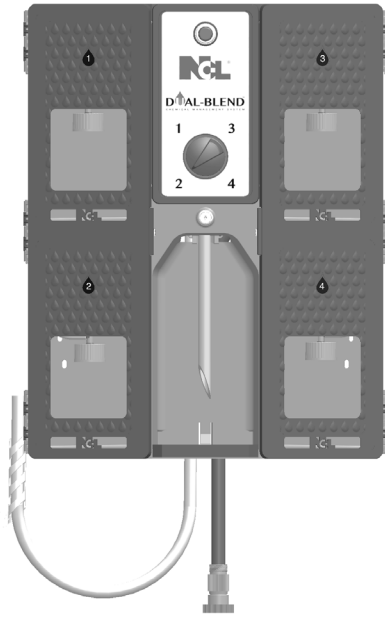


DUAL-BLEND®

CHEMICAL MANAGEMENT SYSTEM

4113 Dispensing Unit



Box Contains:

- Dispensing Unit with 6' Water Supply Hose.
- Mounting Template (Cardboard packing material holding hoses: Unfold to see holes that match dispenser mounting holes.)
- Mounting Hardware
- Installation Manual
- 2 Keys
- SDS Reference Page

Suggested Tools:

- Hammer
- Phillips screwdriver
- Drill w/ 3/16" & 9/32" bits
- Tape Measure
- Pencil
- Level

Overview

The **DUAL-BLEND® Chemical Management System** makes users more efficient, filling bottles and buckets with ease and quickness. Some of the great design features include:

- A single dial for 8 different dilution points
- Multi-point locking system for Extreme security
- Integrated ASSE approved backflow prevention
- Large sight window to identify product and level
- One-handed quart bottle fill

Warnings



All installations must conform to local plumbing codes and use approved backflow prevention devices. A pressure indicating tee is to be installed with existing faucets according to local plumbing codes in the state of Wisconsin and any other state that requires the use of a pressure indicating tee



ALWAYS WEAR PROTECTIVE CLOTHING AND EYEWEAR WHEN WORKING WITH CHEMICAL PRODUCTS

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Operational Requirements

Water Supply Requirements

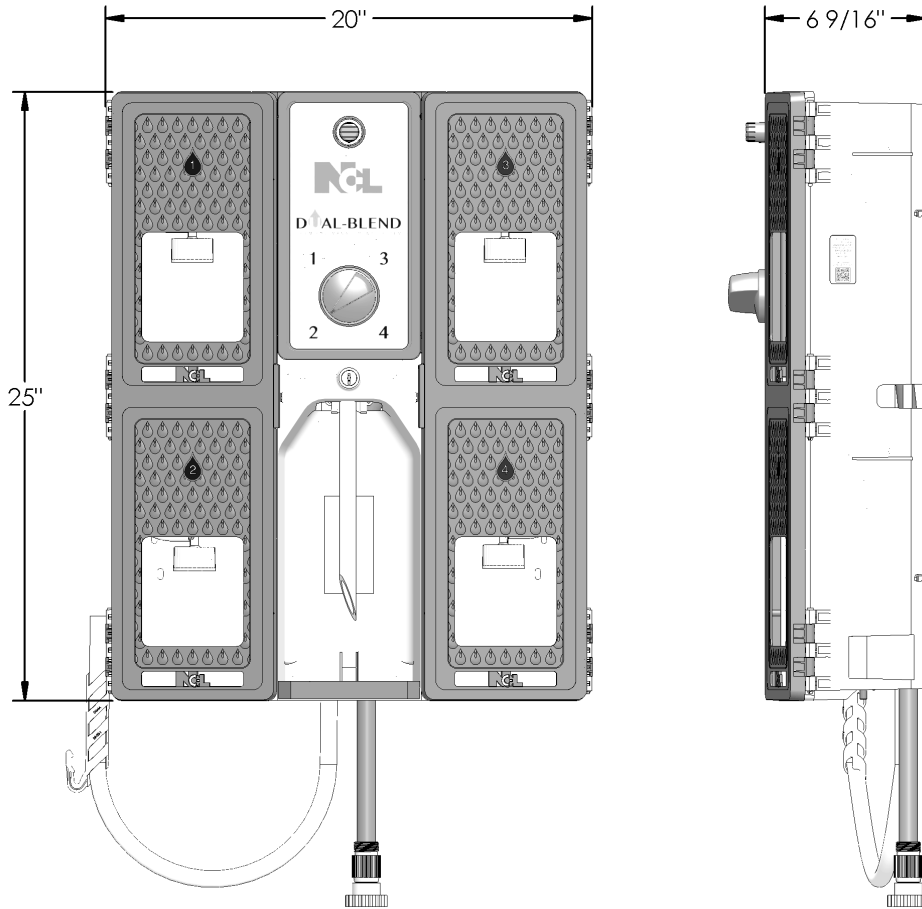
	Minimum	Maximum
Water Pressure	20 psi (1.38 bar)	125 psi (8.62 bar)**

