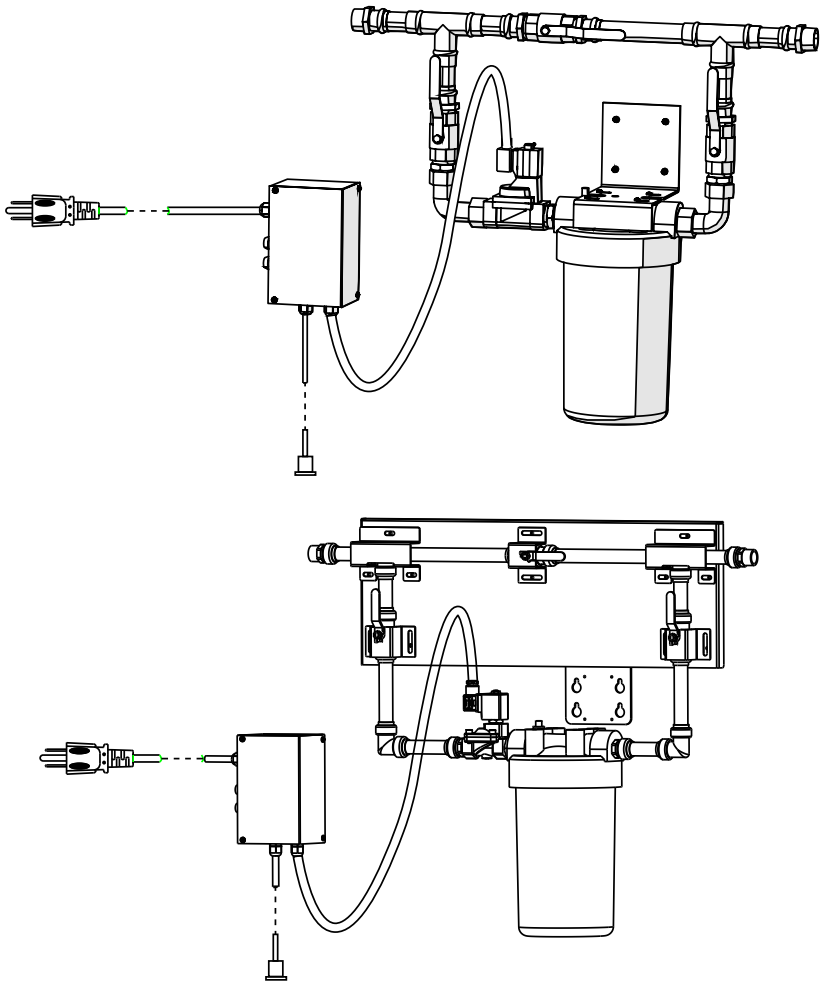
ADS Dental System

Water Filter System

Model: 1", 3/4"

User Manual



** Picture for Reference Only*

Dear Customer

Thank you for purchasing an ADS product. The contents mentioned here relate to your safety, legal rights and responsibilities. ADS reserves the final right of interpretation of this document and related product documents. Product reform is our consistent purpose and pursuit. ADS may update product design, technical specifications and related documents without further notice. Please visit the ADS official website for the latest product information.

By using this product, you are deemed to have carefully read and accepted the terms of this disclaimer. You agree to take full responsibility for the use of this product and any consequences arising thereof. You agree to only use this product for legitimate purposes and to abide by this agreement and any other rules, policies and guidelines established by ADS. ADS will not be liable for any personal injury, accident, property loss, legal disputes or other adverse events arising from failure to follow the safety instructions, or due to force majeure factors. The user will bear full responsibility and losses.

Unless expressly stated in the after-sales service policy, this product and all related materials and content are provided on an "as is" basis, without any express or implied warranty or condition.

This product is not suitable for use by minors under 18 years old and others without full civil capacity. Please prevent such persons from accessing this product, and take extra precautions when operating it in their presence.

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1 INTRODUCTION

Thank you for choosing our company's product. This manual provides instructions for the installation, operation and maintenance, etc.

1.1 Intended Applications

The purpose of water filter system is to provide safe and easily controllable water supply, includes an easy shut-off function. This system filters out contaminants such as bacteria, viruses, chemicals, and particulates from tap water to ensure the provision of clean and hygienic water during dental procedures. This measure helps prevent infections or cross-contamination among patients and maintains a high standard of hygiene within the dental operatory.

1.2 Symbol Definitions

The following symbols may be used throughout this user manual:

This user manual provides definitions for the symbols used throughout the user manual. These symbols are intended to convey important safety, warning, or cautionary information to the user. It is crucial to understand the meaning of these symbols in order to operate the equipment safely and effectively.

If you have any questions or uncertainty regarding the meaning of any symbol, please contact our customer service department for assistance.

Symbol	Description
	Protective earth (ground).
	Functional earth (ground).
	Type B applied part.
	Caution: Hot surface.
	Electrical and electronic waste. Do not dispose of with domestic waste.
	Manufacturer of equipment.
	Date of manufacture.
	VAC symbol. VDC symbol. VAC/VDC symbol.
REF SN or S/N	Catalog Number. Serial Number.
	General mandatory action sign. Not a caution. Take note of additional important instructions.
	Mandatory to consult the manual.

Symbol	Description
	Caution. Failure to follow instructions could result in damage to product or minor injury.
	Biohazard. Failure to follow instructions could increase risk of infection.
	Danger. Failure to turn off the power before you begin this procedure can lead to electrical shock.
	Warning. Failure to turn off the power before you begin this procedure can lead to product damage and result in serious injury or death.
	Temperature shipping and storage limits.
	Relative humidity shipping and storage limits.
	Atmospheric pressure shipping and storage limits.
	This side up
	Fragile
	Keep dry

1.3 Safety Precautions

WARNING	• For safety reasons, do not use unknown quality water and unknown source water. • Ensure electrical safety - use grounded outlet of correct voltage, do not operate with damaged cord/plug.
CAUTION	• Only certified plumber are permitted to install this equipment. • Protect from freezing, heating and direct sunlight. • Do not use on hot water lines. Water temperature must not exceed 100 ℉ . • Do not use on water line pressure above 100 PSI.

- Replace the filter cartridge every 3 - 6 month.
- Make certain that the water is not with high mineral content.
- Flush the system thoroughly after prolonged periods of non-use.
- Set to Bypass Mode or shut-off the water supply before replace the filter cartridge or other fittings.

To maximize the service life of your product:

- Use the product according to the instructions provided in this user manual. Improper use may shorten the service life.
- Perform regular inspection and maintenance as described in the Maintenance section. This will help identify and resolve minor issues before they cause major damage.
- Use only manufacturer recommended parts and accessories. Non-approved items may cause compatibility issues.
- Contact customer service for repairs by qualified technicians. Unauthorized repairs often create more problems than they fix.
- With proper care and maintenance, you can expect many years of reliable performance from your product. Please contact us if you have any questions about getting the longest usable life from your purchase.

Transportation, Storage and Operating Environment:

Temperature/Relative Humidity	Details
Transportation and Storage	• Temperature: -20℃ ~ +55℃ （-4 ℉ ~ 131 ℉） • Relative Humidity: 30% ~ 70% • Atmospheric Pressure: 700hpa ~ 1060hpa
Operation	• Temperature: 5℃ ~ 40℃ （41 ℉ ~ 104 ℉） • Relative Humidity: ≤ 80% • Atmospheric Pressure: 860hpa ~ 1060hpa
NOTE: This device cannot be used in environments with flammable anesthetic mixtures with air, oxygen or nitrous oxide.	

