



KRYO NOMAD

PORTABLE • IN-LINE • FLASH • CHILLER

INSTRUCTION MANUAL



CONTENTS:

PAGE 1	Important Safety Information
PAGE 2	Controller Quick Start Guide
PAGE 2	Installation Requirements
PAGE 2-3	DC Cable Requirements
PAGE 3-6	Dispensing
PAGE 7	Cleaning & Maintenance
PAGE 7	Fault Codes


WARNING



Read entire manual for important safety information before using your KRYO. Failure to follow warnings could result in injury & void warranty.

IMPORTANT SAFETY INFORMATION

Please read this entire instruction manual for important safety information prior to the use of your KRYO.

 WARNING Failure to follow these instructions may result in injury and/or product damage and will void the product warranty.


GENERAL PRECAUTIONS:

- Avoid external heat sources such as direct sunlight, gas stoves, or other heat-generating appliances.
- Ensure that there is always at least 4" of clearance on each side of the KRYO to allow adequate airflow. Not allowing adequate ventilation will reduce performance, increase power consumption and void warranty.
- Only use approved cleaners and sanitizers to clean the product lines.
- Do not set the temperature below 0°C/32°F or you risk freezing the beverage you are dispensing.
- Only use on a flat surface or at a maximum angle of 20 degrees off level.
- If using a 12V power inverter to power the NOMAD from your vehicle's 12V power outlet, never use an inverter rated to less than 500W power at 100% duty cycle.

TEMP CONTROLLER QUICK START GUIDE

⚠ WARNING

- Do not set the temperature below 0°C/32°F or you risk freezing the beverage you are dispensing.


1. Press the Power Button to turn on the unit.
2. Press and release the “SET” button on the temperature controller to enter into the settings menu.
3. Press “SET” again to display the value of SEt; this is the target temperature setting.
4. Press the “UP/DOWN” arrows to adjust the value of the target temperature.
5. Press the  button or wait 30 seconds, and the setting will be saved, and the controller will return to the home screen.

Adjusting the Differential

The Differential setting is how far the temperature is allowed to rise before the compressor turns on to cool

For more detailed instructions, download the controller manual from our website.

the unit back to your programmed target temperature. The default Differential setting is 2°C, but you can adjust it if desired. To adjust the Differential setting:

1. Press and release the “SET” button on the temperature controller to enter into the settings menu.
2. Press the “UP/DOWN” arrows till the display reads diF for the Differential setting.
3. Press “SET” again to display the value of diF.
4. Press the “UP/DOWN” arrows to adjust the value of the differential setting.
5. Press the  button or wait 30 seconds, and the setting will be saved, and the controller will return to the home screen.

INSTALLATION REQUIREMENTS

1) Only Use On Flat Surface: The NOMAD should only be used on a flat surface or at a maximum angle of 20 degrees off level. DO NOT operate this unit on its side or at angles greater than 20 degrees or permanent damage to the compressor will occur.

2) Provide Adequate Ventilation and Avoid External Heat Sources: In order to achieve the best possible performance from the NOMAD we recommend 4" clearance around air vents. External heat sources such as direct sunlight, gas stoves or other heat generating appliances should be avoided.

DISPENSING

Before attaching the NOMAD to your keg first screw your taps onto the two shanks on the front of the NOMAD and tighten the shank collar using a 7 in 1 Facet Tap Wrench/Spanner Tool.

After tightening your taps onto the shanks, you can then plumb your kegs in to the NOMAD. On the back of the NOMAD you will find two 8mm push in bulkhead fittings. Simply push 8mm OD EVABarrier tubing from your liquid ball lock disconnect or keg coupler into the bulkhead fitting. Then attach the ball lock disconnect or keg coupler onto your liquid keg post or spear respectively.

Ensure that the EVABarrier hose is cut straight and cleanly with a Stanley knife or 2 in 1 tube cutter (DUO200). Then firmly push the EVABarrier hose into the opening of the bulkhead. Make sure that the hose is pushed in to its full depth. Then check for a good connection by gently pulling bank on the hose. If the hose comes out of the push in fitting, reinsert ensuring the hosing is pushed far enough into the fitting.

