not discharged**

● Make sure to check KEG and CO2 gas valve before use
➢ If valve is locked, then beverage is not discharged.

● Make sure to check residual beverage in KEG before use
➢ If beverage is insufficient, beverage is not discharged.

● Make sure to check residual CO2 before use
➢ If CO2 is insufficient, beverage is not discharged.

❖ **When lots of bubble is generated**

● Make sure to check that valve and nozzle is cooled before use
➢ When this product is first installed, lots of bubble may be generated from nozzle and valve due to differences in temperature.

● Remove bubble in beverage pipe before using this product
➢ Bubble may be generated due to residual bubble in pipe

● Before using this product, make sure to remove leakage in connecting area of various pipes
➢ Leakage in pipe connection may generate bubble

● Make sure to fit flow rate by adjusting valve in beverage pipe
➢ Bubble may be generated due to rapid flow rate

● Use this product after temperature of beverage is cooled
➢ High temperature of beverage may cause bubble

● Use the product when beverage in KEG is sufficient
➢ If beverage is insufficient, bubble may be generated.

❖ **Configuration Item**

1. Top cover	**2. Top cover cap**	**3. Gripper**

5. DC power adaptor	**6. Hose band**	**7. Drain hose**

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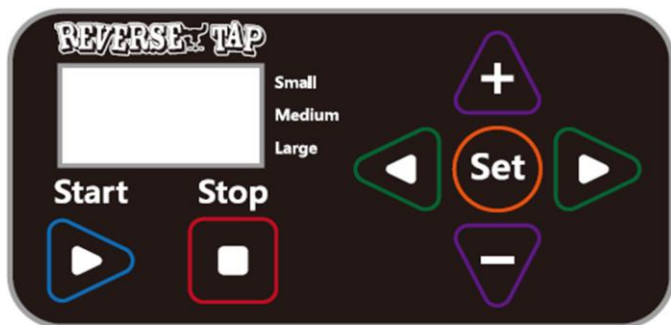
■ Display and function switches

1. Capacity
It displays capacity of currently set cup: Large /Medium / Small on OLED

2. Power OFF
By pressing 'STOP' button for more than 2 seconds in waiting mode, power is turned off along with long beep sound

3. Power ON
By pressing 'START' button for more than 2 seconds while power is turned off, power is turned on along with long beep sound and then system is initialized.

4. Start and Stop switches
By pressing 'START' button in manual mode while cup is recognized, selected amount of beer is discharged. When 'STOP' button is pushed in auto or manual mode, discharge of beer is stopped.
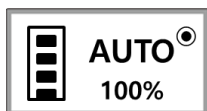
5. Mode change and confirm switches
This is a switch to change functions or save changed values

6. Changing set value switch
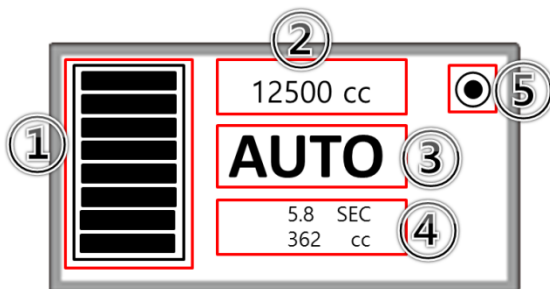These switches change values such as amount of discharge

7. OLED display
OLED displays current operation status, mode selection and set values

■ Configuring the default display

1. Amount of discharge (Figure)
In usual status, there is no figure. But if a cup entered, outer shape appears and if beer starts to be poured then internal level is rising up.