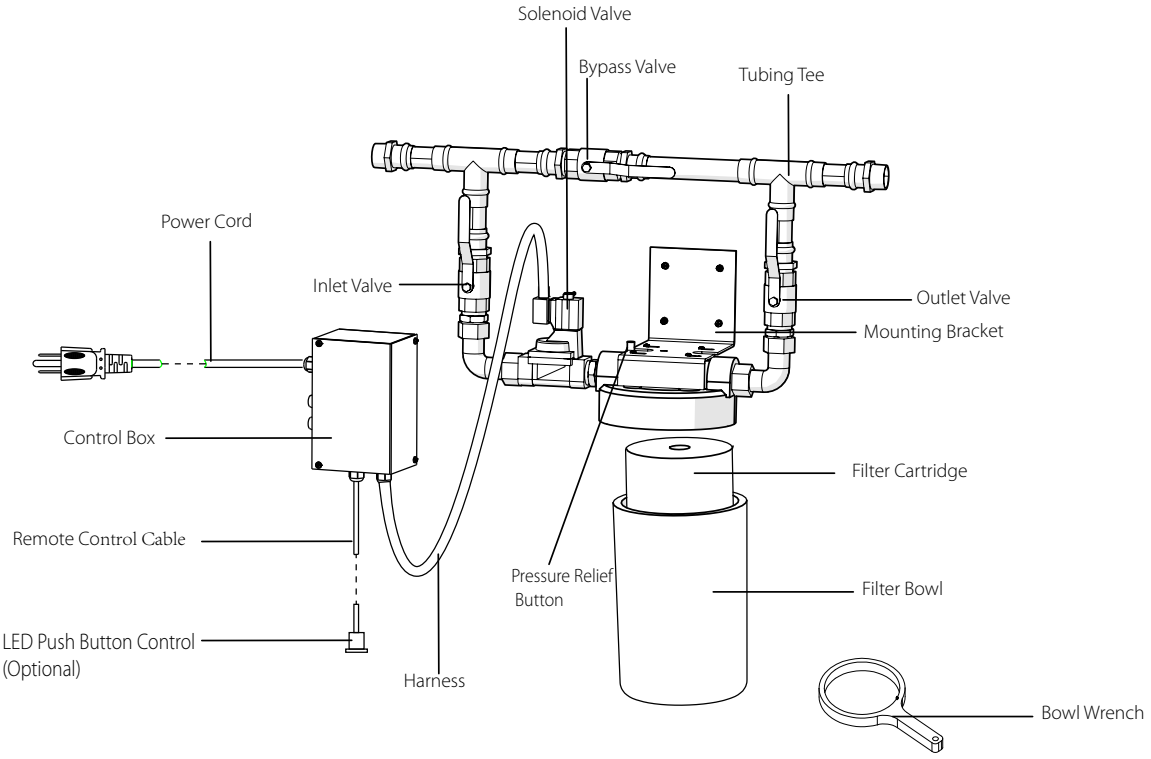
1.4 Specifications

Model	1" Water Filter (Metal Tube)"	3/4"Water Filter (Metal Tube)	1" Water Filter (Plastic Tube)	3/4" Water filter (Plastic Tube)
Rated Power (Hp)	0.008	0.008	0.008	0.008
Operating Current (A)	0.5	0.5	0.5	0.5
Fuse Rating (A)	1	1	1	1
Filter Cartridge (Length)	10"	10"	10"	10"
Filter Housing Inlet/Outlet	1" NPT	3/4" NPT	1"NPT	3/4"NPT
Inlet/Outlet	1" NPT	3/4" NPT	1" NPT	3/4" NPT
Tubing	1" Copper	3/4" Copper	1" PXE(White)	3/4" PXE (White)
Flow Rate (L/Min)	75.7	37.9	48.2	24.5
Filtration Rating (μm)	5	5	5	5
Net Weight (LBS)	24.2	18.3	30.0	25.2
Product Dimensions (Inch)	27.9×7.3×23.7	26.9×21.9×17.2	32.4×26.31×8.35	32.4×26.31×8.35
Packaging Dimensions (Inch)	21×19.7×10.2	21×19.7×10.2	34.3×26×9.8	34.3×26×9.8

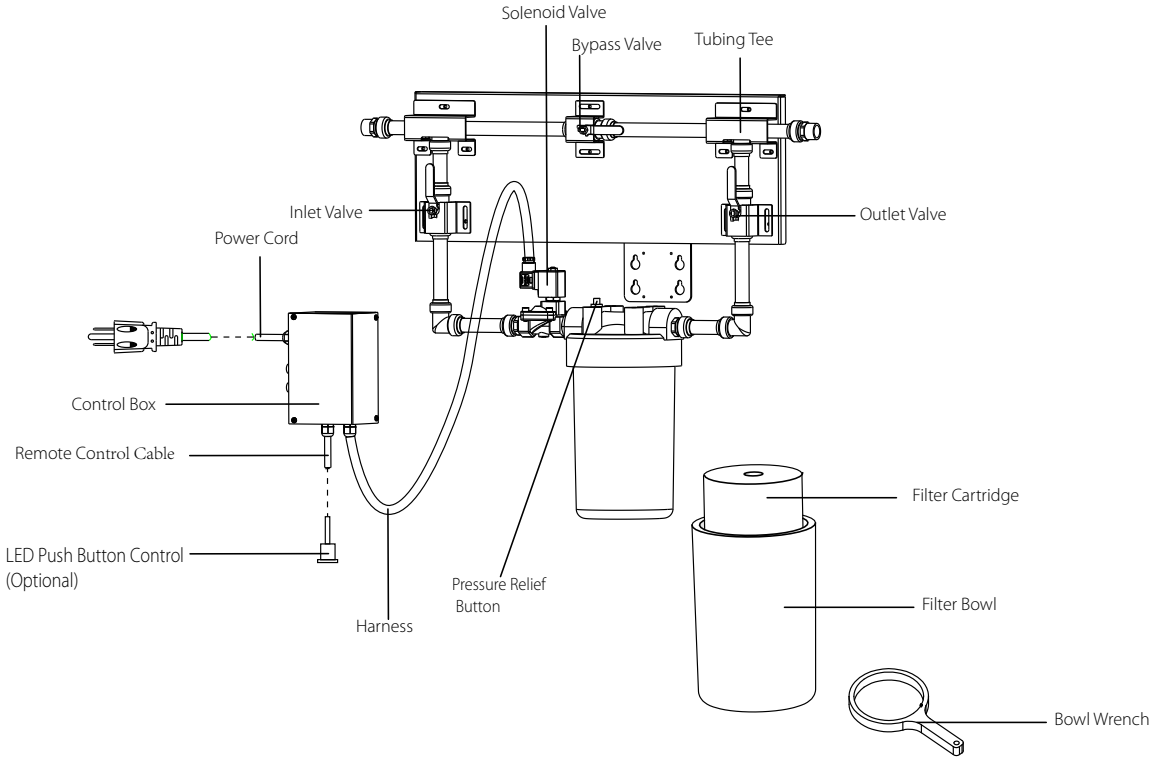
1.5 Product Overview

The water filter system consists of the components shown as follows:

Water filter (Metal Tube)



Water Filter (Plastic Tube)



2 BEFORE THE INSTALLATION

2.1 Recommended Tools

- Screwdrivers
- Power Drill
- Compression Tool
- Adjustable Wrench
- Teflon Tape
- Water Tubings
- Pressure Gauge

Water Filter System 3/4”