To remove EVABarrier hose from the push in fitting, simultaneously push the collar in while pulling the EVABarrier hose out of the push in fitting. Once the hose is removed cut the burred end off with a 2 in 1 tube cutter or box knife

to produce a clean straight cut.

A 7 in 1 spanner tool (D1269) can also be used to remove hosing from the push in fitting. Insert the hose into the groove in the center of the spanner and use the spanner to press in on the collet while pulling on the hose.

After your taps are attached and your kegs are connected to your NOMAD you can then hook CO₂ up to your keg and set the pressure based on your desired carbonation level and the ambient temperature according to a carbonation chart (page 4).

CARBONATION

The pressure to be set on your regulator differs according to the temperature that the keg is stored at. If the product is stored at a higher temperature it will require a higher pressure to maintain the desired level of carbonation. Refer to a carbonation chart to determine what pressure you should be setting your regulator at to reach your desired level of carbonation based on the ambient temperature the keg is stored in.

For most styles of beer, you should be aiming for a carbonation level of between 2.3–2.8 volumes of carbonation with the average carbonation level being 2.6 volumes (if you are unsure of the carbonation level of the beer i.e. if it is a commercial keg then assume it is at 2.6 volumes of carbonation). To achieve a specific carbonation level during carbonation or priming refer to the table below and correlate the temperature of the keg with the desired carbonation level.

NOTE: Do not try to fix a slow or fast pour rate by adjusting the dispensing pressure. This will result in your beer either going flat or over carbonated. It is best to adjust the beverage line length and diameter. If the pour is too fast and foamy increase the length of the beverage line between the KRYO and the keg. If the pour is too slow decrease the length of the beverage line between the KRYO and the keg.

How To Read the Carbonation Chart

First, choose the average temperature of the beer on the left side of the chart, and then find the level of carbonation you want in the center of the chart. Once you have determined the carbonation level, follow the column up to the top of the chart to find your PSI setting.

See Carbonation Chart on Page 4

THIS SPACE LEFT INTENTIONALLY BLANK

CARBONATION CHART

How To Read the Carbonation Chart

First, choose the average temperature of the beer on the left side of the chart, and then find the level of carbonation you want in the center of the chart. Once you have determined the carbonation level, follow the column up to the top of the chart to find your PSI setting.