2. Displaying accumulated amount
If beer in Keg is completely consumed, then amount of sold beer is displayed and if residual of beer is less than 10%, warning is displayed to prevent bubble of beer from being burst out.
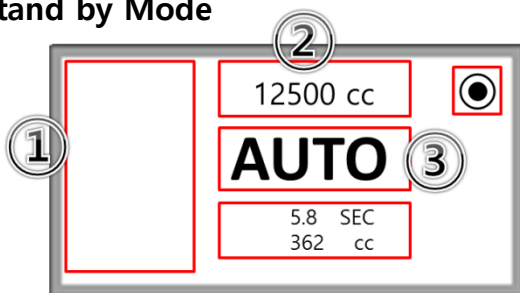
3. AUTO/MANUAL
This indicates current status

4. Set time and amount of discharge (%)
In usual status, set time is displayed and when beer is discharged, then it is expressed in percent

5. Small, Medium, Large
This indicates current set value

■ Stand by Mode

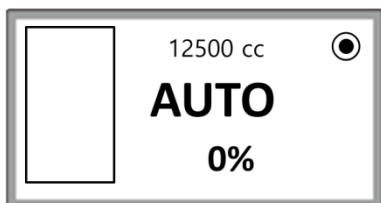**1. Amount of discharge (Figure)**
No figure in usual condition

2. Accumulated discharge
This indicates accumulated discharge until now after KEG is replaced. In case of 20,000 CC KGE, when discharge amount exceeds 18,000 CC, then this blinks. Make sure to press ▼ button for more than 2 seconds to clear KEG after it is replaced
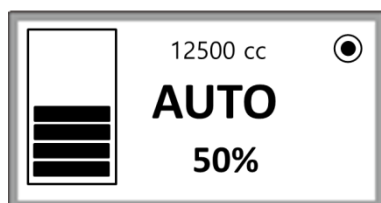
3. AUTO/MANUAL
This indicates current set value

REVERSE TAP

■ Standby mode

<table>
<tr><td>

```
12500 cc    ◉
AUTO
0%
```
</td><td>

• When a cup is recognized, amount of discharge is displayed in percent instead of set value
</td></tr>
<tr><td>

```
12500 cc    ◉
AUTO
50%
```
</td><td>

■ When beer is discharged, bar is rising displaying amount in percent
</td></tr>
</table>

■ Mode Selection

1. **Auto / Manual Mode**
2. **Size Mode**
3. **Bubble Mode**
4. **Sales count Mode**
5. **LED Lamp Mode**
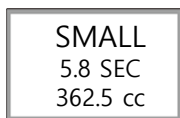6. **Cup Sensor Mode**
7. **KEG Volume Mode**
8. **DEMO Mode**

When you push the Right button 1 -> 2 -> 3 -> 4 -> 5 -> 6 -> 7 -> 8 -> 1
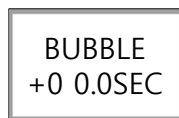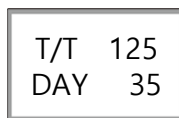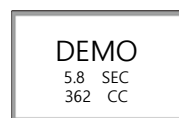**When you push the Left button   1 -> 8 -> 7 -> 6 -> 5 -> 4 -> 3 -> 2 -> 1**

■ Mode Display

AUTO	SMALL 5.8 SEC 362.5 cc	BUBBLE +0 0.0SEC	T/T 125 DAY 35
<Auto / Manual>	**<Size Setting>**	**<Bubble Setting>**	**<Sales count >**

LED Lamp MODE 1	CUP SENS DOUBLE	KEG ALARM 0.1 SEC : 6.25CC ALARM : 18000 CC	DEMO 5.8 SEC 362 CC
<LED Settingl>	**<Cup Sensor Set>**	**<KEG Setting>**	**<DEMO setting>**

■ How to set mode

AUTO

➤ By pressing **Set** button for more than 2 seconds, display is switched into screen change mode

➤ Initial mode is AUTO/MANUAL mode

➤ If you want to change set value in mode screen, then push **Set** button, then value is blinking

➤ and if you push **+** **−** button, value is set, make sure to confirm changed value by pressing **Set** button again. After all changes are completed, make sure to push **Set** button for more than 2 seconds to save changed values. Otherwise or if power is turned off without saving set values, then the changes are not reflected.

