

DESGEO C500 Smart Bottom Filter
Amphibious Ecological Fish Tank Owner' s Guide

D E S G E O

Beijing Yuanyibai Technology Co., Ltd.

Contents

1.Welcome	1
2.Products and Accessories	1
3.Product Function Description	2
4.Charger Connection	4
5.First Use	5
6.Safety Notices	6
7.Daily Maintenance	7
8.Tips on Fishkeeping	9
9.Parameter Table	10
10.Trademark Legal Notice	11

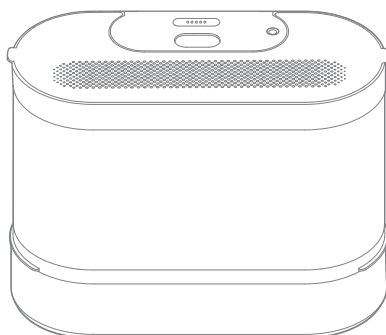
1 Welcome

Thank you for using DESGEO · Smart Bottom Filter Amphibious Ecological Fish Tank.

Used in conjunction with Wi-Fi Smart Box and the Feeder (need to be purchased separately), it can provide intelligent and convenient operation through Mijia APP, you can control lighting, feeding and water pump remotely, easily achieve one-click fish farming.

Please read the instruction carefully and keep it properly before use. Start now and feel the infinite fun of fish fishkeeping!

2 Products and Accessories



Main Part

Accessories list

Please carefully check whether the items in the packing box are complete and intact. If there are any missing or damaged items, please contact the customer service of the purchase platform or call the Desgeo service number **400-882-8957** for more after-sales questions.



Power adapter



Bottom sand



Filter cotton



Type-C
power cord

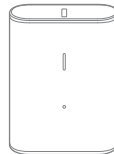


User guide

The following products need to be purchased separately.
They can be purchased through official authorized channels of DESGEO.

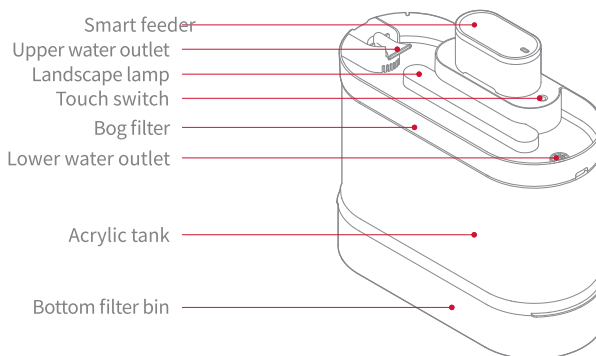


Smart Feeder



Wi-Fi Smart Box

3 Product Function Description



Smart feeder	Smart Feeder, used with Wi-Fi Smart Box, can be connected to Mijia APP to achieve remote automatic feeding (The Feeder and Wi-Fi Smart Box need to be purchased separately)
Upper water outlet	Lead the water from the bottom filter bin to the swamp flowerpot
Landscape lamp	Adopt highly integrated color light beads, a variety of light modes can be switched freely
Touch switch	Long press for 3 seconds to turn on/off the main power supply of the fish tank; click once to switch lights; double click to turn on/off the pump
Bog filter	The bog filter is used to enhance the filter effect by planting hydroponic plants, or with the micro-landscape
Lower water outlet	The water is filtered through the bog filter and flows back into the tank
Acrylic tank	High strength acrylic material with wear resistance, drop resistance and flame retardant
Bottom filter bin	From physical to biochemical filtration, super large bacteria culture space can effectively reduce daily maintenance