** Recommended water pressure is between 20 psi (1.38 bar) and 70 psi. (5.52 bar). If pressure exceeds 70 psi, it is recommended that a water pressure regulator is used.

Specifications

Weight: Dispenser Only: 17 lbs

Overall Dimensions:



Installation and Preparation

1. Identify desired location of dispenser. Remove cardboard mounting template from packaging, place against wall and mark hole locations using the template as a guide.
[For accuracy, use level with template to ensure the dispenser is level on the wall]
2. Install all four supplied anchors into marked hole locations from step 1. Using supplied screws, install top two screws and hang dispenser from them. Install bottom two screws through dispenser holes into the anchors.
3. Tighten screws against dispenser to assure a secure fit.
4. Install Drip Tray by sliding into place against tab in back of drip tray holder.
[Optional: Drill 3/16" hole into drip tray barb and attach 1/4" ID hose (not supplied) for draining chemical from drip tray (Figure 1)]
5. Position chemical container into each compartment in desired position and connect DUAL-LINK cap. (Figure 2)
6. Close and lock the cabinet doors
7. Connect the supplied water hose to your water source and activate the dispenser by selecting a position on the dial and using either the bucket or bottle fill activation point (Figure 3)

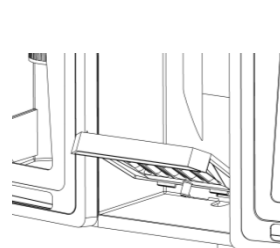


Figure 1

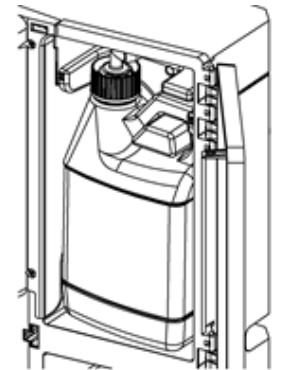


Figure 2

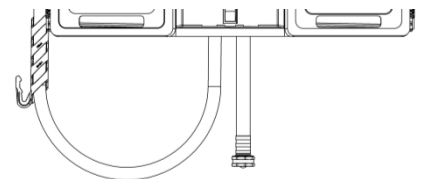


Figure 3

Operation

Chemical Selector Dial (Figure 4)

1. Turn the chemical selector dial to the desired chemical position, indicated by the directional arrow
2. Dispense chemical by either activating the bottle fill lever or bucket fill button (or remote fill trigger)
3. For rinse water, point the dial straight down at the water symbol- This is not potable water, do not drink

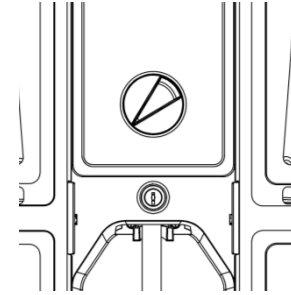


Figure 4

Dispenser Activation Points – Bottle Fill (Figure 5)

1. Slide the bottle tube inside the spray bottle and raise the bottle to engage the u-shaped lever of the bottle fill assembly
2. To stop filling, lower the bottle and the lever will disengage
3. Be careful when removing the spray bottle so as to not splash residual chemical