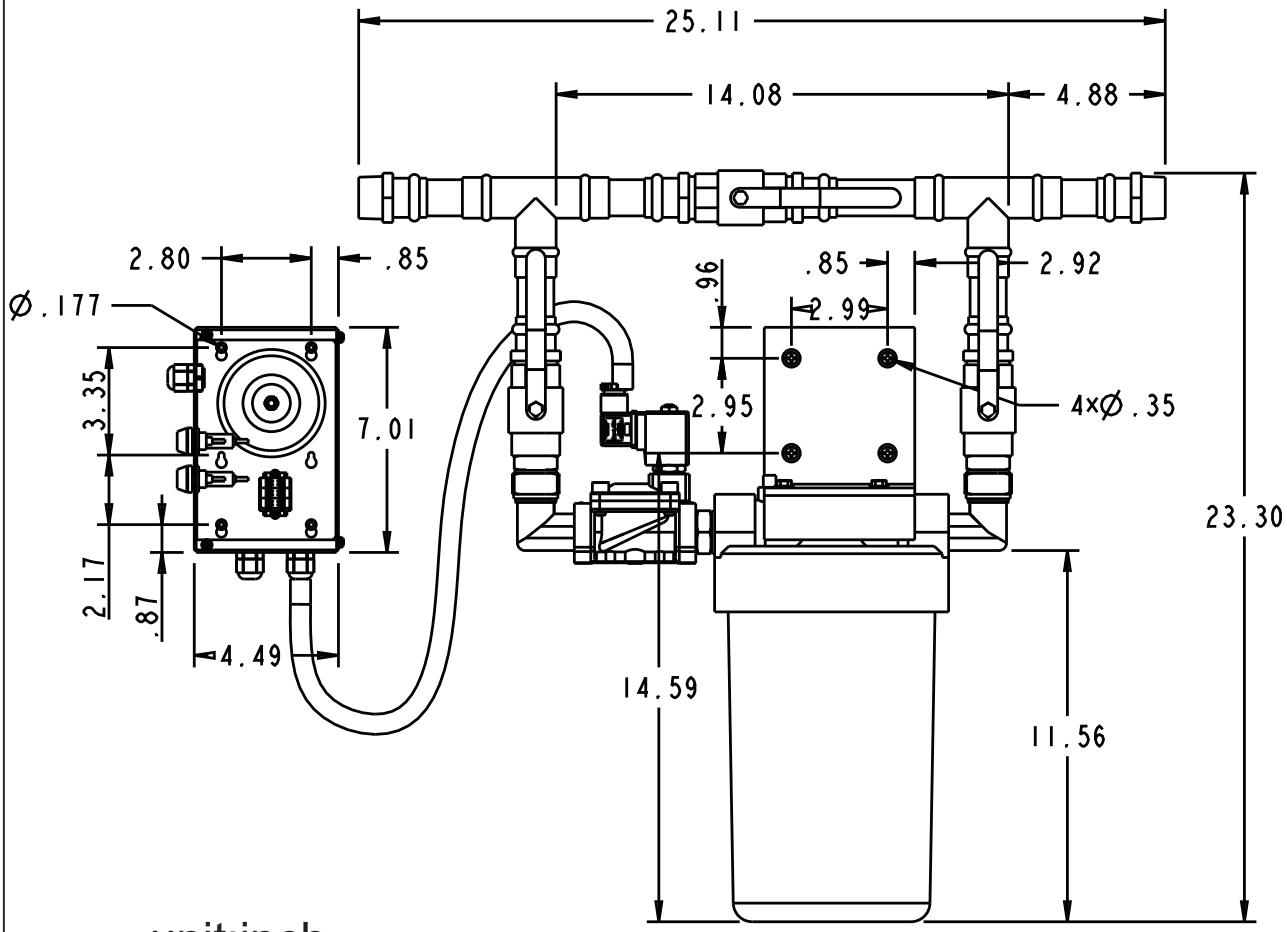
2.2 Other Preparations

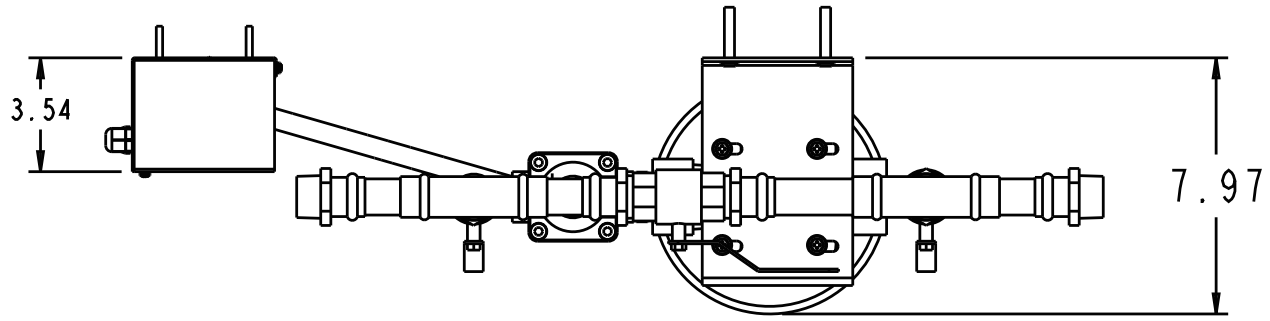
Before proceeding, review the components of the water filter system. Carefully read all instructions before and after installing the water filter system.

Identify and measure the ideal location for the filter installation, taking account factors like maintenance access, piping layout, proximity to power outlets.

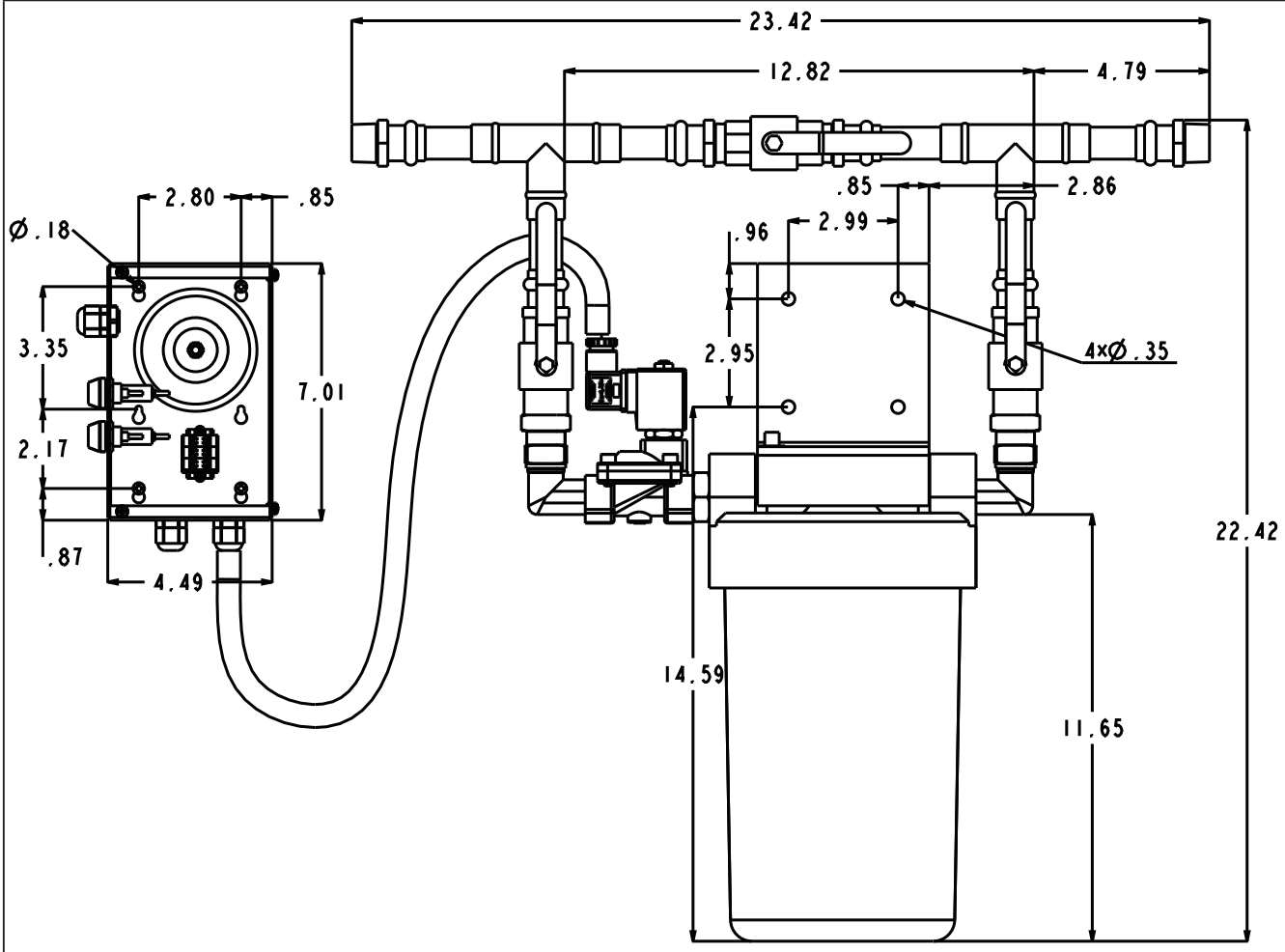
2.3 Product Dimensions

Water Filter System 1" (Metal Tube)