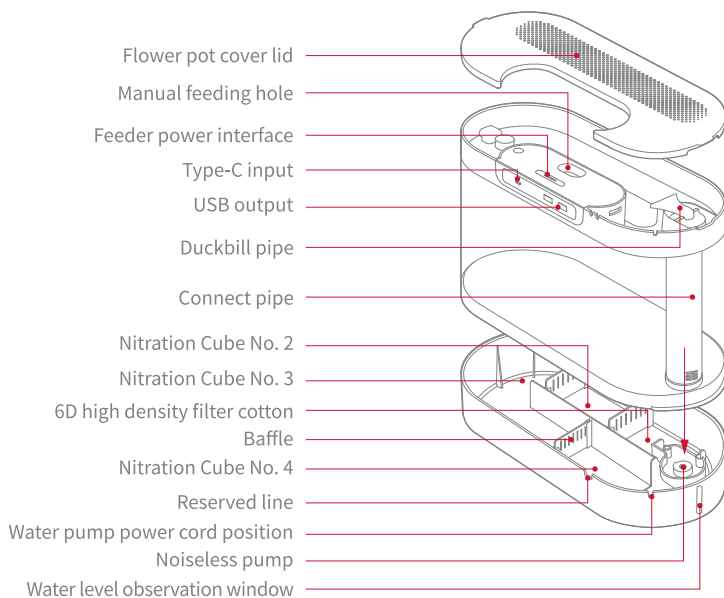
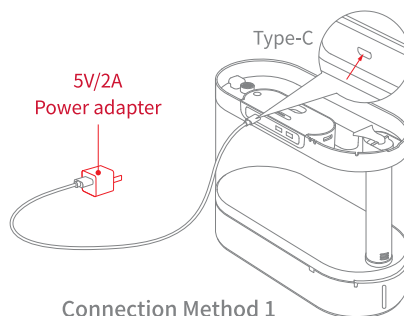


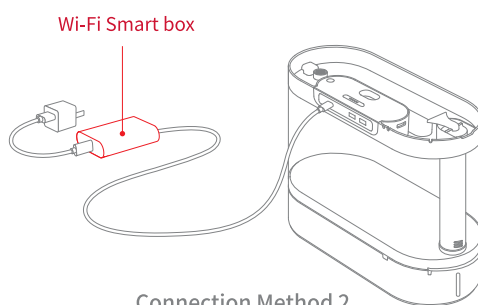
Diagram1

Flower pot cover lid	Placing the lid to effectively reduce water evaporation
Manual feeding hole	You can put the fish food directly into the tank
Feeder power interface	POGO PIN connector, use with automatic feeder (The feeder needs to be purchased separately)
Type-C input	Fish tank power line input interface
USB output	Water pump power supply inlet
Duckbill pipe	Connect the upper water pipe to lead the water from the bottom filter bin into the bog filter
Connect pipe	Connect bottom filter bin and bog filter to ensure water circulation
Nitration Cube No. 2	With positive charge on the surface, it can quickly adsorb nitrifying bacteria and inhibit and eliminate pathogenic bacteria
Nitration Cube No. 3	Covered with nanometer tourmaline particles, it can strengthen the activity of bacteria and purify water quality
6D high density filter cotton	Three-dimensional cloth composite material, with the characteristics of separation of wet and dry zones, can remove the visible small particles in the cylinder, to achieve physical filtration
Baffle	Distinguish the physical filter area, biochemical filter area, and water pump equipment area to effectively prevent overflow
Nitration Cube No. 4	Contain volcanic mud and xylostone powder, can optimize water quality with metasilicic acid, soften water quality and reduce pH value
Reserved line	Third-party equipment supported
Water pump power cord position	The power cord of the pump is directly connected to the USB port of the upper lid
Noiseless pump	The water pump has low water level monitoring function, when the water level is too low, the water pump will automatically stop working, to prevent the water pump from damage
Water level observation window	The water level line of the bottom filter bin can be observed at any time to prevent water overflow

4 Charger Connection



Connection Method 1



Connection Method 2

Diagram2

Note:

Connection Method 2 is to connect the fish tank through "Wi-Fi Smart Box", you can use Mijia APP, intelligently control lighting, water pump, and feeding functions of the fish tank (The Wi-Fi Smart Box needs to be purchased separately).