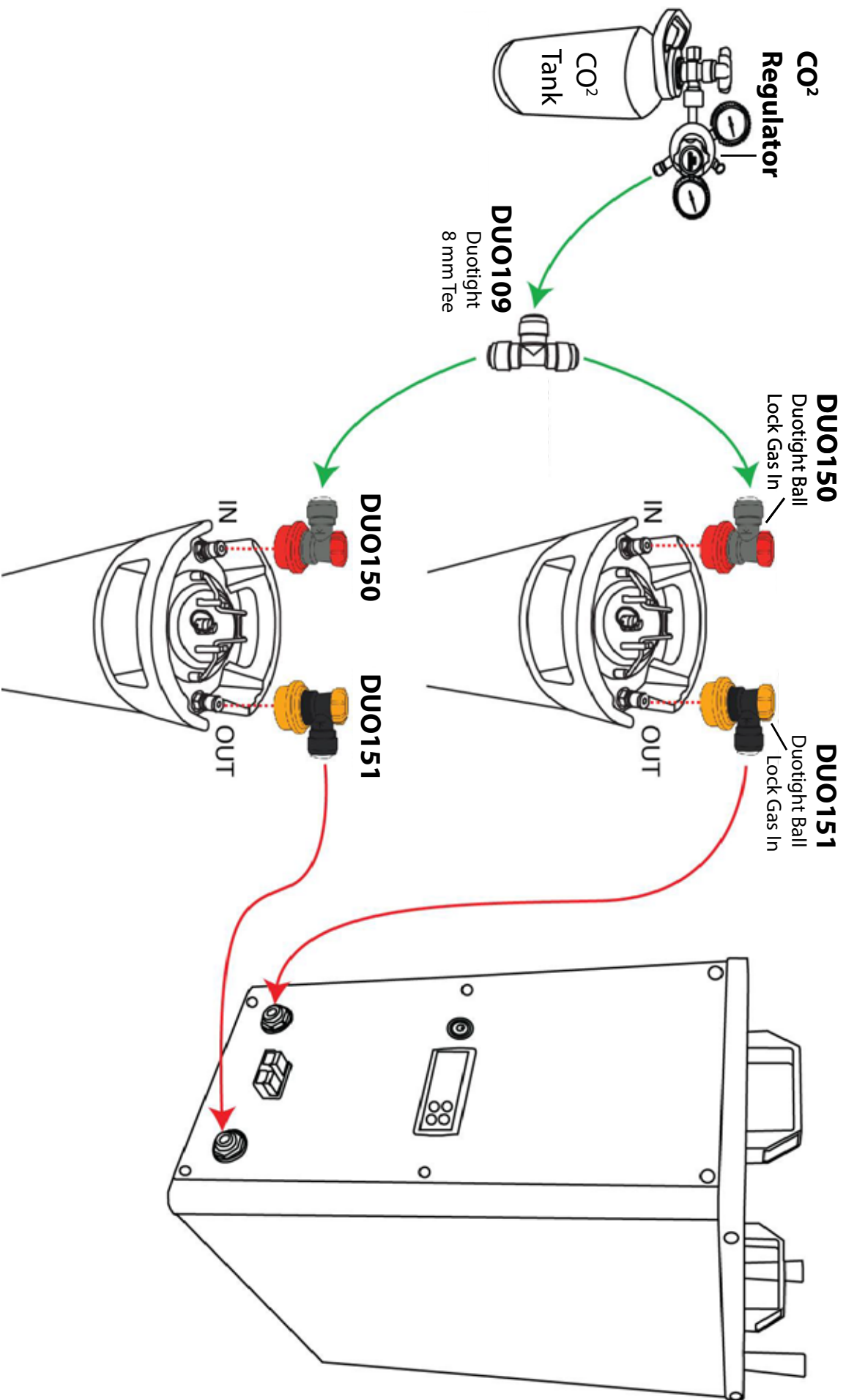
KOMOS

KOMOS CO₂ Carbonation Chart

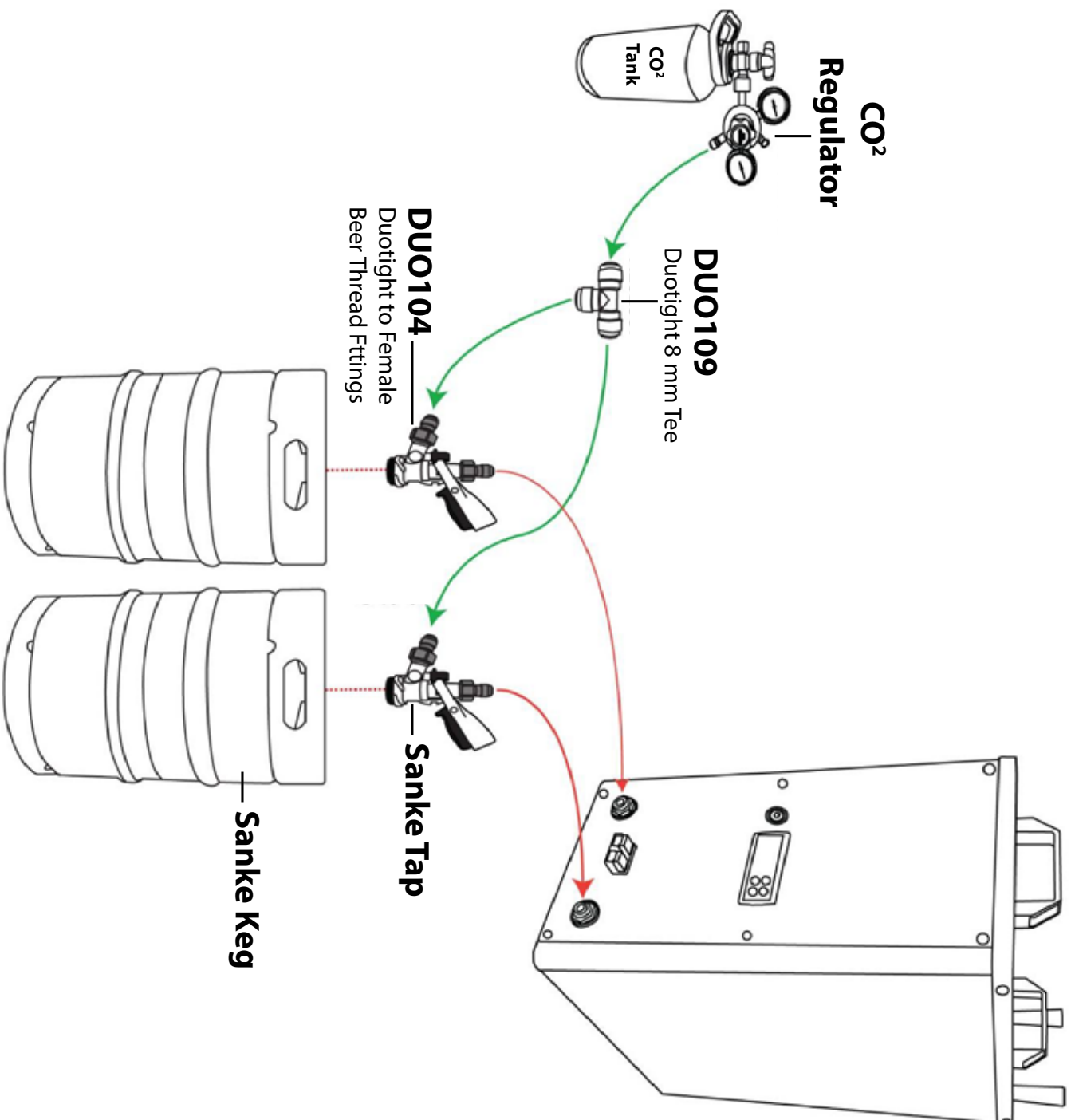
Grams Per Liter Used

Temp °F	Temp °C	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5		
24	-4						0.3	1.1	1.9	2.7	3.6	4.4	5.3	6.1	7.0	7.8	8.6	9.5	10.3	11.1	12.0	12.8	13.6	14.4	15.3	16.1	16.9	17.7	18.5	19.4	20.2	21.0	21.8	
26	-3					0.2	1.0	1.9	2.7	3.6	4.4	5.3	6.1	7.1	8.0	8.9	9.7	10.6	11.5	12.3	13.2	14.1	14.9	15.8	16.7	17.5	18.4	19.2	20.1	20.9	21.8	22.6	23.5	
28	-2				0.1	1.0	1.9	2.7	3.6	4.5	5.4	6.3	7.2	8.1	9.0	10.0	10.9	11.8	12.7	13.6	14.5	15.4	16.3	17.2	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	
30	-1				0.8	1.7	2.7	3.6	4.5	5.4	6.3	7.2	8.1	9.0	10.0	10.9	11.8	12.7	13.6	14.5	15.4	16.3	17.2	18.0	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2	26.8	
32	0			0.6	1.6	2.5	3.5	4.4	5.4	6.3	7.3	8.2	9.2	10.1	11.0	12.0	12.9	13.9	14.8	15.7	16.7	17.6	18.5	19.5	20.4	21.3	22.2	23.2	24.1	25.0	25.9	26.8	28.5	
34	1	0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.2	9.2	10.2	11.2	12.1	13.1	14.1	15.1	16.0	17.0	18.0	18.9	19.9	20.9	21.8	22.8	23.8	24.7	25.7	26.6	27.6	28.5	29.4	30.2	
36	2	0.0	1.0	2.1	3.1	4.1	5.1	6.2	7.2	8.2	9.2	10.2	11.2	12.3	13.3	14.3	15.3	16.3	17.3	18.3	19.3	20.3	21.3	22.3	23.3	24.3	25.3	26.3	27.3	28.3	29.2	30.2	31.9	
38	3	0.7	1.8	2.8	3.9	4.9	6.0	7.0	8.1	9.1	10.2	11.2	12.3	13.3	14.4	15.4	16.5	17.5	18.6	19.6	20.6	21.7	22.7	23.7	24.8	25.8	26.8	27.9	28.9	29.9	30.9	31.9	33.7	