■ Auto / Manual Mode

➤ **Auto Mode**
When a cup is recognized, then beer is discharged in 0.5 second according to set values: Large / Medium / Small.

➤ **Manual mode**
Although a cup is recognized, beer is not discharged without pushing 'START' button. By pressing 'STOP' button,

AUTO   Manual

If you select Auto / Manual mode by pushing left or right button, then **currently set mode** is displayed. By pushing **Set** button, current status is blinking along with beep sound and then system is ready to change mode. By pushing **+** **−** button, mode is switched into Auto<->Manual mode and then setting is completed along with beep sound by pushing **Set** button. Make sure to save set value by pushing **Set** button long. Even though power is turned off, set value is not changed nor return to original status.

■ Capacity change mode

Amount of discharge is set by Large / Medium / Small. But it can be tuned by tiny amount for each set

<div style="border:1px solid black; text-align:center">

SMALL
5.8 sec
362.5 CC

</div>
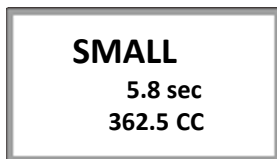
➤ By pushing left and right button ◀ ▶ select capacity change mode, then currently set mode is displayed . If you push Set button, the system is ready to change setting along with beep sound.

➤ By pushing + − button, mode is switched into Small <-> Medium<-> Large. Select capacity by pushing + − button and then time change screen for corresponding capacity is displayed.

➤ By pushing Set time of discharge is changed every 0.1 second and expected amount of discharge is displayed as well.

➤ Make sure to save set value along with beep sound by pushing ■ button long. Even though power is turned off, set value is not changed nor return to original status.
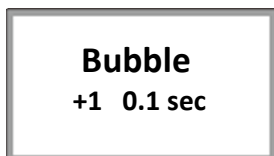
■ Changing amount of bubble

When changing bubble amount is set, specified amount is discharged but last amount is discharged being divided into certain amount.

<div style="border:1px solid black; text-align:center">

Bubble
+1   0.1 sec

</div>

By pushing left and right ◀ ▶ button, select bubble amount mode, then currently set mode is displayed. By pushing Set button, machine is ready to change set value sounding beep.

Change number by pushing Set Left number is changed into +1 <-> +2 <-> +3 <-> 0 <-> -1 <-> -2 <-> -3. This means that +1 indicates once before discharge while -3 indicates three times after discharge. By pushing Set button, right number is blinking.

By pushing + − time is changed by every 0.1 second from 0.1 second to 0.9 second. Make sure to save set value along with beep sound by pushing Set button long. Even though power is turned off, set value is not changed nor return to original status.

■ Bubble Mode

If number is '+', this span is operated forward whereas '0' indicates non-operation

Bubble
+1   0.1 sec

Ex.   **Setting ->**   **-2   0.5 sec**

| 0.5 sec | | 0.2sec | 0.5 sec | 0.2sec | 0.5 sec |

① **Cup recognition**
② **Valve opened**
③ **Valve locked**
④ **Valve opened**
⑤ **Valve locked**
⑥ **Valve opened**
⑦ **Work finished**
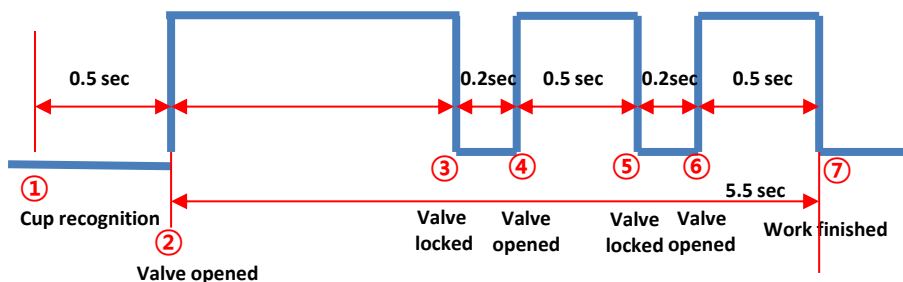
5.5 sec

If a cup is recognized, valve is opened in 0.5 second and it is locked in 4.5 second which is calculated by subtracting 1 second (0.5 second x 2 times) from a total time of 5.5 seconds and two times of opening valve for 0.5 seconds after 0.2 seconds (fixed time) is repeated, which amounts to total 5.5 seconds of opening valve.