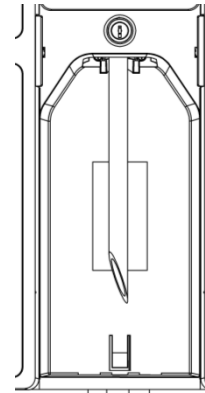


Figure 5

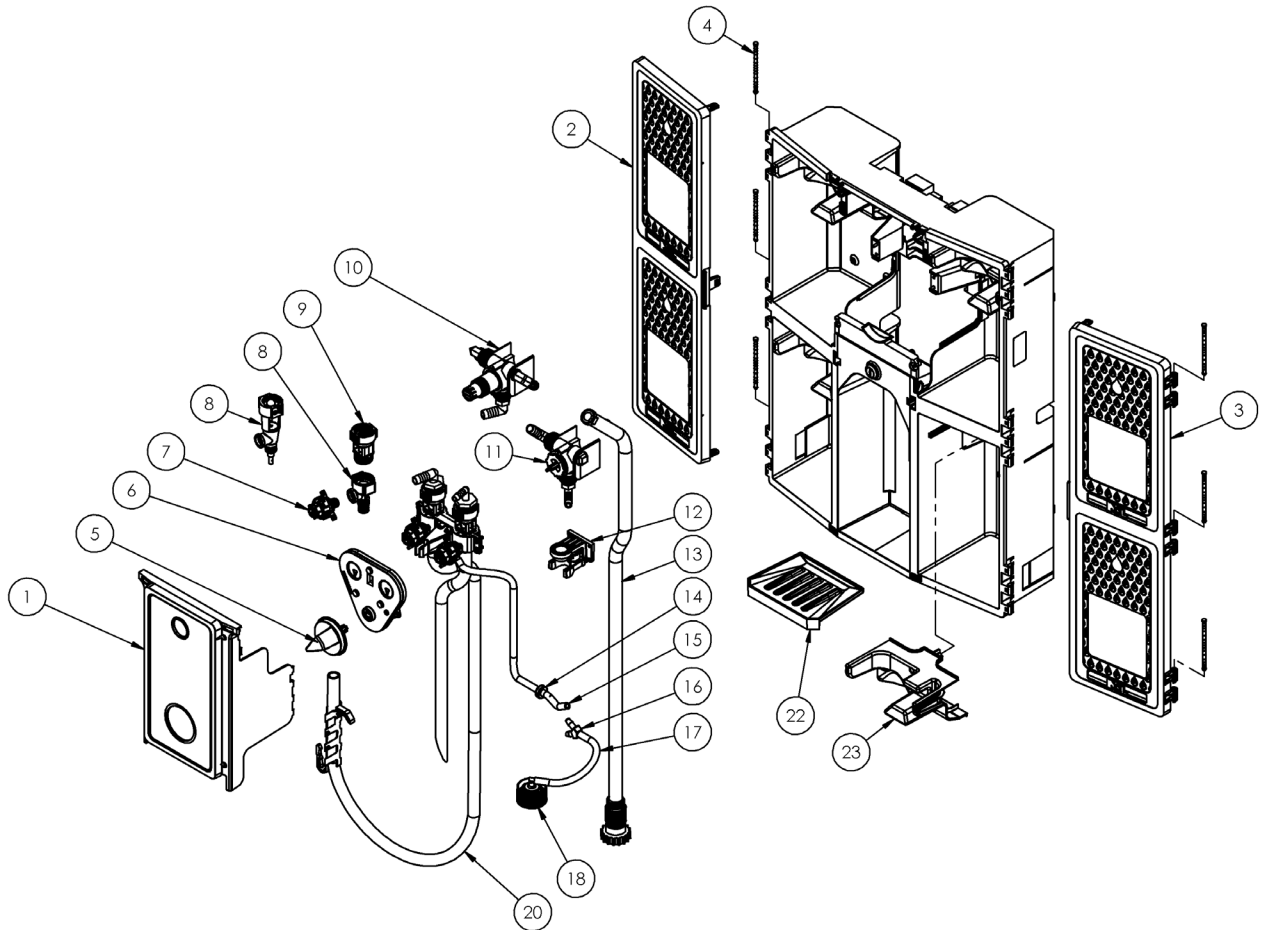
Dispenser Activation Points – Push Button Bucket Fill (Figure 6)

