# What is the ADA's CO<sub>2</sub> supply system?

ADA has launched the world's first CO<sub>2</sub> supply system with a small CO<sub>2</sub> cartridge. Our knowledge and experience are utilized in the safety, operability, and expandability of our products.



# ADA's original CO<sub>2</sub> regulator provides excellent safety and accuracy.





The highly accurate Speed Controller enables precision control of a supply volume down to less than one bubble per second, which is great for a mini aquarium.

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# Prevention of foreign material contamination

Fine filter prevents foreign material from getting into the essential part of the regulator.

### Safe CO<sub>2</sub> cartridge installation

Floating Needle prevents gas leakage and enables the smooth installation of a cartridge without resistance. 4

#### **Excellent durability**

Equipped with a durable inner seal that has passed a functional test of more than 1,000 cycles.

# What are the advantages of ADA's CO<sub>2</sub> supply system?

ADA's CO<sub>2</sub> supply system satisfies the need of any aquarium, from a mini aquarium up to a large aquarium, including automation, branched CO<sub>2</sub> system, and more. The excellent availability of the genuine parts ensures a trouble free operation.



You can choose a product based on your tank size and a CO<sub>2</sub> supply volume with an endless possibility for system upgrading.

# Rich lineups of CO<sub>2</sub> supply necessary for system upgrading based on your tank sizes are available.

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By attaching
CO<sub>2</sub> Adapter, you can use
a large CO<sub>2</sub> cylinder even
with a regulator for small
CO<sub>2</sub> cartridge.



\* It can only be connected to regulators for small CO<sub>2</sub> cartridge, YA/Ver.2 and SA. 3

By connecting NA Control Timer, the ON-OFF of lighting and CO<sub>2</sub> injection can be automatically controlled.



Various
branching parts are
available, so you can
easily divide the system
even if you have multiple
tanks in the future.

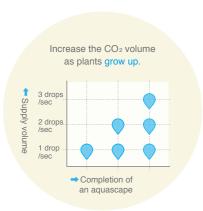


ADA's CO<sub>2</sub> supply system corresponds with your future needs.

# What are the variations of CO<sub>2</sub> supply systems?

Glass-made CO<sub>2</sub> diffuser not only has various designs but also size of diffusion surface from dia.10-50mm.

By choosing the appropriate size, you can supply CO<sub>2</sub> effectively.



#### Standard CO<sub>2</sub> supply volume

The key is to start with 1 drop per second and increase the volume gradually according to the plants' growth.



### Diffusion For 60cm tank

A basic CO<sub>2</sub> supply system with Pollen Glass and CO<sub>2</sub> Bubble Counter.

Choose the most suitable diffuser according to the tank size and types and volume of aquatic plants.





#### For Mini tank

Music Glass with small diffusion surface are suitable as Mini tanks require only a small CO<sub>2</sub> volume.





## For large tanks and tanks with a lot of stemmed plants

Pollen Glass Large or Beetle with large diffusion surface is suitable as such tanks require a large CO<sub>2</sub> volume.

# ADA's original CO<sub>2</sub> supply system.

CO<sub>2</sub> supply system developed with ADA's unique concept and style makes the planted aquarium hobby more joyful.

As it is developed for the hobby, we respect being design conscious.



Tropical fragrances developed after the image of world's three largest tropical forests are added to CO<sub>2</sub>.







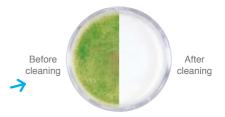
All products adopt stylish designs for presentation.

## Easy cleaning method.

ADA's glass-made CO<sub>2</sub> supply equipment can keep the appearance and performance as good as a new product by cleaning with Superge, a special detergent for cleaning glassware. Therefore, it can be used in a good condition without losing the performance almost permanently.



For cleaning, simply make a diluted solution with Superge in a Clean Bottle and soak the glass-made product into the solution.



Clean the glass-made products periodically as the diffusion surface becomes clogged with algae.



### GLASSWARE

Delicate design of the diffusers that even the white diffusion surface is made of glass produces fine bubbles with high supply efficiency.

# ADA NATURE AQUARIUM

## Reaching the higher end

The CO<sub>2</sub> system with the professional standard has been established as a result of repeated improvement and revision in the development of ADA's various CO<sub>2</sub> supply equipments. The know-how accumulated in our hands-on practice has been fully utilized in the system. Would you be interested in reaching the higher end of Nature Aquarium with the products that produce uncompromising performances?



## Shall we start the first step?

It is a CO<sub>2</sub> system that is developed for the beginners to meet such needs.

So, the products are designed in a way that emphasizes on cost-effectiveness.

How about starting Nature Aquarium with Do aqua lineups?