40	4	1.4	2.5	3.6	4.7	5.7	6.8	7.9	9.0	10.1	11.2	12.3	13.4	14.4	15.5	16.6	17.7	18.8	19.8	20.9	22.0	23.0	24.1	25.2	26.2	27.3	28.4	29.4	30.4	31.5	32.6	33.8	35.4	
42	5	2.1	3.2	4.3	5.5	6.6	7.7	8.8	10.0	11.1	12.2	13.3	14.4	15.5	16.7	17.8	18.9	20.0	21.1	22.2	23.3	24.4	25.5	26.6	27.7	28.8	29.9	31.0	32.1	33.2	34.3	35.4	37.1	
44	6	2.8	3.9	5.1	6.3	7.4	8.6	9.7	10.9	12.1	13.2	14.4	15.5	16.7	17.8	19.0	20.1	21.3	22.4	23.5	24.7	25.8	27.0	28.1	29.2	30.4	31.5	32.6	33.8	34.9	36.0	37.1	38.7	
46	7	3.5	4.7	5.9	7.1	8.3	9.5	10.7	11.8	13.0	14.2	15.4	16.6	17.8	19.0	20.2	21.3	22.5	23.7	24.9	26.0	27.2	28.4	29.6	30.7	31.9	33.1	34.2	35.4	36.6	37.7	38.7	40.4	
48	8	4.2	5.4	6.7	7.9	9.1	10.4	11.6	12.8	14.0	15.3	16.5	17.7	18.9	20.1	21.4	22.6	23.8	25.0	26.2	27.4	28.6	29.8	31.0	32.3	33.5	34.7	35.9	37.1	38.3	39.5	40.7	42.4	
50	9	4.9	6.2	7.5	8.7	10.0	11.3	12.5	13.8	15.0	16.3	17.6	18.8	20.1	21.3	22.6	23.8	25.1	26.3	27.6	28.8	30.1	31.3	32.5	33.8	35.0	36.3	37.5	38.7	40.0	41.2	42.4	44.2	
52	10	5.7	7.0	8.3	9.6	10.9	12.2	13.5	14.8	16.1	17.3	18.6	19.9	21.2	22.5	23.8	25.1	26.4	27.6	28.9	30.2	31.5	32.8	34.0	35.3	36.6	37.9	39.1	40.4	41.7	42.9	44.2	46.1	
54	11	6.4	7.7	9.1	10.4	11.8	13.1	14.4	15.7	17.1	18.4	19.7	21.1	22.4	23.7	25.0	26.3	27.7	29.0	30.3	31.6	32.9	34.2	35.5	36.9	38.2	39.5	40.8	42.1	43.4	44.7	46.1	47.7	
56	12	7.2	8.5	9.9	11.3	12.6	14.0	15.4	16.7	18.1	19.5	20.8	22.2	23.6	24.9	26.3	27.6	29.0	30.3	31.7	33.0	34.4	35.7	37.1	38.4	39.8	41.1	42.4	43.8	45.1	46.5	47.9	49.4	