■ Displaying number of sold cups

This indicates accumulated amount of sold beer until now including whole amount and today's amount.

T/T 2350 ①   **Accumulated amount**

DAY 220 ②   **Today's amount**

➤ By pushing left and right button ◀ ▶ and select display mode for sold beer, then currently selected mode is displayed. Whenever beer is sold, accumulated sales and today's sale are displayed in number of cups.

➤ By pushing ▼ button, for more than 2 seconds, it is cleared along with beep sound. When accumulated amount of sold beer is cleared, then today's sold beer is also cleared.

➤ By pushing **Set** button again, DAY 220 is blinking. by pushing ▼ button for more than 2 seconds, it is cleared along with beep sound. Although today's sold beer is cleared, accumulated amount is not changed.

➤ Accumulated amount is not changed nor cleared before it is manually cleared although power is turned off.

■ Changing LED illumination

```
LED Lamp
Mode 1
```
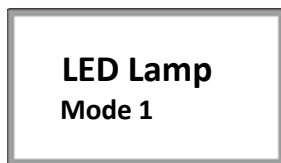
➢ By pushing left and right button ◀ ▶ and select display mode for sold beer, then <u>currently selected mode</u> is displayed.

➢ By pushing **Set** button, machine is ready to change mode along with beep sound. By pushing **+** **–** button, mode is changed. Finally by pushing **Set** button, mode is selected along with beep sound. Make sure to save setting by pushing **Set** button long. Setting is not changed although power is turned off.

```
Mode 0 :  Various Color          Mode 6  :  Yellow Color LED
Mode 1 : Red Color LED           Mode 7  :  Purple  Color LED
Mode 2 : Green Color LED         Mode 8  :  Light Green Color LED
Mode 3 : Blue LED                Mode 9  :  Light blue  Color LED
Mode 4 : White LED               Mode 10 :  Light purple Color LED
Mode 5 : Blink LED               Mode 11 :  Light yellow LED
```

■ Changing method to recognize cup (sensor)

As number of cup recognition sensor is two, set value for operation can be changed.

```
CUP SENSOR
DOUBLE
```

➢ By pushing left and right ◀ ▶ button, select illumination change mode, then <u>currently set mode</u> is displayed. If you push **Set** button, the machine is ready to change set value along with beep sound. Mode is changed by pushing **+** **–** button.

➢ Make sure to save setting by pushing **Set** button long. Setting is not changed although power is turned off.

```
DOUBLE Mode
If the machine is set to "DOUBLE', beverage can be discharged only
when both sensors are all recognized.

SINGLE Mode
 If the machine is set to "SINGLE', beverage is discharged although one
of both sensors is recognized.
```

■ Changing KEG capacity

This enables to set amount of discharge and capacity of KEG

KEG ALARM
0.1 SEC : 6.25 CC
ALARM : 18000 CC

➢ By pushing left and right ◀▶ button, select illumination change mode,
   then currently set mode is displayed.

➢ If you push Set button, the machine is ready to change setting along with
   beep sounds. You can also change set value by ▲▼ button

➢ Finally, if you push ▲▼ button, then setting is completed along with beep
   sound. Next make sure to save setting by pushing Set button for long
   time.

➢ Setting is not changed although power is turned off. 'Changing amount of
   discharge' enables to change setting of discharging amount. Amount of
   discharge can be changed every 0.05 CC using ▲▼ button.