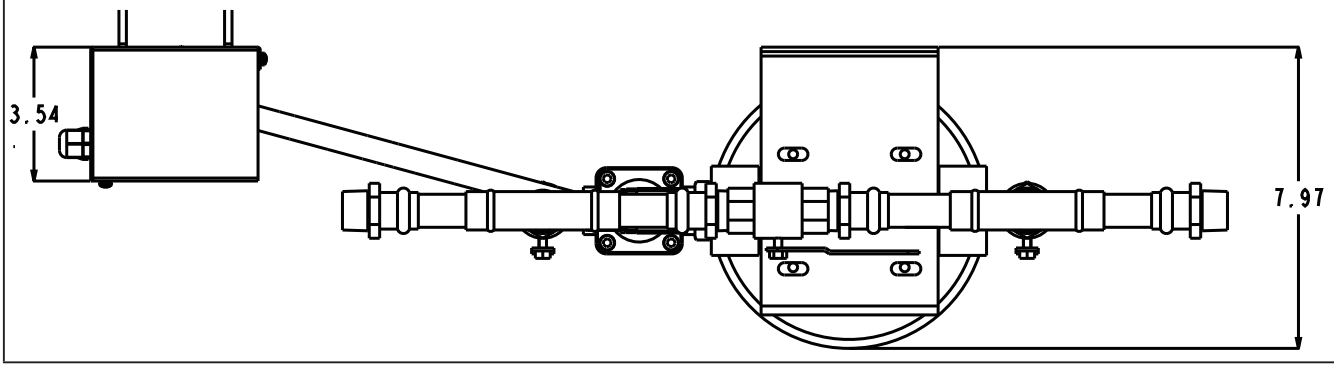




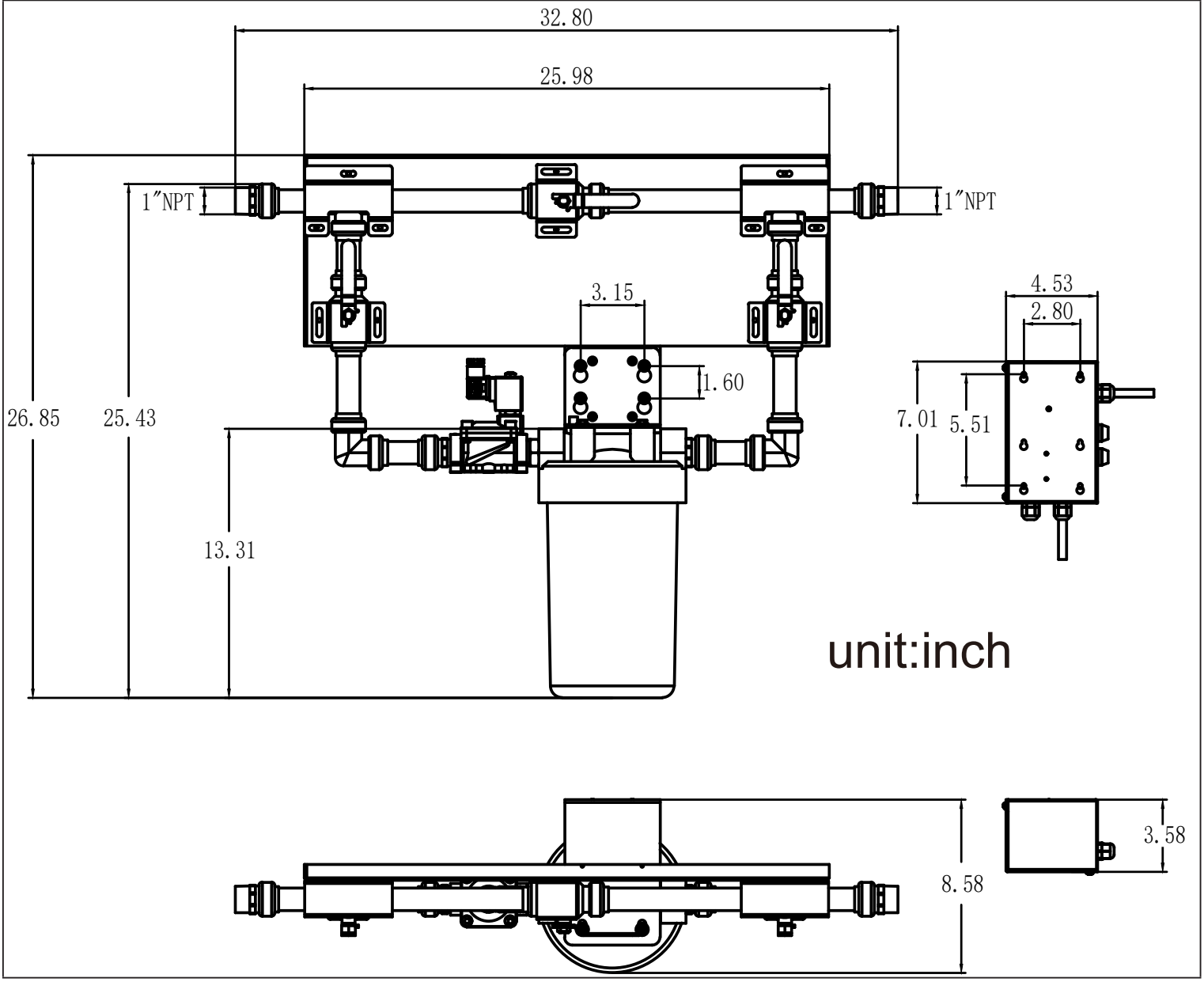
Water Filter System 3/4" (Metal Tube)



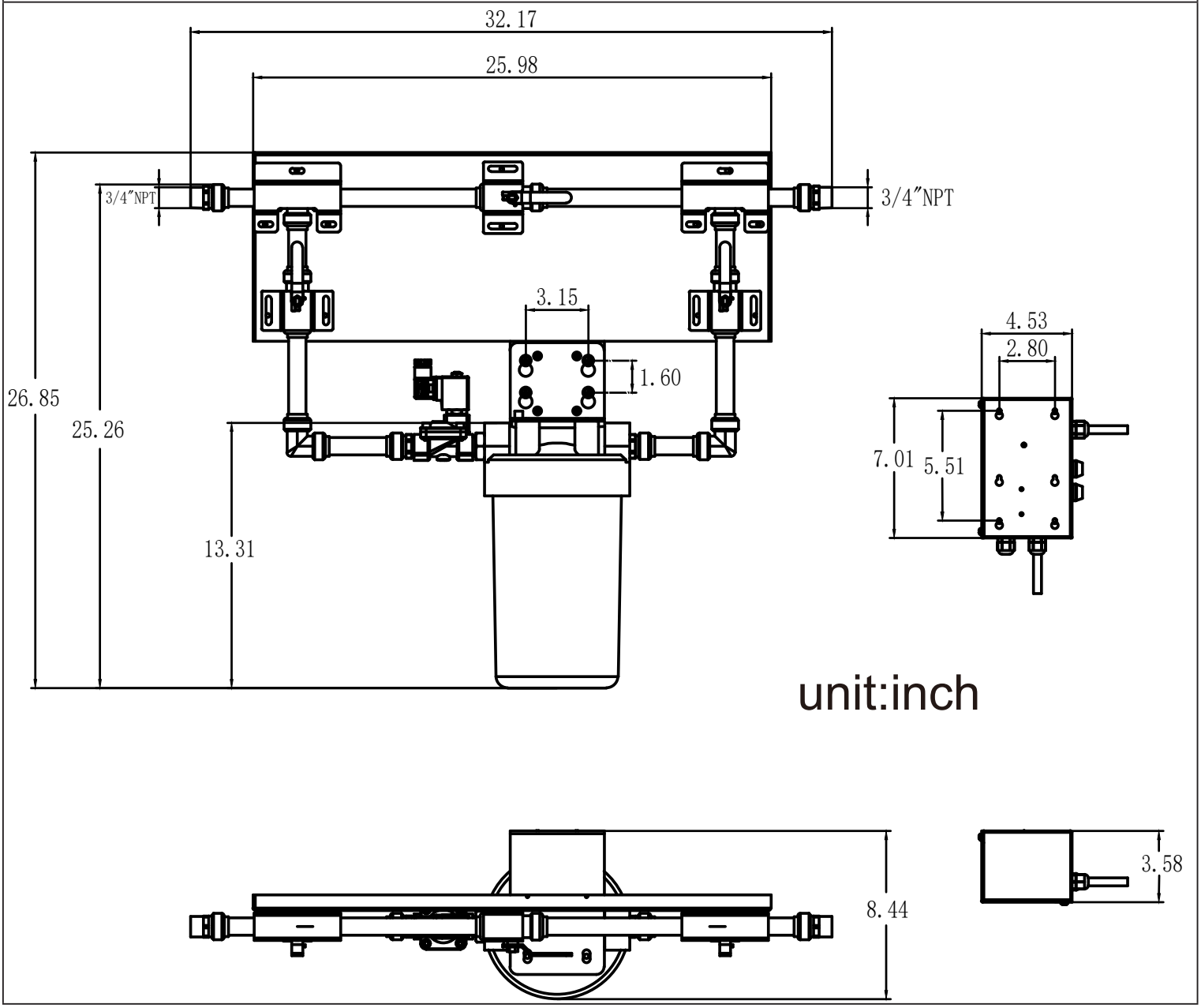
unit:inch



Water Filter System 1" (Plastic Tube)



Water Filter System 3/4" (Plastic Tube)