58	13	7.9	9.3	10.7	12.1	13.6	15.0	16.4	17.8	19.2	20.6	21.9	23.3	24.7	26.1	27.5	28.9	30.3	31.7	33.1	34.5	35.8	37.2	38.6	40.0	41.4	42.7	44.1	45.5	46.9	48.3	49.7	51.1	
60	14	8.7	10.1	11.6	13.0	14.5	15.9	17.3	18.8	20.2	21.6	23.1	24.5	25.9	27.4	28.8	30.2	31.6	33.0	34.5	35.9	37.3	38.7	40.1	41.5	43.0	44.4	45.8	47.2	48.6	50.0	51.4	52.8	
62	15	9.5	11.0	12.4	13.9	15.4	16.9	18.3	19.8	21.3	22.7	24.2	25.7	27.1	28.6	30.0	31.5	33.0	34.4	35.9	37.3	38.8	40.2	41.7	43.1	44.6	46.0	47.4	48.8	50.2	51.6	53.0	54.4	
64	16	10.3	11.8	13.3	14.8	16.3	17.8	19.3	20.8	22.3	23.8	25.3	26.8	28.3	29.8	31.3	32.8	34.3	35.8	37.3	38.8	40.3	41.8	43.2	44.7	46.1	47.5	48.9	50.3	51.7	53.1	54.5	55.9	
66	17	11.1	12.6	14.2	15.7	17.3	18.8	20.3	21.9	23.4	25.0	26.5	28.0	29.6	31.1	32.6	34.1	35.7	37.2	38.7	40.2	41.8	43.3	44.8	46.3	47.8	49.2	50.7	52.1	53.6	55.0	56.4	57.8	
68	18	11.9	13.5	15.1	16.6	18.2	19.8	21.4	22.9	24.5	26.1	27.6	29.2	30.8	32.4	33.9	35.5	37.0	38.6	40.2	41.7	43.3	44.8	46.3	47.8	49.3	50.8	52.3	53.8	55.3	56.8	58.2	59.7	
70	19	12.7	14.3	15.9	17.6	19.2	20.8	22.4	24.0	25.6	27.2	28.8	30.4	32.0	33.6	35.2	36.8	38.4	40.0	41.6	43.1	44.7	46.2	47.8	49.3	50.8	52.3	53.8	55.3	56.8	58.3	59.8	61.2	
72	20	13.5	15.2	16.8	18.5	20.1	21.8	23.4	25.1	26.7	28.4	30.0	31.6	33.3	34.9	36.5	38.2	39.8	41.4	43.1	44.7	46.3	47.9	49.5	51.1	52.7	54.3	55.9	57.5	59.1	60.7	62.2	63.8	
74	21	14.4	16.1	17.8	19.4	21.1	22.8	24.5	26.2	27.8	29.5	31.2	32.9	34.5	36.2	37.9	39.5	41.2	42.9	44.5	46.2	47.8	49.5	51.1	52.8	54.4	56.1	57.7	59.4	61.0	62.6	64.2	65.8	