➢ 'ALARM is changed by every 100 cc. This set value is for changing amount
   of alarm in waiting screen.

➢ ** This setting doesn't change amount of discharge but change standard
   value of discharging amount based on measured value. If you want to
   change standard value, then push ▼ button for long time, then it is
   recovered to initial value.

REVERSE TAP

■ Whole Structure

Cup

Reversetap

Out

Out

In

In

Cooler

Beer KEG container

Co2
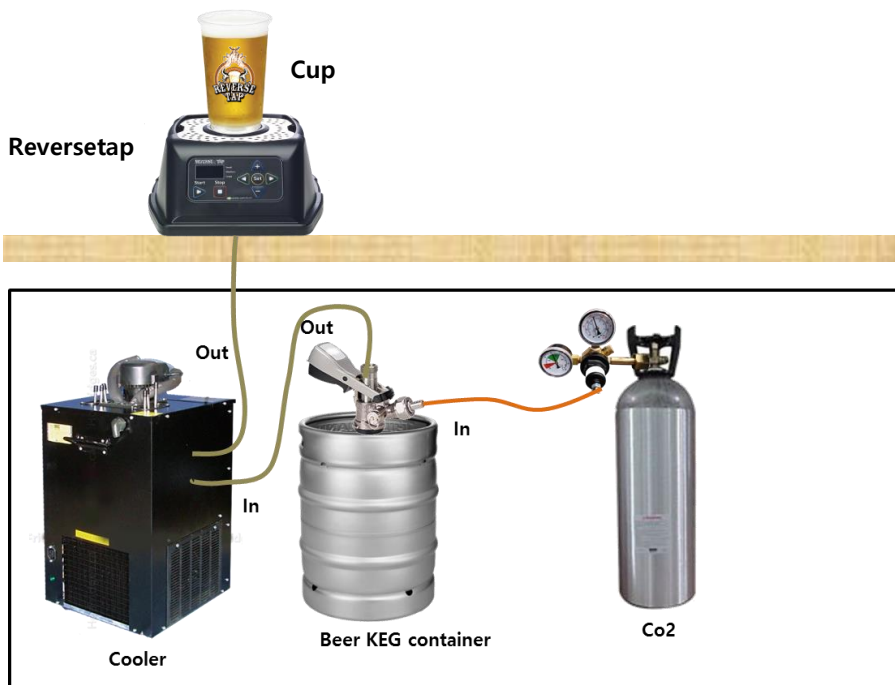
■ Tools

① **Drill (if necessary)**

② **Wrenches**

③ **+ ,- Driver**

④ **Multi scissors**

⑤ **Knife**

⑥ **Lighter or torch**

❖ How to clean the product

● **Auxiliary parts for dispenser**
➢ Clean them by water and neutral detergent
➢ Clean beverage pipes or replace them regularly (once every 6 month)

● **How to disassemble the product for cleaning**
➢ Grab top cover by both hands and unplug it by lifting it up.
➢ Grab gripper plate by hand and lift it up for unplugging
➢ Unplug nozzle by rotating it counter-clockwise

● **How to clean beverage pipes**
➢ Fill washing container with clean water and connect it with head
➢ Open Co2 gas valve
➢ Put a cup to dispenser and let beverage be discharged
➢ Repeat the above action until clean water is discharged
➢ Lock CO_2 gas valve and remove CO_2 in washing container
➢ Separate head from washing container and put it into clean water

● **Reference**
➢ If the product is not used for a long time, drain all beverage inside pipes and wash them using water and dry it.