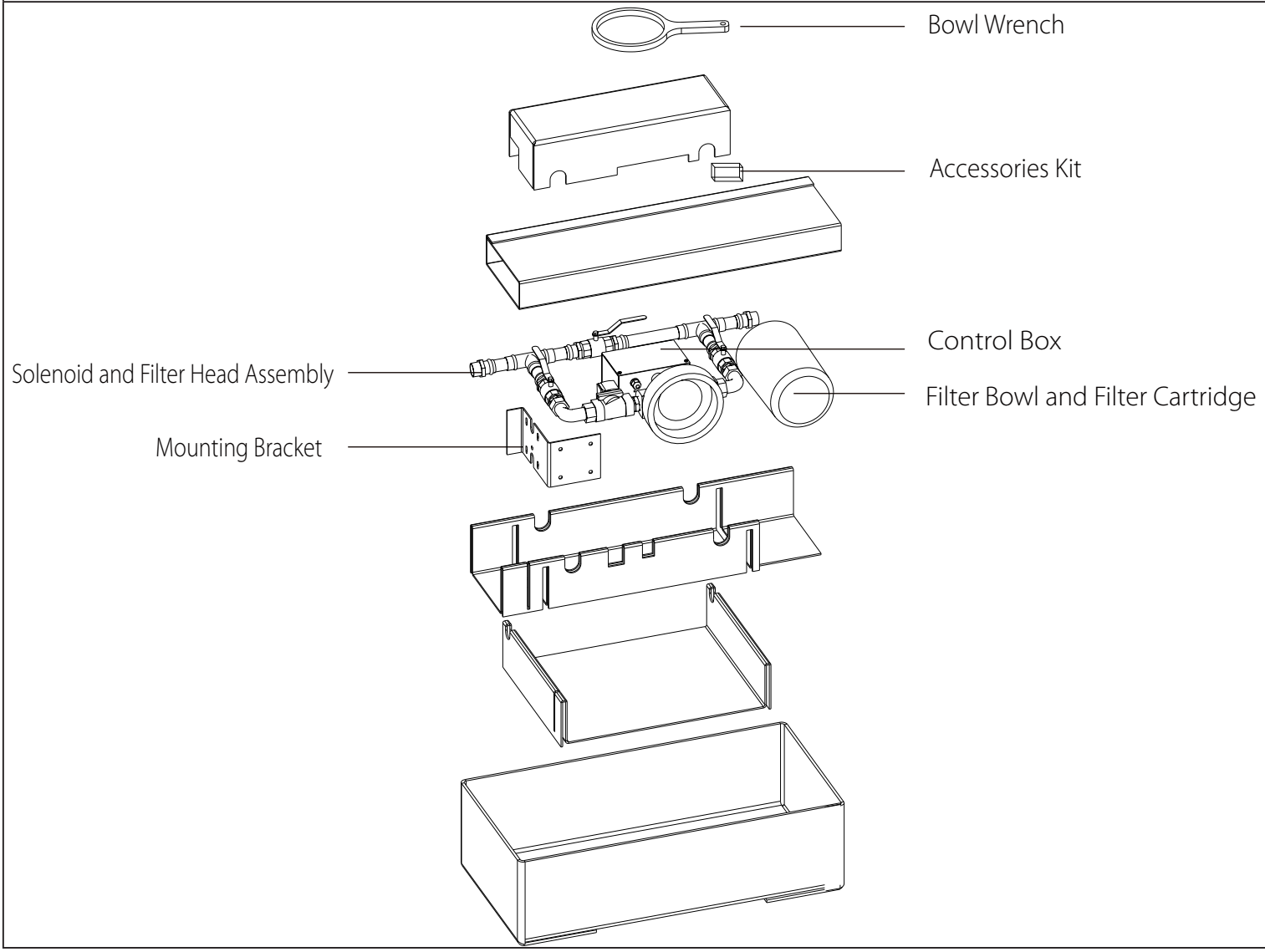


3 INSTALLATION

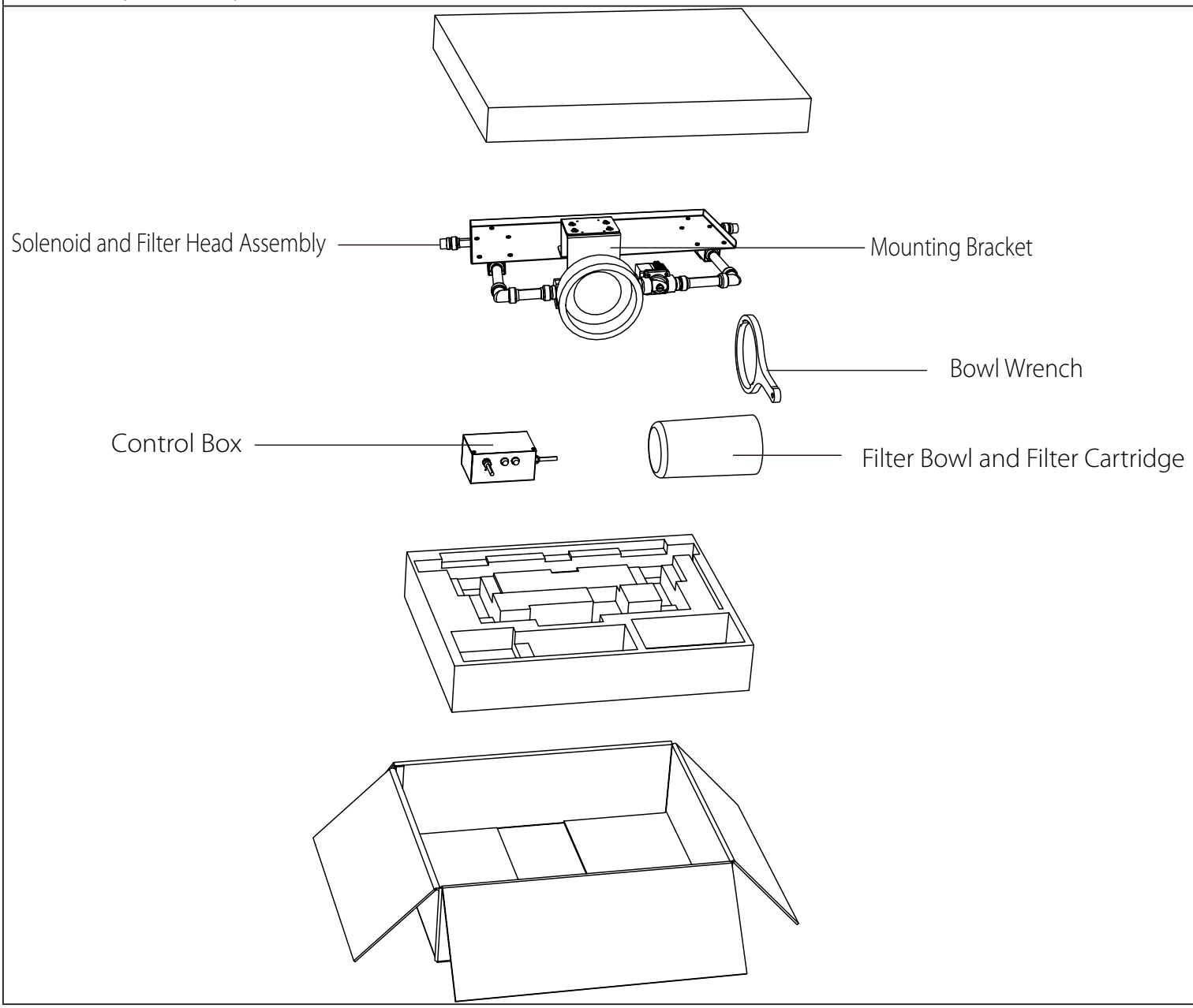
3.1 Unpack the Water Filter

1. The followings are the packages of water filter with mental pipe and water filter with plastic pipe.
2. Open the outer box and inspect the device for any damage.
3. Check the accessories against the packing list to ensure nothing is missing or damaged.
4. Contact your dealer or our company immediately if you having questions.

Water Filter (Mental Tube)

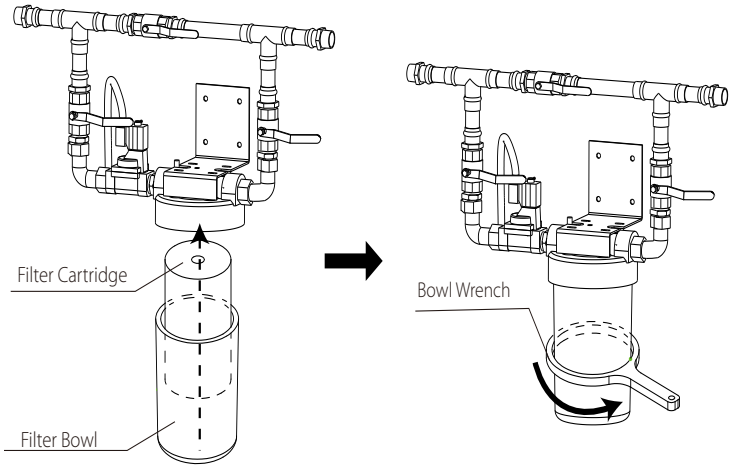


Water Filter (Plastic Tube)



3.2 Install the Water Filter

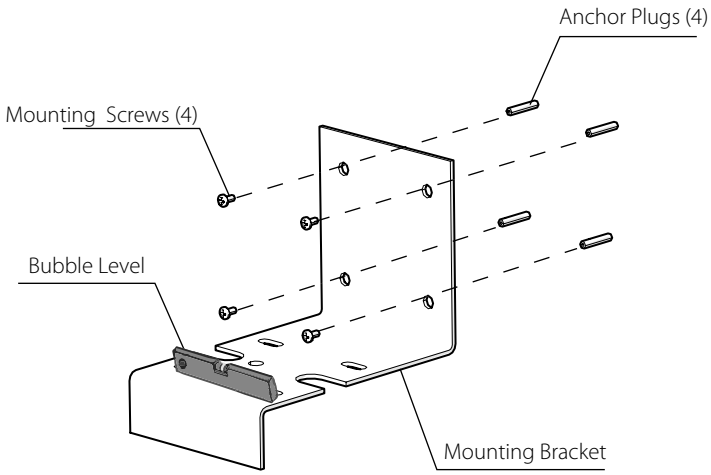
3.2.1 Install the Water Filter (Mental Tube)



3.2.1.1 Connect the Assemblies

To connect the assemblies:

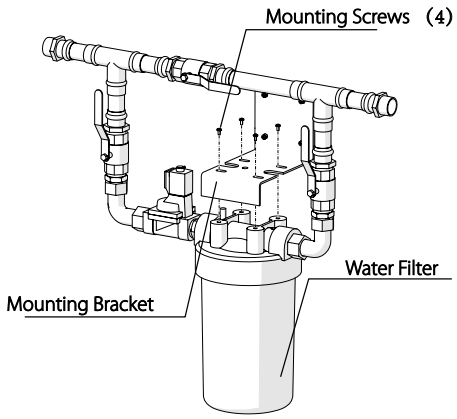
1. Insert the cartridge into the filter bowl until it is fully seated.
2. Screw the filter bowl onto the filter head.



3.2.1.2 Install the Mounting Bracket to the Wall

To install the mounting bracket to the wall:

1. Locate a convenient water and electrical supply line run for water filter system installation.
   (**NOTE:** Ensure the wall is clean, dry, and free from dust or grease.)
2. Using the mounting bracket as a template, mark the hole locations.
   (**TIPS:** To ensure it is level, place a bubble level on the mounting bracke.)
3. Drill holes in the marked position using a power drill, matching the size of the chosen wall anchors.
4. Gently tap the anchor plugs into the drilled holes with a hammer.
5. Install and secure the mounting bracket to the wall with four mounting screws.