76	22	15.2	17.0	18.7	20.4	22.1	23.8	25.5	27.2	29.0	30.7	32.4	34.1	35.8	37.5	39.2	40.9	42.6	44.3	46.0	47.7	49.4	51.1	52.8	54.5	56.2	57.9	59.6	61.3	63.0	64.7	66.4	68.1	
78	23	16.1	17.8	19.6	21.4	23.1	24.9	26.6	28.4	30.1	31.8	33.6	35.3	37.1	38.8	40.5	42.3	44.0	45.7	47.4	49.1	50.8	52.5	54.2	55.9	57.6	59.3	61.0	62.7	64.4	66.1	67.8	69.5	71.2
80	24	17.0	18.8	20.5	22.3	24.1	25.9	27.7	29.5	31.2	33.0	34.8	36.6	38.3	40.1	41.9	43.7	45.4	47.2	48.9	50.7	52.4	54.2	55.9	57.7	59.4	61.2	62.9	64.6	66.4	68.1	69.9	71.6	
82	25	17.8	19.7	21.5	23.3	25.1	26.9	28.8	30.6	32.4	34.2	36.0	37.8	39.6	41.5	43.3	45.1	46.9	48.7	50.5	52.3	54.1	55.9	57.7	59.5	61.3	63.1	64.9	66.7	68.5	70.3	72.1	73.9	
84	26	18.7	20.6	22.4	24.3	26.2	28.0	29.9	31.7	33.6	35.4	37.3	39.1	40.9	42.8	44.6	46.4	48.2	50.0	51.8	53.6	55.4	57.2	59.0	60.8	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	
86	27	19.6	21.5	23.4	25.3	27.2	29.1	31.0	32.8	34.7	36.6	38.5	40.4	42.3	44.1	46.0	47.8	49.6	51.4	53.2	55.0	56.8	58.6	60.4	62.2	64.0	65.8	67.6	69.4	71.2	73.0	74.8	76.6	
88	28	20.5	22.5	24.4	26.3	28.2	30.2	32.1	34.0	35.9	37.8	39.8	41.7	43.6	45.5	47.4	49.3	51.2	53.1	55.0	56.9	58.8	60.7	62.6	64.5	66.4	68.3	70.2	72.1	74.0	75.9	77.8	79.7	
90	29	21.4	23.4	25.4	27.3	29.3	31.2	33.2	35.2	37.1	39.1	41.0	43.0	44.9	46.8	48.7	50.6	52.5	54.4	56.3	58.2	60.1	62.0	63.9	65.8	67.7	69.6	71.5	73.4	75.3	77.2	79.1	81.0	
92	30	22.4	24.4	26.4	28.4	30.3	32.3	34.3	36.3	38.3	40.3	42.3	44.3	46.3	48.3	50.3	52.3	54.3	56.3	58.3	60.3	62.3												

