USER MANUAL

MODEL NUMBER:

GK2T-24VAC

AND RELATED UNITS

Doorway Central Station

English (Original Instructions)

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

WARNING

Read this manual completely and understand the machine before operating or servicing it.

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Do not exceed an incoming air pressure of 100 psi (6.9 bar).
- Do not exceed a fluid temperature of 100˚F (37.8˚C).
- Only use clean and dry air.
- Do not use an air lubricator before the unit.
- Never use unit if it is damaged or leaking.
- Disconnect unit from electrical power source and from the air and solution supply lines before servicing.

PROTECT THE ENVIRONMENT
Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

*Specifications and parts are subject to change without notice.

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REQUIREMENTS	
Compressed air requirements	40-80 psi (2.8-5.5 bar) with 3.5-8 cfm (99.1-226.5 l/min)
Liquid temperature range	40-100˚F (4.4-37.8˚C)
Electrical requirements	120 VAC at 60 Hz, 2 amps (GFCI protected outlet)
Operating voltage	24 VAC (Included adapter converts 120VAC to 24 VAC)
Central system requirements	Pre-mixed solution must be supplied by a properly sized header system at 2 gpm and 40 to 80 psi (2.8 to 5.5 bar).
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or MSDS for your product or contact our customer service department.

SPECIFICATIONS	
Power type	Compressed air and electricity
Chemical pickup type	Pre-mixed solution
Number of products unit can draw from	One product
Output volume	Approximately 15 gal/min (56 l/min)
Flow rate*	2 gal/min (7.6 l/min)
Pump seals	Santoprene, Viton, or Kalrez
Timer operation type	Repeat cycle
Coverage area**	5 ft. wide by 9 ft. long (1.5 m wide by 2.7 m long)
Number of nozzles	One control box can support up to two nozzle assemblies
Nozzle type	Single-line poly nozzle assembly (NZA-DS-SL) (sold separately)
Distance from nozzles to control box	The combined distance between the control box and the nozzle(s) must equal 25 ft. (7.6 m) or less
Tubing/fitting sizes	Designed for use with 1/2 in. (12.7 mm) outside diameter tubing between control box and nozzle(s)

*Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.
**Foam pattern dimensions provided were measured with nozzle assemblies mounted 6 in. (15 cm) above the floor.

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Installation Instructions:

To Install Control Box:

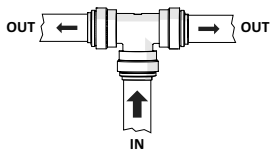
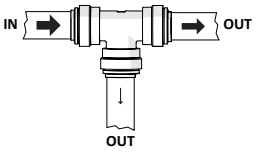
1. Remove all components from packaging.
2. Select an area to mount the control box.
   Note: The control box should be mounted to a vertical wall.
3. Attach the control box mounting feet to the back of the control box, using the four screws provided in the parts package.
4. Mount the control box to the wall using four of the screws and plastic anchors provided in the parts package.
   Note: To drill holes for the plastic anchors, use a 5⁄16 inch drill bit.

To Install Nozzle Assembly:

Note: Nozzle assembly is sold seperately

1. Verify the control box has been installed.
2. Mount the nozzle assembly in the desired location, using the mounting brackets and two of the screws and plastic anchors provided in the parts package. Repeat as needed for multiple nozzles.
   Note: To drill holes for the plastic anchors, use a 5⁄16 inch drill bit.
3. Run tubing from the outlet fitting on the control box to the inlet fitting on the nozzle assembly. For multiple nozzles, run the tubing from the control box into a tee fitting, as shown in tee fitting diagram. Then, run tubing from the tee fitting to the nozzle assemblies.

TEE FITTING (QFT12) DIAGRAM

Correct	Incorrect
	
Connecting the inlet to the stem of the tee creates even discharge from each side	Connecting the inlet to one side of the tee creates uneven discharge

To Connect Control Box to Header Supply Line:

1. After control box and nozzle assembly have been installed, connect compressed air line to air inlet fitting on control box.
2. Connect the pre-mixed solution header supply line to solution inlet quick fitting, or remove quick fitting and connect solution supply line to threaded inlet fitting.
   Note: The air and solution lines must be routed to the appropriate fittings (as labeled). Make sure to insert the tubing all the way into the push fittings to ensure proper connection. A shut off valve must be installed between the header supply line and the control box, to provide the ability to deactivate the control box for maintenance.