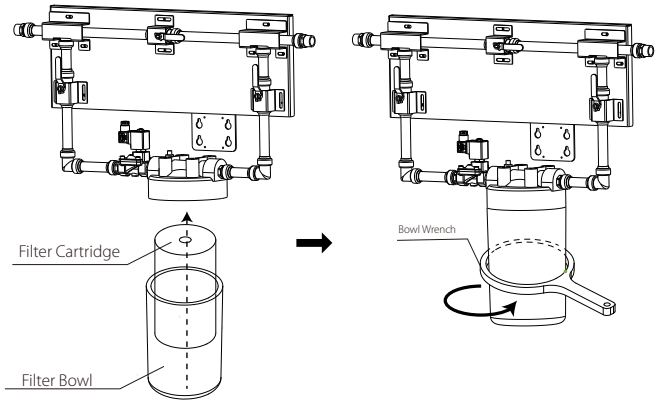


3.2.1.3 Install the Water Filter to the Mounting Bracket

To install the water filter to the mounting bracket:

1. Install the water filter to mounting bracket.
2. Secure the water filter with four mounting screws.

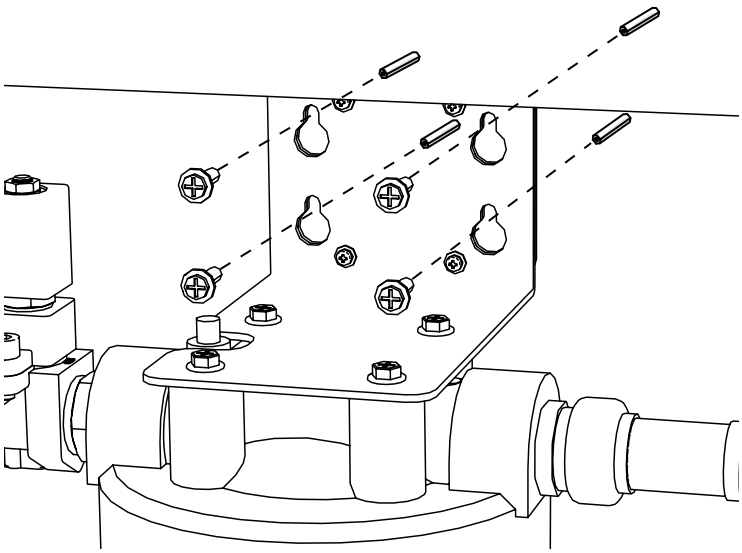
3.2.2 Install the Water Filter (Plastic Tube)



3.2.2.1 Connect the Assemblies

To connect the assemblies:

1. Insert the cartridge into the filter bowl until it is fully seated.
2. Screw the filter bowl onto the filter head.



3.2.2.2 Install the Mounting Bracket to the Wall

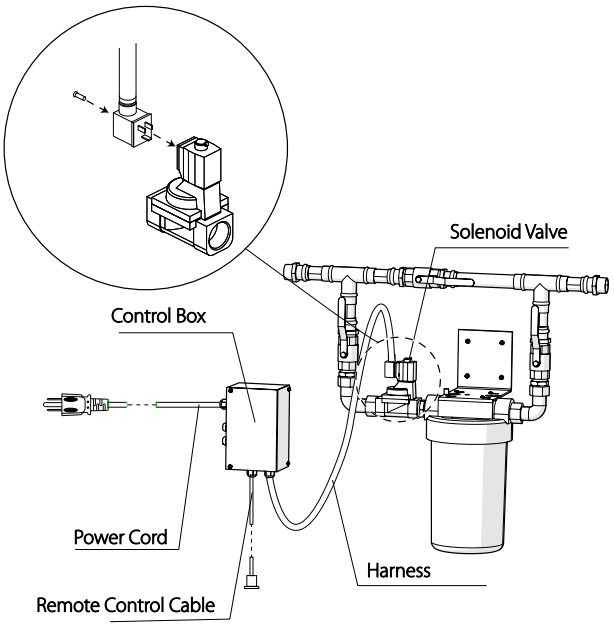
To install the mounting bracket to the wall:

1. Locate a convenient water and electrical supply line run for water filter system installation.

   (**NOTE:** Ensure the wall is clean, dry, and free from dust or grease.)
2. Using the mounting bracket as a template, mark the hole locations.

   (**TIPS:** To ensure it is level, place a bubble level on the mounting bracke.)
3. Drill holes in the marked position using a power drill, matching the size of the chosen wall anchors.
4. Gently tap the anchor plugs into the drilled holes with a hammer.
5. Install and secure the mounting bracket to the wall with four mounting screws.

3.3 Make Electrical Connections



The water filter system is driven by electricity.

To make electrical connections for the water filter:

1. Connect the control box harness to the connector of the solenoid valve.
2. Secure the connection with the fixing screw.
3. Plug the power cord to the power socket..

3.4 Install the Remote Control

The remote control is a must for activating and deactivating the water filter system. The water filter system supports the ADS LED Push Button Controls and the third-party remote control.

3.4.1 Connect the LED Push-Button Controls

The water filter system can include LED illuminated push-button controls for convenient start and stop operations. If including the LED illuminated push-button controls, proper connection of these controls is a must and important for their functionalities.

For details, refer to the user guide of the LED push-button controls.

3.4.2 Install the Third-party Remote Control

The water filter system also supports the third-party remote control.

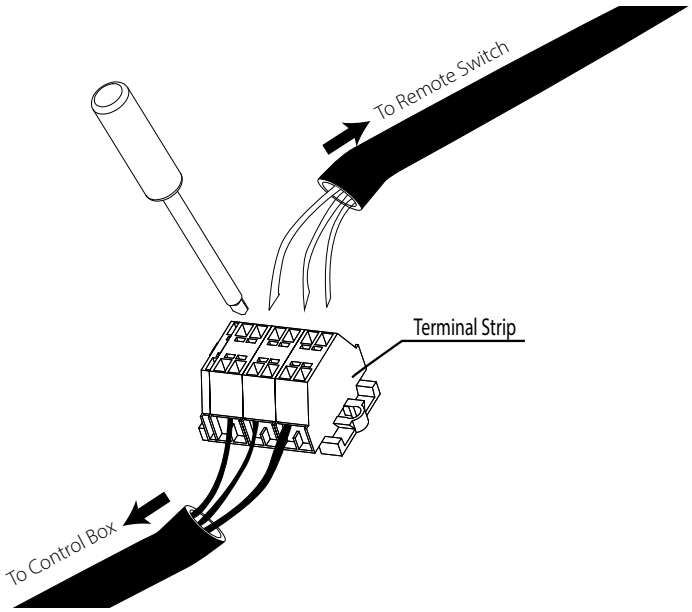
To install the third-party remote control:

1. Unplug the device.
2. Attach the third-party remote control to the terminal strip.

Mfg/Wire	Yellow (+24V)	Brown (-Light)	Orange (Run Signal)
AirTechniques	Yellow	Brown	Orange
A-dec	Blue	Gray	Black
Midmark	Blue	White	Red
Dental EZ	Black	Brown	Yellow
Matrix	Red	Blue	White
Apollo	Blue	White	Red
Tech West	Blue	White	Red

3. Ensure secure and correct wiring.
4. Connect the power and conduct a thorough electrical inspection and functional testing.

5. Follow the remaining steps of the third-party remote control installation.
6. For details, refer to the support documentation of the third-party remote control.



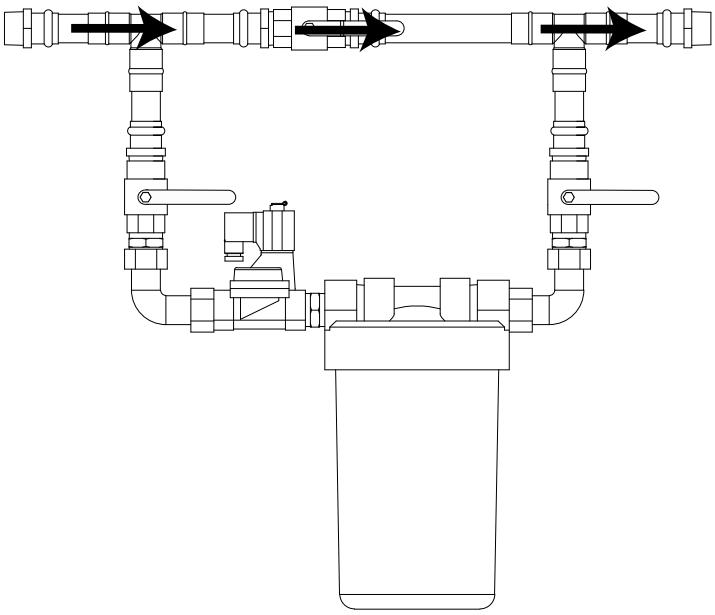
4 OPERATIONS

4.1 Set to Bypass Mode

The bypass mode is used for maintenance.