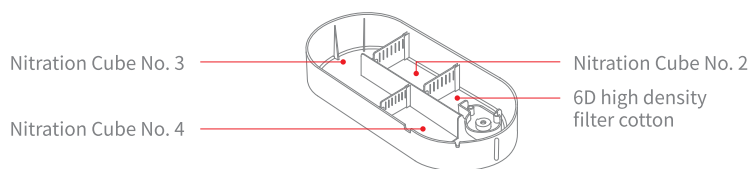


Users who purchase Wi-Fi Smart Box need to download and install the "Mijia APP" from a smartphone with Android or iOS system before intelligently control the fish tank. Search for "Mijia" in the APP Store or scan the QR code on the left to download the APP, please refer to "Smart Feeder and Wi-Fi Smart Box Instructions" for specific usage, please follow the instructions to connect and use.

5 First Use

1.Before use, the new fish tank should be cleaned and thoroughly disinfected to remove bacteria or chemical components remaining in the production process (Please refer to Chapter 8 of the instructions for cleaning and disinfecting methods)

2.Install the filter materials in the following order



3.In order for the water in the tank to circulate effectively, please inject the water into the fish tank strictly according to the water level prompt (Diagram3)

Water level in the tank:

The water level in the tank should be equal to MAX during normal operation; When the water level is too low, the water in the tank will not be able to circulate to the bottom filter bin; When the water level is too high, if there is a power failure or malfunction, the water will flow into the bottom filter bin under the action of gravity. If it exceeds the set volume of the bottom filter bin, there will be a risk of overflow

Water level in the tank Water level of bottom filter bin

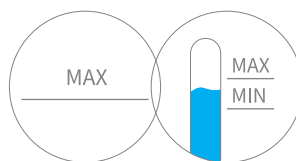


Diagram3

Water level of bottom filter bin:

Please keep the water level between MAX-MIN. The pump has a low water level monitoring function. If the water level is too low, the pump will automatically stop working; if the water level is too high, there is a risk of overflow

- 4.vertically in the card slot of the bottom filter bin (Diagram1)
- 5.water pump into the USB port according to the red mark (Diagram4)
- 6.After correctly connecting the main power supply according to (Diagram2), you can start using.

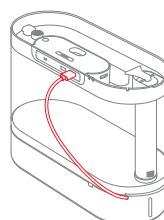
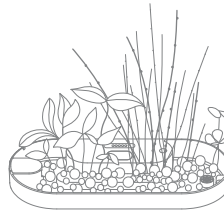


Diagram4

Usage of bog filter:

1. Pile some small gravel about 5mm in the filter area of the swamp
2. Planting some hydroponic plants (for example: Chandelium officinalis, Water Mint, Clover, Apochidae, Moss, Phnom Penh, etc.)



The principle of bog filtration:

This is an ancient growth technology, and the unique growth method is also known as "Aquaponics." This method uses fish waste as a source of nutrients for the plants, and plants naturally filter out impurities and recycle them back into the water.

Note: No planting soil is allowed in the bog filter bin. Please choose small gravel with a diameter of about 5mm (for example: Daji sand, ceramsite, etc.). The size of small gravel determines the density in the filter bin, if the density is too high, the water can not be recycled into the fish tank, and there is a risk of overflow.

6 Safety Notices

- This product can only be connected to power adapters with rated voltage and rated current of 5V/2A;
- Please disconnect the power supply before installation or cleaning maintenance. After cleaning, install and fix the accessories before they can be powered on;
- The water pump cannot run idle for a long time. The water pump must be completely immersed in water during normal operation;
- The tank is made of acrylic material and is strictly forbidden to contact with objects with temperature higher than 50°C and corrosive chemical solvents;
- It is strictly forbidden to stack other objects on the top lid and inside the tank (Except for landscaping);
- All electronic devices must be waterproof. It is strictly prohibited to plug and unplug the power supply or USB connector with wet hands;
- Please note that the fish tank should be filled with water before the power is connected. Avoid electrification in anhydrous state to prevent idling of water pump;