To Calibrate Foam Station:

3. Make sure the power switch is in the “OFF” position, plug the unit into a GFCI protected 120 VAC outlet.
4. To activate unit, turn the power switch ON. The unit will begin cycling through the on time and off time intervals set on the timer, beginning with the on time.
5. Ensure the needle valve, located inside control box, is completely open by turning knob counter-clockwise.
6. Ensure air pressure is set for desired foam quality.
   To adjust air pressure:
   a. While unit is running and discharging product, pull up and turn the air regulator adjustment knob until the air gauge reads 10 psi (0.68 bar).
   b. Slowly increase air pressure by turning the air regulator adjustment knob until desired foam quality is achieved.
7. To deactivate the unit, turn the power switch OFF.
8. Set the timer for the desired on time and off time, as described in the timer adjustment instructions.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

Operation Instructions:

1. Verify that the unit is connected to compressed air and chemical line, and timer is set and plugged into GFCI protected 120 VAC outlet.
2. To activate unit, turn the power switch ON. The unit will begin cycling through the on time and off time intervals set on the timer, beginning with the on time.
3. To deactivate the unit, turn the power switch OFF.

Maintenance Instructions:

To keep the unit operating properly, periodically perform the following maintenance procedures:

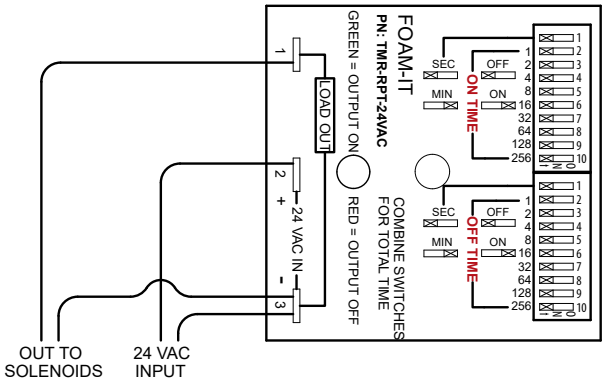
Note: Before performing any maintenance, ensure that the unit has been turned OFF, unplugged from the electrical power source, and disconnected from the air and solution supply.

- Inspect all hoses and tubings for leaks or excessive wear. Make sure all hose clamps and push-fittings are in good condition and properly secured.

Troubleshooting Instructions:

- If foam sputters out of the fan tip:
  a. Verify foam station is calibrated correctly. Reference installation instructions “To Calibrate Foam Station”.
  b. More chemical may need to be added to solution in order to create thick foam.
- If only liquid or only air discharges out the fan tip:
  a. Verify the needle valve and air regulator to ensure one of them is not closed. Adjust needle valve and air regulator as stated in Operation Instructions.
  b. Verify all the wiring is securely connected.
  c. A solenoid valve may need to be replaced.
- If no liquid discharges out of the fan tip:
  a. Verify there is adequate liquid being supplied to the control box.

TIMER ADJUSTMENT INSTRUCTIONS



The timer is an adjustable repeat cycle timer with the ON time operating first. ON and OFF times can range from 1 second to 511 minutes.

To set the timer:

1. Starting with the ON time, move the top dip switch to the left for SEC (seconds) or to the right for MIN (minutes) to select the desired time interval.
2. The next 9 dip switches will be used to control the total active time. To the left is inactive and to the right is active. Combine the numbers next to the active dip switches to achive the desired time.
3. Repeat the above steps for the OFF time setting.