To set the water filter system to the bypass mode:

1. Place the bypass valve in the open position.
2. Place both inlet valve and outlet valve in the closed positions.

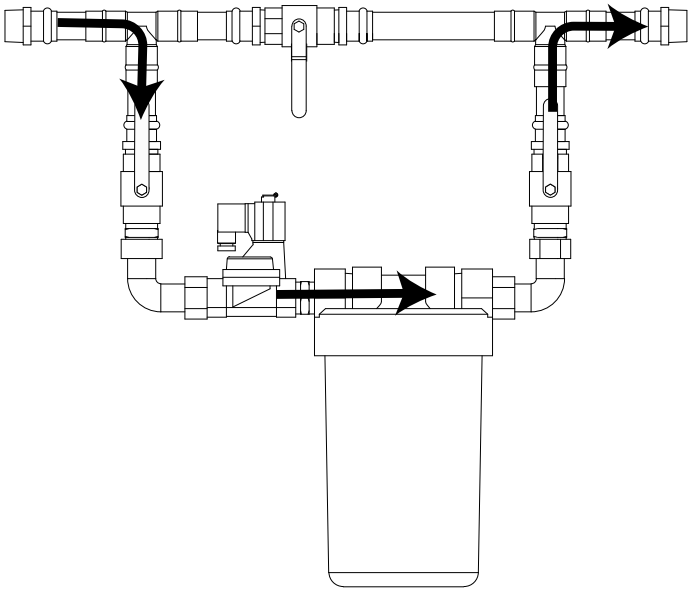


4.2 Set to Operational Mode

The operational mode is used for water filtering.

To set the water filter system to the operational mode:

1. Place both inlet valve and outlet valve in the open position.
2. Place the bypass valve in the closed position.



4.3 Activate the Water Filtering

To activate the water filtering:

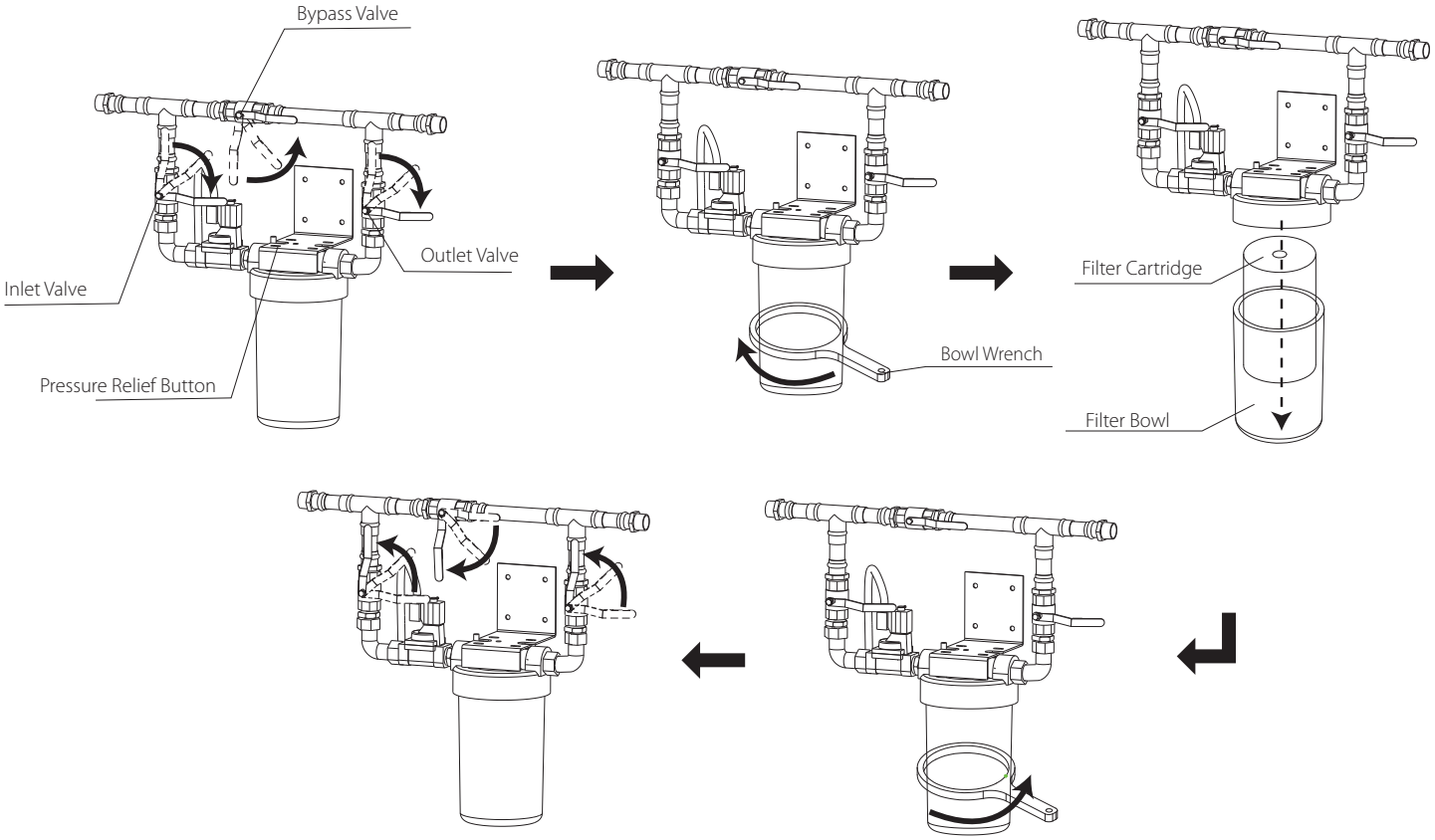
1. Ensure that the water filter system is in the operational mode.
2. Use the remote control to turn on the water filtering system.
   For details, refer to the user guide of the remote control.

5 MAINTENANCE

5.1 Replace the Water Filter Cartridge

To replace the water filter cartridge:

1. Place the bypass valve in the open position.
2. Turn off both inlet valve and outlet valve.
3. Depress the pressure relief button to release housing pressure.
4. Use the bowl wrench to unscrew and remove the filter bowl from the filter head.
5. Remove the used filter cartridge from the filter bowl.
6. Insert the cartridge into the filter bowl until it is fully seated.
7. Screw the filter bowl onto the filter head.
8. Open both inlet valve and outlet valve, turn off the bypass valve.
9. Slowly depress the pressure relief button to release tapped pressure and check for leaks.
10. Flush the cartridge for five minutes before use.



6 USER SERVICE INFORMATION

WARNING	Only licensed dental professionals should operate or perform maintenance on this portable dental unit. Improper use or disassembly by untrained individuals can result in electric shock, burn hazard, infection control issues, or damage to the equipment.

6.1 Troubleshooting

The diagram below is for reference of troubleshooting problems. Contact customer service for help when the suggested procedures can not resolve the problem.

Problem	Solution
When switch is turned off, water continues to flow out	It indicates that the solenoid valve is malfunctioning. Contact customer service for help.
Water quality after filtration have shown a significant decline.	It indicates clogged or expired filter cartridges which require replacement. Replace the water filter cartridge. (See Section 5.1)
Leaks from inlet/outlet connections	1. Turn off master water supply. 2. Tighten the fittings with adjustable wrench. 3. Turn on master water supply and check if exists other leaks (if there are other leaks, contact customer service for help).
Leaks between filter bowl and filter head	1. Set to Bypass Mode and press the pressure relief button. 2. Remove the filter bowl. 3. Check and clean the O ring and the O ring groove (located beneath threads of filter head). 4. Install the O ring into groove securely. 5. Screw and tighten the filter bowl into filter head. 6. Set to Operational Mode.

6.2 Disposal

NOTE	Improper disposal of dental equipment and its components can harm the environment and pose a risk to public health. Always follow local regulations when disposing of equipment and its components.

Prior to disassembly or disposal, the product must be thoroughly prepared through appropriate cleaning, disinfection, and sterilization procedures.

For permanent equipment disposal, recommend contacting your local dental equipment specialist to obtain specific information regarding the disposal regulations applicable in your country. Follow the following procedures for permanent equipment disposal:

1. Unplug the equipment from the power source.
2. Remove any attachments or accessories from the equipment.
3. Check local regulations to determine the proper method of disposal for the equipment.
4. If allowed, disassemble the equipment into its individual components for recycling or disposal.
5. Dispose of the equipment and its components according to local regulations.

6.3 Limited Warranty

ADS warrants the items portrayed within the table underneath against defects in material or workmanship beneath typical planning utilize when obtained from ADS or an authorized ADS dealer. The guarantee period is measured from the date of ADS's invoice. In the event that you've got questions about when your guarantee scope starts, it would be ideal if you contact ADS Client Service.

Product	Warranty Period
All Dental Chairs; Portable Dental Unit; Operator and Assistant Stools; Dental Lights, Delivery Systems; Monitor Mounts; Dental Furniture; Mechanical Room Compressors and Vacuums; and original components	5 years
Electric Motors, Tubing, and Control Modules	1 year
Replacement components and parts	Remainder of original product warranty period or 1 year (whichever is greater)

Items (counting accessories, components and replacement parts) not made by ADS are secured by the original manufacturer's guarantee and are not secured by ADS's guarantee. Illustrations incorporate, but are not restricted to, sterilizers, maintenance equipment, cameras, curing lights, ultrasonics, control modules, electric motors, attachments, handpieces, and turbines. If you don't mind contact ADS Client Service for specific guarantee information of the initial producer otherwise you may contact the original producer specifically.