1. To start the flow of diluted chemical, press button on unit above selector dial
2. For continuous flow, twist button clockwise
3. To disengage, release button or twist button counterclockwise



Figure 6

Parts List



No.	Part No.	Description
1	40.741.4	Cover plate (Button operated)
2	14.2.5	Door – Left side
3	14.2.6	Door – Right side
4	10-47	Hinge Pin
5	66-339-1	Knob
6	63-53-15	Transmission Assembly
7	63-53-12	Selector Assembly
8	163CHA-NB	NCL Action Gap Proportioner
9	16-30	Action Gap Assembly
10	14-5-2	Push Button Valve Assembly
11	14-6-1	Bottle Fill Valve Assembly
12	98-58-1	Lever Assembly
13	44-3-6FCOS	6' Black Hose Assembly with Strainer
14	11-72-1	Check Valve (Threaded)
15	100-12-18	7/32" Tubing, 2"
16	66-500-2	Wye Adapter 1/4"
17	100-12-19	7/32" Tubing, 5"
18	6747	DUAL-LINK Swivel Cap Assembly
19	66-242-1	Bottle Fill Tube – Action Gap
20	89-30-GAP	Bucket Fill Tube – Action Gap

No.	Part No.	Description
22	10.57.3	Drip Tray
23	40.873.1	Bottle Rejecter

Parts Not Shown	
Part No.	Description
66-21K	Keyset
98-40-4	Screw & Anchor Kit
L1853	Dual-Blend Control Panel Label
L1854	Dual-Blend Door Label

Warranty

Merchandise Returns

No merchandise will be returned for credit without NCL's written permission. Please contact your dealer for warranty issues.

Product Warranty

NCL's products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "O"-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of NCL products. If products are altered or repaired without prior approval of NCL, this warranty is void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. NCL assumes no liability for damages. Return merchandise authorization number must be granted in advance of returned units for repair or replacement (See "Merchandise Returns" above).

Troubleshooting: Water valve or backflow preventer is leaking

Symptom	Problem	Remedy
Leaking at water valve to proportioner (dispenser is on)	Connections are not tight, tubing is not secure	Secure tubing firmly against components, tighten clamps
Leaking at water valve (dispenser is off)	Connection to water valve is loose	Tighten fittings at water valve
	Water pressure is above acceptable range	Install pressure regulator
Leaking at Action Gap (if equipped)	Bucket fill tube is raised higher than proportioner	Ensure dispenser is installed at minimum of 36" off floor Do not raise bucket fill tube higher than proportioner
	Backflow preventer is faulty	Replace Action Gap backflow preventer

Troubleshooting: Chemical not drawing properly

Symptom	Problem	Remedy
Dispenser won't dispense chemical at any locations	Screen washer on water supply hose is clogged	Remove screen washer, clean out and replace
	Water pressure is insufficient	Verify water pressure is minimum of 20psi, remove screen washer, clean out and replace
	Mineral deposits are built up in proportioner	Soak proportioner in delimer to clean off mineral deposits
	Selector valve is not turning	Verify transmission aligns to selectors, verify transmission operates as intended Replace transmission
Dispenser is dispensing chemical from wrong position	Transmission or selector valve not engaging	Verify transmission alignment to selector valves
Chemical inlet tubing does not stay primed with chemical after use	Check valves are worn and have failed	Replace check valves
Dispenser does not dispense chemical from certain locations, but works at others	Chemical bottle isn't drawing product	Replace bottle in question with new one
	Loss of vacuum is preventing chemical from drawing	Check for vacuum at cap or foot valve, if none, check both selector valves, if you have vacuum then replace check valves If no vacuum, remove selector and check for vacuum at proportioner inlet If you have vacuum then replace selector valve, if none, replace proportioner
		Selector valve is not turning

Troubleshooting: Product dilution is incorrect

Symptom	Problem	Remedy
Product dilution is too weak or strong	Water flow to dispenser is fluctuating	Ideal water pressure range accurate chemical dilution is 30psi to 70psi max., if over 70psi, install pressure regular