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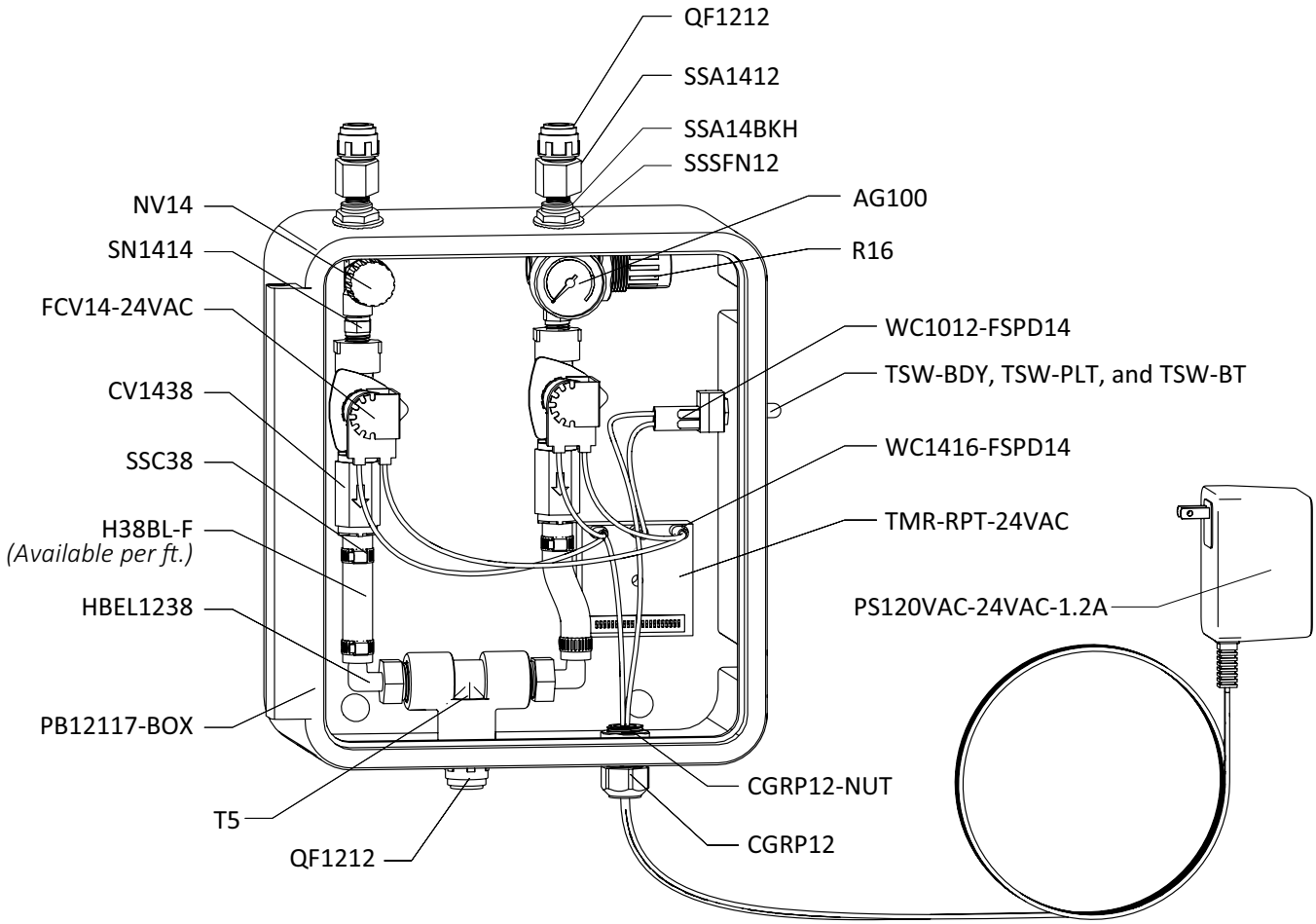
CONTROL BOX ASSEMBLY