Exclusions

ADS's Restricted Guarantee does not cover:

a) ADS items that have been utilized in coordinate or roundabout combination with unapproved third-party items, counting third-party parts (i.e. items not authorized or fabricated by ADS).

b) Representations and guarantees made by any individual or substance other than ADS.

c) The harm caused by typical wear and tear or the common breakdown of materials over time.

d) The harm caused by inappropriate establishment, care, or upkeep, mischance, abuse, manhandling, disregard, carelessness, altering, disappointment to look for and get repair or substitution in a convenient way, changes, cargo harm, common catastrophe, or any other cause or constrain majeure past ADS's control (a disappointment to take after ADS's Enlightening for Utilize and pertinent item operation and support enlightening, counting establishment enlightening, will void the guarantee).

e) The harm caused by schedule upkeep or in association with the utilization of chemicals and forms for cleaning, or sterilizing.

f) Changes in color caused by normal or fake light.

Consumable items are not secured by this Restricted Guarantee. Contact ADS Client Service with questions about guarantees or returns for these items.

Warranty Assistance and Contact Information

In case you obtained your product from an ADS dealer, for guarantee help, it would be ideal if you contact your authorized ADS dealer amid the guarantee period. The dealer will examine with you courses of action for the product(s) to be conveyed to them for assessment or for assessment to happen on location.

In the event that ADS decides that the item contains a deformity that's secured beneath this Restricted Warranty, the item will be repaired or supplanted with an item that's comparable to the initial execution. In case the item is secured beneath ADS's Constrained Guarantee, you'll not be charged for parts, but the ADS dealer performing the repair(s) will charge you a call-out charge (in the event that pertinent) and any applicable repair benefit expenses. In certain circumstances, you will be mindful of expeditiously shipping the item to ADS and related transport/shipping costs; ADS isn't capable of bundles misplaced or harmed in travel, and you're dependable for purchasing insurance. Please note that styles and color alternatives accessible at the time of benefit may change. In the event that an item or color has been suspended, a substitution within the item fashion or color that's the foremost comparative to the original will be given.

In case you have got a question that's not tended to in this Restricted Guarantee or on the off chance that you acquired your item straightforwardly from ADS and require guarantee help, it would be ideal if you contact ADS Client Service. Reaction time is inside 24 hours.

ADS Dental System

Add: 1590 S Milliken Ave., unit A, Ontario, CA 91761

Email: sales@adsequip.com

Tel: (626)620 0456

Customer service is available Monday through Friday, from 8:30 a.m. to 5:30 p.m.

Shipping

All prices are Ex Works Ontario California, U.S.A.
Standard shipping will be by ground. Air or expedited service is available upon request.

Return and Refund

ADS Equipment will accept return and unused product within 60 days of ship date, subject to the following conditions:

The product must be unused, saleable and returned in the original shipping materials. The box or boxes may have been opened but all contents must be returned.

Call: ADS Equipment at 626.620.0456 with the original purchase order number and request return materials authorization (RMA) number be printed on the box (eg. RMA 12345).

Ship product to: ADS Equipment 1590 S. Milliken Ave. Unit A Ontario, CA. 91761

Return shipping cost is the customer' s responsibility.

After receipt and inspection of the returned product, ADS will either credit the customer' s account or return payment via the payment card for the invoiced product price plus applicable taxes less a 25% restocking fee and payment discounts taken. Shipping and handling charges are not subject to a refund.

Damaged in Transit

If a product is damaged upon delivery to our dealer, it is the dealers responsibility to notify the shipper immediately of the damage, so a claim can be assessed. They must also notify ADS immediately.
Special Order Items
Special orders cannot be returned

Warranty Limitations; Exclusive Remedy; Damages Disclaimer

ADS's sole commitment and your exclusive remedy beneath this Restricted Guarantee is the repair or substitution of defective items or components. ADS's Restricted Guarantee is in lieu of all other guarantees and commitments, express or inferred. ADS explicitly repudiates all inferred guarantees, counting but not restricted to inferred guarantees of merchantability, toughness, or wellness for a specific reason or utilization.

ADS might not be obligated for and explicitly repudiates any coordinate, uncommon, roundabout, coincidental, reformatory, uncommon, commendable, or considerable harms or delays, counting but not constrained to, harms for the misfortune of benefits or pay, the misfortune of utilize, downtime, property harm, or individual harm, in any case, caused, whether for breach of guarantee, breach of contract, tort (counting carelessness), strict obligation or something else.

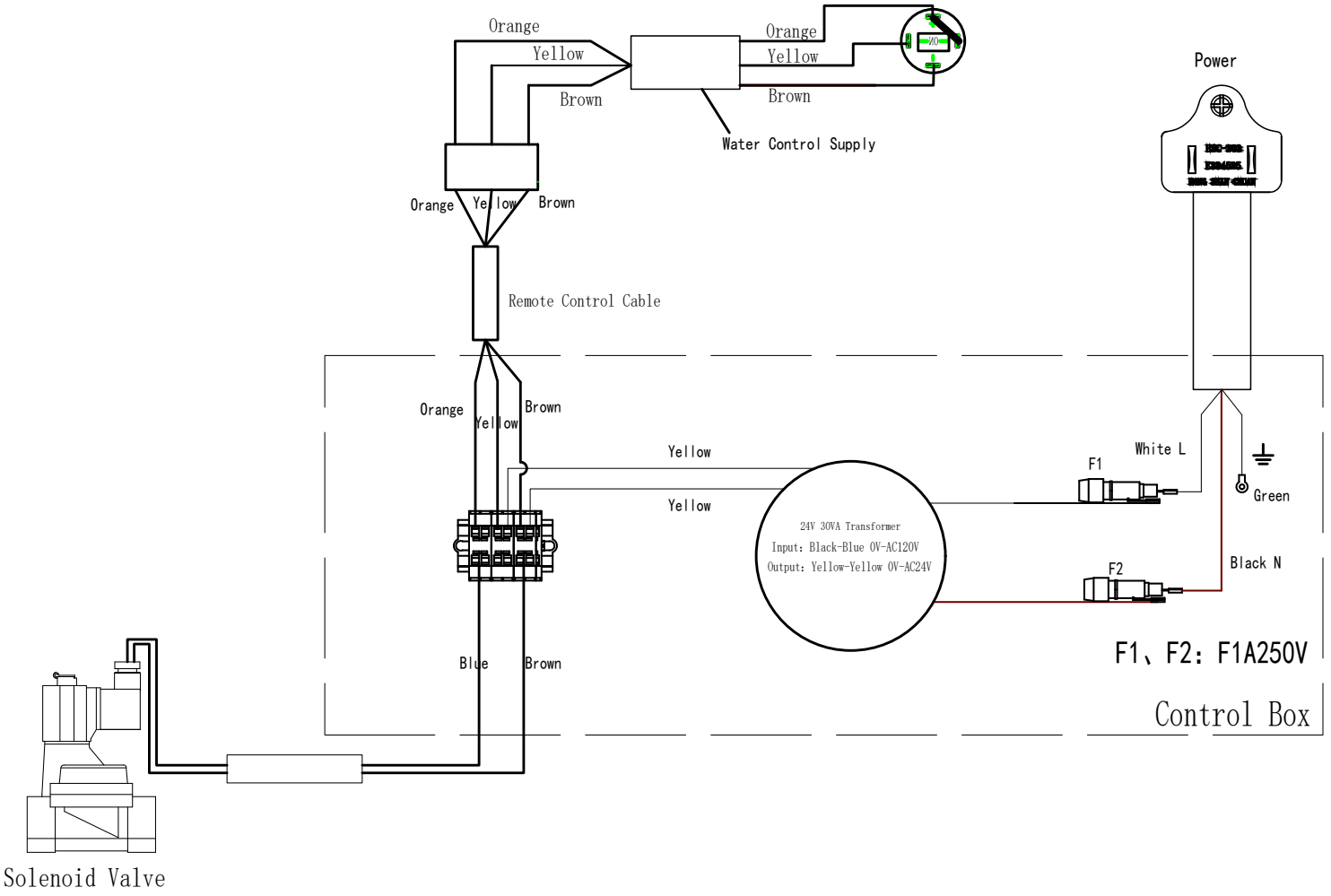
Limitation of Liability

Without constraining the harms disclaimer above, the maximum liability of ADS and its providers, associates, dealers, affiliates, specialists, and each of their representatives, chiefs, and temporary workers to you are constrained to the purchase price you paid for the item. A few wards don't permit the restriction or prohibition of accidental or noteworthy harms, so the above restrictions or prohibitions may not apply to you in entirety or in portion.

Adjustment or Withdrawal of the Warranty

ADS reserves the correct in its caution to alter or pull back this Restricted Guarantee at any time without taking note. Any adjustment or withdrawal will not influence items as of now introduced and completely paid for earlier to the date of such alteration or withdrawal. No ADS merchant, affiliate, benefit supplier, agent, or representative is authorized to form any alteration, expansion, or expansion to this guarantee.

7 APPENDIX


Orange
Yellow
Brown
Orange
Yellow
Brown
Water Control Supply
Power
Orange
Yellow
Brown
Remote Control Cable
Orange
Yellow
Brown
Yellow
Yellow
24V 30VA Transformer
Input: Black-Blue 0V-AC120V
Output: Yellow-Yellow 0V-AC24V
White L
F1
Green
F2
Black N
Blue
Brown
F1、F2: F1A250V
Control Box
Solenoid Valve



ADS Dental System

ADS Dental System

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