- Place the fish tank power supply in a safe and convenient place to avoid children's touch;
- In order to achieve the best viewing effect, the table on which the aquarium is placed must be smooth, and it is better to use a level gauge to correct its levelness;
- The water in the tank and the bottom filter bin should be injected in strict accordance with the standard range of water level, if the water level is too high, there is a risk of overflow, and if the water level is too low, the water can not be filtered through normal circulation;
- When cleaning or replacing the filter material, the fish tank should be moved steadily. Do not tilt to prevent water overflow;

7 Daily Maintenance

Fish tank cleaning

If stains appear on the surface of the fish tank, use a soft cloth dipped in a small amount of water to wipe it. If there are stains that are difficult to clean, smear toothpaste on the stains and brush repeatedly with a toothbrush, then wipe clean with a damp cloth. Please use magnetic brush to clean the dirt or algae inside the tank wall during use.

Tips: Do not use alcohol, gasoline, kerosene or other corrosive and volatile chemical solvents to clean, otherwise it will seriously damage the appearance and internal structure of the fish tank. Do not use tap water directly wash the top lid (It contains electronic components). Make sure the fish tank is turned off and the charger has been unplugged during cleaning. Otherwise, you may get an electric shock or cause serious failures due to water flow into the electronic components.

Filter material maintenance

1. "Filter cotton" in bog filter and "6D high density filter cotton" in bottom filter bin, it is recommended to clean the filter cotton once in 15 days and replace it once in 60 days to make the filter effect better.
2. It is recommended to clean or replace the "No. 2-4 Nitration Cube" in the bottom filter compartment every 6-12 months. Using the original tank water for cleaning is more conducive to the retention of nitrifying bacteria on the filter material and minimizing the loss of nitrifying bacteria. After cleaning, you can put it back in place and use it again.

Tips: Do not soak any fungicides during cleaning. Some fungicides are easy to remain. The soaked filter material can hardly be cultured again. The frequency of cleaning and replacement of the filter material is closely

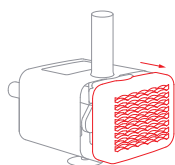
related to the size, density, and feeding amount of the fish. The frequency of cleaning and replacement can also be adjusted according to the turbidity of the fish tank.

Feeder power interface maintenance

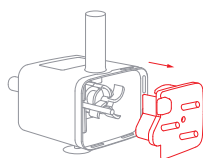
The feeder is connected by POGO PIN, the POGO PIN connector needs to be waterproof and kept clean and tidy. Please do not uncover the protective sticker when not in use (The damage caused by using the fish tank without following the above instructions is not eligible for free warranty service).

Water pump cleaning

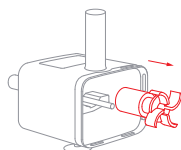
The pump needs to be disassembled and cleaned regularly. After a long time of use, impurities are easily trapped between the turbine chamber and the rotor stator, such as fish excrement, rotting aquatic weeds, and residual feed may be pumped into the pump. These impurities will reduce the water flow of the pump, increase the working temperature, increase the noise, and even cause the pump to stop working. It is recommended to clean the water pump once a month, open the protective cover of the water pump, remove the turbine, rotor and bottom shaft, and thoroughly clean the inside of the water pump.



1. Take out the water pump from the Filter barrel and open the filter cover.



2. Remove clapboard.



3. Remove the impeller with tweezers and clean the impeller and turbine chamber.

8 Tips on Fishkeeping

What kind of fish is suitable for tabletop fish tanks?

For novices, it is recommended to feed zebrafish, lampidae, guppy, Poecilia latipinna, colorful dresses, Bushy Nose Plecostomus, Aspidoras, Brochis, Pearl gourami, Xiphophorus helleri and other easily survivable fish.

Tips: Due to the different species of fish, they have different requirements on water quality and environment, breeding methods, temperature, living habits, feeding methods, etc., it is not recommended to breed small, medium, and large fish at the same time in the same fish tank.