DISPENSING FROM BALL LOCK CORNELIUS KEGS



DISPENSING FROM BALL LOCK CORNELIUS KEGS



CLEANING AND MAINTENANCE

Use a streak free stainless steel cleaner/polish to clean the outside of the NOMAD to keep it looking shiny and new.

Only use approved cleaners to clean and sanitize your product lines.

APPROVED CLEANERS:

- Sodium Percarbonate (CL09) / Oxyclean
- PBW (CL25)
- Saniclean (CL27)
- Star San (CL26)

Line Cleaning

Always clean between every keg use. Cleaning your system will ensure your taps, lines, and faucets are clean, resulting in a better-tasting beer.

REQUIRED:

- Cleaning Pump
- Faucet Wrench
- Beer Line Cleaner
- Tap & Faucet Brush
- Water
- Bucket
- Large Bowl

1. Disconnect your ball lock QDs or keg couplers from your kegs. Disconnect the EVABarrier tubing from your fittings and run your beer lines from the Duotight bulkheads on the NOMAD into a bucket.
2. Remove the beer faucets from the front of the NOMAD. Fully disassemble the faucets to the point that the internal shuttle can slide out. Place these parts in a bowl with 2 cups of warm water and a 1/4 teaspoon of Beer Line Cleaner.
3. Attach your cleaning pump to the faucet draft shank. Pump cleaning solution through the line. For best results, allow the solution to sit in the lines for 10-15 minutes, then pump through. Repeat this step for the other line.
4. Use a faucet brush to scrub the faucet body and all parts, then rinse with clean water. Reassemble the faucet, hand tighten the parts but leave them loose enough so that they move freely. Attach the faucets back onto the shanks using a draft wrench but do not over tighten.
5. Hook up a fresh keg and enjoy!

FAULT CODES

The power button is a multi-purpose button both turning on the main power to the compressor but also the illumination on the button will flash to indicate fault codes if an error has been triggered.

NUMBER OF FLASHES	FAULT TYPE
1	Voltage Fault (The input voltage is beyond the setting range)
2	Fan Fault Current (The fan's output current is more than 1A peak)
3	Compressor Start Fault (The rotor is blocked or the system pressure is too high (above 6 bar)
4	Minimum Motor Speed Fault (If the compressor is too highly loaded and cannot maintain minimum rotor speed this will be triggered, also if the controller cannot sense rotor speed this will also trigger this fault code)
5	Thermal Fault of Electronic Unit (If the load on the compressor is too high or if the ambient temperature is too high the controller will not run until it cools down)
6	Controller Hardware Fault (Controller detects abnormal parameters)