● **Cautions**
➢ Do not spray water on the product directly. Do not clean it with benzene, thinner, Sodium Hypochlorite, alcohol and acetone. Otherwise there might be risk caused by fire or electric shock
➢ Do not use coarse surface of substance such as brush, loofah and coarse cloths for cleaning dispenser
➢ Make sure to turn power switch off and then turn it on after cleaning. Otherwise there might be risk caused by fire or electric shock

Symptom	Checks	Treatment
Beverage is not discharged	Is power switch off?	Turn power switch On
	Is adapter power unplugged?	Plug adapter power again
	Is KEG valve locked?	Open valve of KEG
	Is CO2 gas valve locked?	Open CO2 gas valve
	Is flow rate regulator locked?	Open flow rate regulator
	Is head connected?	Connect head to KEG
	Is there beverage in KEG?	Replace it with a KEG including beverage
	Is coil in cooler frozen	Request A/S
	Is a cup well recognized?	Make sure to check operational status for cup recognition sensor
Lots of bubble are created	Is beverage pipe is broken? Or isn't it isolated from heat?	Replace pipe and keep it isolated from hear
	Is pipe connected to sol valve leaked?	Make sure to check fastening of clamp for pipe connection
	Is nozzle temperature high?	Make sure to keep nozzle temperature under proper level
	Is beer KEG significantly swaying during transportation?	Make sure to stabilize it for an hour before use
	Is pressure of CO2 too low?	Adjust the pressure under proper level (30 ~ 55PSI)
	Is flow rate regulation correct?	Adjust flow rate regulator to proper level
	Is gas leaked from head?	Make sure to check head and then re-connect it
Bubble is too scarce	Is CO2 gas pressure too low?	Make sure to check gauge and adjust it under proper level
	Is flow rare regulation incorrect?	Adjust flow rate regulator under proper level

E R R O R   H A N D L I N G

Symptom	Checks	Treatment
Beverage is not cool	Is cooler properly operated?	Make sure to check power of cooler
	Is cooling water insufficient?	Refill cooling water up to a level where coil is soaked
	Is agitating motor malfunctioned?	Request A/S
	Is temperature of KEG high?	Keep KEG under a chilled area
There is a strange smell on beverage	Is pipe connection checked?	Replace pipes with new pipes once every 6 month
	Is pipe cleaned?	Wash it regularly
	Is KEG well preserved?	Replace KEG before use
	Is a cup clean?	Use a clean cup
The machine is not operated although the button is pushed	Button may not be operated if it is touched by wet hands, cleaned by damp cloth, which means that button sensing part is abnormal due to moisture. Make sure to remove moisture on button.	
Screen of LCD monitor is abnormal	Is abnormality still persistent although power is turned off and turned on again?	Request A/S
Main LCD touching is not operated	Is abnormality still persistent although power is turned off and turned on again?	Request A/S

Reverse Tap

❖ Default Setting Value
● Default setting value are as below

Parameter	Default Setting	Min	Max	Remark
Small Cup On Time	5.8	0	99	sec
Medium Cup On Time	7.5	0	99	sec
Large Cup On Time	11.3	0	99	sec
Bubble Count	0	-3	+3	
Bubble Generation Time	0	0	0.9	sec
Total Cups	0	0	50000	Total sales amount / EA
Daily Cup	0	0	5000	Daily sales amount / EA
Flow Count	0	0	1000000	impeller sign count
LED Mode	0	0	11	LED Mode
OLED Contrast Value	5	0	255	OLED brightness , 0~7 step
Cup Sense Mode	1	0	1	Cup sensor method
Capacity Unit	6.25	0	100	Discharged rate, / cc
Alarm Capacity	18000	0	50000	Alarm value / cc

❖ Product specification

Model name		SINGLE	TWIN
Weight of main body		1.5Kg	9Kg
Product dimension	Horizontal (mm)	238mm	350mm
	Vertical (mm)	300mm	375mm
	Height (mm)	92mm	140mm
Rated voltage		DC 24V /1.5A	DC 24 / 2.5A
Power consumption			
Photographs			

> ➢ Design and product specifications may be changed for quality improvement without notification
> ➢ Auxiliary products may vary depending on each model. If you want to purchase additional auxiliary parts, consult with shop where you purchased this product