Correct ways to start using the tank

1. Clean and disinfect the fish tank

After cleaning the fish tank with tap water, start to disinfect the fish tank. The disinfection generally uses salt water or potassium permanganate soaking. The concentration of potassium permanganate should not be too high. Note: Prepare potassium permanganate solution with cold water, then pour the solution into the fish tank and soak for 20 minutes, then rinse with clean water.

2. Regulating water quality (The following two ways can effectively remove chlorine from water)

Drying method: Place the tap water in a container and expose it to the sun for 24-48 hours.

Saturated dissolved oxygen: Use air pump to input excess oxygen into the water to increase the dissolved oxygen content in 8-12 hours.

3. Put in the first batch of fishes to cultivate nitrifying bacteria

Put 2 or 3 fishes in the tank (Suggestion: Lampidae fish). The fish placed in the tank for the first time will prepare for the formation of a nitrifying system and can promote the pH (Hydrogen ion concentration), water quality and oxygen content of the aquarium to achieve a balance. Feed the fish and change the water appropriately during this period. Each feeding amount should be controlled so that the fish can be eaten about 1 or 2 minutes. The purpose of feeding is to provide nutrients to nitrifying bacteria (Fish feces and food residues). It should be noted that nitrifying bacteria are aerobic bacteria and do not like light. The appropriate temperature is 25 degrees. Avoid strong light exposure during the cultivation process.

4. Check water quality

Visual inspection: Determines whether the water is clear and transparent, without impurities such as fog or flocculent matter. If the water is clear and transparent, indicates the nitrification system has been established and the fish can be placed in the tank.

5. Put in other fish after completing the above steps

Put the packaging bag with the fish in the tank and let it stand for about 20 minutes. After the water temperature in the tank is the same as that in the bag, put the fish into the tank.

Tips

1. Water change cycle: it is recommended to change water 2 to 3 times a week (The water changing frequency can be adjusted according to the actual situation. If the water temperature is too high, it is recommended to increase the water changing frequency).

2. Please pay attention to the amount of fish fed and the amount of fish. Each feeding amount is controlled so that the fish can be eaten in about 3 minutes. It can be fed in small amounts for multiple times, do not overfeed. Overfeeding can lead to the dissolution of uneaten fish food into the water, accelerating organic decay, resulting in murky water, water quality deteriorated.

9 Parameter Table

Product name	DESCEO · Smart Bottom Filter Amphibious Ecological Fish Tank
Material	PMMA / ABS
Product size	382mm*166mm*295mm
Execution standard	Q / YYB 001
Model	C500
Rated power	10W
Rated voltage	5V
Color	White
Net weight	2.5kg
Gross weight	3.3kg

10 Trademark Legal Notice

画法几何 and Desgeo are registered trademarks or trademarks of Beijing Yuanyibai Technology Co., Ltd.

Beijing Yuanyibai Technology Co., Ltd. reserves all rights.

© 2021 Beijing Yuanyibai Technology Co., Ltd. All rights reserved.

This manual has been printed with the latest functional introduction and instructions as far as possible. Actual product may vary due to the continuous improvement of product functions and design changes. Due to product update, the product displayed in this manual may be different from the actual product in terms of color, appearance, etc. The final product received may be deviations between the product displayed in this manual. Please subject to actual products.

Executive Standard of the Product: Q / YYB 001

Desgeo Intelligent Fish Tank
Smart Feeder and Wi-Fi Smart Box Owner's Guide

D E S G E O

Beijing Yuanyibai Technology Co., Ltd.

Contents

- 1. Products and Accessories 1
- 2. Wi-Fi Smart Box 1
- 3. Connect the Smart Fish tank to Mijia APP 2
- 4. Smart Feeder 6
- 5. Q&A 7
- 6.Precautions 8

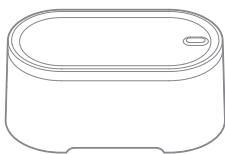
Welcome

Thank you for choosing DESGEO intelligent fish tank. Fish tank with Wi-Fi smart box (hereinafter referred to as smart box) and smart feeder (hereinafter referred to as feeder) are two accessories. Connected to Mijia APP through Wi-Fi, our Smart Box can remotely control lighting, feeding and water pump, bringing you a more intelligent and convenient new experience.