CO<sub>2</sub> supply system allowing more accurate adjustment



#### CO<sub>2</sub> ADVANCED SYSTEM

Item code: 101-602 black Item code: 101-603 white

#### [Contents]

- •CO<sub>2</sub> SYSTEM 74-YA/Ver. 2
- •CO<sub>2</sub> SYSTEM 74-TROPICAL FOREST NO.1 Amazonian
- •POLLEN GLASS for CO₂
- •CO<sub>2</sub> BUBBLE COUNTER
- ·CAP STAND
- •BALL VALVE
- ·Pressure resistant tube (clear 1m)
- ·Silicone tube (gray and white, 1m of each)
- ·CHECK VALVE
- •Suction cup (medium × 4, small × 8)
- Syringe
- · GREEN BACTER



## Excellent expandability and quality

Excellent for people who are looking for a system that can be expanded to accommodate a larger CO<sub>2</sub> cylinder for a large aquarium in the future or those who demand high performance, quality, and stylish design.

### ADA Nature Aquarium

To know Mother Nature is to love her smallest creations.

We recreate the natural eco-system in our aquarium, which leads to a better understanding of the global environment.

## Precision Speed Controller

An important functions required for CO<sub>2</sub> regulators is the adjustment of CO<sub>2</sub> volume. Even the volume, less than a drop per second is adjustable with high accuracy.



The CO<sub>2</sub> flow rate is adjusted with the adjustment screw on the outside and set by tightening the locking nut on the inside.

## Original thread pitch and safety seal

The original thread pitch prevents the problem of cross-threading of a small CO<sub>2</sub> cartridge. The safety seal ensures the safety of the system by preventing a small CO<sub>2</sub> cartridge from rupturing due to overheating.



CO<sub>2</sub> System 74 Tropical Forest is equipped with the original thread pitch and safety seal.

## "Natural diffusion" of fine bubbles

CO2 is supplied through "natural diffusion" of fine CO2 bubbles. Pollen Glass realizes an ideal CO2 diffusion.



With "natural diffusion," it is easy to adjust the CO<sub>2</sub> level and avoid hypoxia caused by CO<sub>2</sub> rapidly dissolving in the water.

### It is perfect for aquarists who would like to...

enjoy an aquatic plant layout in a mini aquarium, or enjoy it in a cost-effective way. It is also recommended for aquarists who would like to try and see the effect of CO2.



### Please be sure to use a compatible cartridge.

CO<sub>2</sub> cartridges of the Tropical Forest series are not compatible with Do aqua products. Always use Do aqua genuine CO2 cartridge.





CO<sub>2</sub> cartridge

Tropical Forest series CO<sub>2</sub> cartridge of other brands

### Simplified system

CO<sub>2</sub> Diffuse is a CO<sub>2</sub> diffuser integrated with a CO<sub>2</sub> bubble counter that allows you to visually measure CO2 supply volume. The integrated design makes it simple to set up the system.



### A typical CO<sub>2</sub> consumption

If you are concerned about the monthly running cost of CO2 system, here's what you can expect. You will need approximately two cartridges per month based on the standard supply volume of 1 bubble per second for a mini aquarium.



Be sure to keep a replacement cartridge on hand.



You can start adding CO<sub>2</sub> even if it is the first time.



#### CO<sub>2</sub> STARTER KIT

Item code: 140-000

#### [Contents]

- ·CO<sub>2</sub> regulator
- •CO₂ BOTTLE (35g) × 2 pcs
- •CO<sub>2</sub> Bottle stand
- BALL VALVE •CO2 DIFFUSE
- · Check valve
- •Pressure resistance tube (clear, 1m)
- ·Silicone tube (1m)
- •Suction cup (medium) × 2 pcs
- ·Suction cup (small) × 4 pcs

\*Specifications of the product and the contents of a kit are subject to change.

# The basic knowledge of CO<sub>2</sub> supply supplementation.

It is essential to understand the correct method to supply CO<sub>2</sub> effectively.

The key points are the duration for CO<sub>2</sub> supplementation

and the adjustment of the supply volume.



#### How to measure supply volume

Count how many bubbles are produced for 10 seconds, and convert it to the numbers of bubbles per second.

This value is the number you see in "O bubbles per second" information.



#### Standard supply duration is 8 hours

Supply CO<sub>2</sub> for approximately 8 hours during the day while aquatic plants perform photosynthesis based on the ON-OFF cycle of the lighting system.

# Adequate CO<sub>2</sub> supply promotes photosynthesis, which produces abundant oxygen and creates a stable environment.



#### Watch out for excessive CO2

The use of Drop Checker is recommended as it makes it easy to figure out the CO<sub>2</sub> level in an aguarium.



### Make sure that aquatic plants are performing photosynthesis

Aquatic plants are doing well if they are producing oxygen bubbles within three to four hours after the start of  $CO_2$  injection.



Beautiful tropical fish swim and attractive aquatic plants and wave in an aquarium.

Products for keeping living organisms need to be obtains from a reliable store.

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