Company Information
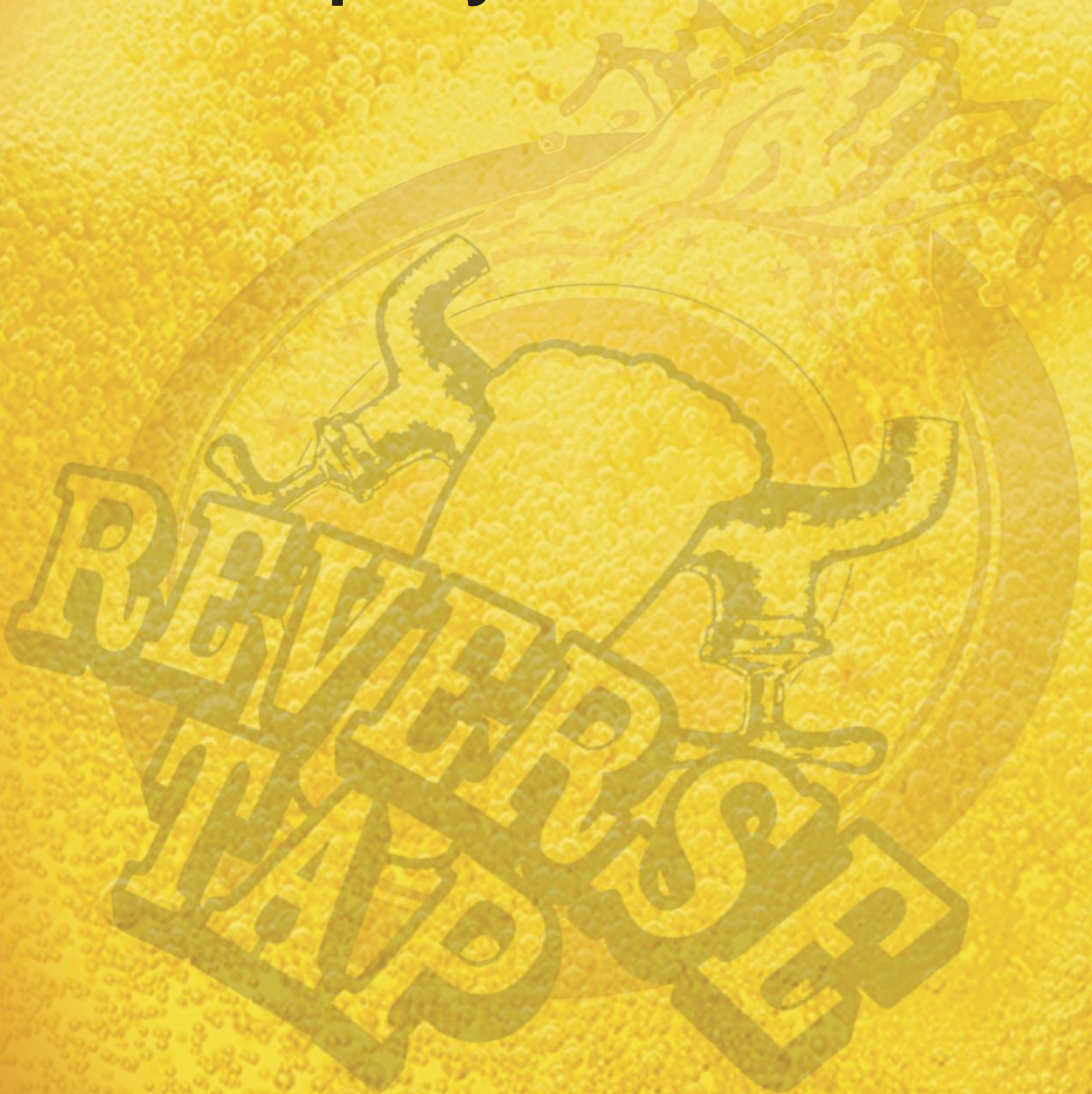
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Customer Center