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ITEM NUMBER	DESCRIPTION
AG100	AIR GAUGE - 1/8IN NPT - 0-100 PSI MARKINGS - DRY MODEL
B1032114	BOLT - 10-32 X 1 1/4IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS
CB-5	CIRCUIT BREAKER ASSEMBLY - 5 AMP - INCLUDES CLEAR BOOT
CB-BT	CLEAR BOOT FOR CIRCUIT BREAKER
CGRP12	CORD GRIP - 1/2IN MPT - BLACK NYLON - CORD RANGE 0.17IN TO 0.45IN - WATER RESISTANT - FOR 7/8IN HOLE - NO NUT INCLUDED
CGRP12-NUT	NUT - 1/2NPT - BLACK NYLON
CV1438	1/4 MPT X 3/8 BARB-PVC CHECK VALVE-SS SPRING
FCV14-24VAC	FLUID CONTROL VALVE - DEMA - 1/4IN FPT - 7 GPM - POLYPROPYLENE BODY - VITON DIAPHRAGM - 24VAC SOLENOID - NORMALLY CLOSED - 18IN 18AWG FLYING LEADS
H38BL-F	3/8IN ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT
HBEL1238	HOSE BARB ELBOW 1/2 X 3/8
LN1032	LOCKNUT - 10-32 - STAINLESS STEEL - NYLON INSERT
NV14	NEEDLE VALVE - 1/4IN NPT - INCLUDES BLACK KNOB
P18	PLUG - 1/8IN MPT - 304 STAINLESS STEEL - SQUARE HEAD
PBA-12117	POLY BOX ASSEMBLY - 12IN X 11IN X 7IN - GRAY POLYPROPYLENE - INCLUDES BRAND LABEL AND MOUNTING HARDWARE
PB12117-BOX	POLY BOX - GRAY POLYPROPYLENE - FOR PBA-12117
PB12117-LID	POLY BOX LID - GRAY POLYPROPYLENE - FOR PBA-12117 - INCLUDES PB-GSKT ROPE SEAL
PB-FT	POLY BOX FOOT - GRAY POLYPROPYLENE - FOR PBA-12117 AND PBA-16138
PB-LTCH	POLY BOX LATCH - GRAY POLYPROPYLENE - TWO PIECES ASSEMBLED - FOR PBA-12117 AND PBA-16138
PB-PIN	STAINLESS STEEL HINGE PIN FOR PB16138 AND PB12117
PS120VAC-24VAC-1.2A	PLUG-IN VOLTAGE TRANSFORMER - 120VAC INPUT - 24VAC 1.2A OUTPUT
QF1212	QUICK FIT-1/2 MPT X 1/2 OD TUBE-POLYPROPYLENE
QFT12	UNION TEE 1/2in TUBE - POLYPROPYLENE

ITEM NUMBER	DESCRIPTION
R16	AIR REGULATOR - 1/4fpt TWO PORT 1/8fpt TWO PORT - NO AIR BOWL/FILTER
S1034-FH-HL	SCREW - #10 X 3/4IN - STAINLESS STEEL - FLAT HEAD PHILLIPS - HILO THREAD
SN1414	STAINLESS HEX NIPPLE 1/4 MPT X 1/4 MPT
SSA14	STAINLESS ADAPTOR 1/4 MPT X 1/4 FPT
SSA1412	STAINLESS ADAPTOR 1/2 FPT X 1/4 MPT
SSA14BKH	BULKHEAD ADAPTER - STAINLESS STEEL - 1/4 IN. NPT X 1/4 IN. NPSM
SSC38	SCREW BAND CLAMP - STAINLESS STEEL - FOR 3/8IN HOSE
SSSFN12	SERRATED STAINLESS STEEL FLANGE NUT - 1/2 IN.
T5	1/2 POLY TEE
TMR-RPT-24VAC	TIMER - REPEAT CYCLE - SECONDS AND MINUTES ADJUSTABLE DIGI-SET - 24VAC - SCREW TERMINAL BLOCK
TSW-BDY	TOGGLE SWITCH - BODY - SINGLE POLE SINGLE THROW - NICKEL-PLATED BRASS - 1/4IN SPADE TERMINALS - 1/2IN MOUNTING HOLE - 15/32-32 KEYED THREADED BUSHING
TSW-PLT	TOGGLE SWITCH - ON/OFF PLATE - NICKEL-PLATED STEEL - MOUNTING HOLE FOR 15/32 KEYED BUSHING
TSW-BT	TOGGLE SWITCH - MOUNTING BOOT - BLACK SILICONE RUBBER - 15/32-32 INTEGRATED NUT
WC1416-FSPD14	WIRE CONNECTOR - FOR 14 TO 16 GAUGE WIRE - 1/4IN FEMALE SPADE - BLUE PVC INSULATED
WC1012-FSPD14	WIRE CONNECTOR - FOR 10 TO 12 GAUGE WIRE - 1/4IN FEMALE SPADE - YELLOW NYLON INSULATED
WLN3X	WIRE CONNECTOR - FOR 12 TO 24 GAUGE WIRE - LEVER NUT - 3 POSITION
WLN5X	WIRE CONNECTOR - FOR 12 TO 24 GAUGE WIRE - LEVER NUT - 5 POSITION
WMS14	WALL MOUNT SCREW - #14 X 1 1/4IN - STAINLESS STEEL - HEX HEAD SLOTTED
WMS14A	WALL MOUNT SCREW ANCHOR -#14 X 1 1/4IN - PLASTIC - 5/16IN DRILL SIZE