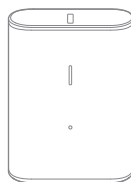
Please read the owner's guide carefully before using the product and keep it properly.

1 Products and Accessories

The following products need to be purchased separately. They can be purchased through official authorized channels of DESGEO.



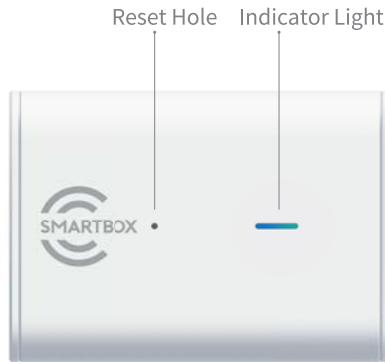
Smart Feeder



Wi-Fi Smart Box

2 Wi-Fi Smart Box

Smart Box is a smart hardware created by DESGEO for intelligent fish tank. After the fish tank is connected to the Smart Box, it can be connected to Wi-Fi via mobile phone to access Mijia app, realizing one-button smart control.



Product Parameter

Size: 76mm*55mm*22mm

Wi-Fi Name: hfjh-fishbowl-v2_xxx

Wi-Fi Device Model: ESP-WROOM-02D

Material: ABS

Model: A5

Maximum Power: 10W

Input/output: 5V 2A

CMIIT ID: 2017DP7231

*The smart box needs to be connected to a 5V/2A power adapter

3 Connect the Smart Fish tank to Mijia APP

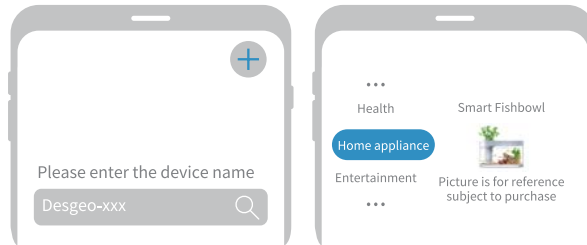
1.Download Mijia APP

Download the Mijia APP and turn on bluetooth and Wi-Fi permissions according to the prompts.



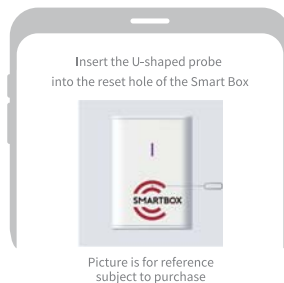
2.Add devices

Open the APP, click "+" in the upper right corner to search the device name "DESGEO-xxx" or click "Home appliance-Smart Fishbowl-DESGEO-xxx" in order of category on the drop-down page to connect the device.



3.Distribution network

Insert the U-shaped probe into the reset hole of the Smart Box, long press for 5 seconds until the indicator light appears purple, then the device enters the network distribution mode, follow the prompts to click "Next" to connect the device.

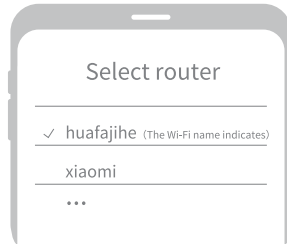


Android iPhone

1.Wait for device scanning

2.Select the router and connect the device to work Wi-Fi (This device only supports 2.4GHz network), enter the Wi-Fi password

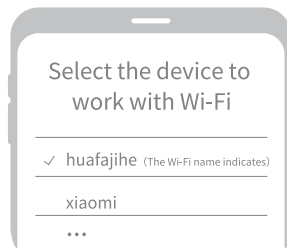
Note: Wi-Fi names only support English characters and numbers



iOS iPhone

1. Select the device to work Wi-Fi (this device only supports 2.4GHz network)

Note: Wi-Fi name only supports English characters and numbers



2. Select device Wi-Fi

Please connect Wi-Fi "hfjh-fishbowl_xxx", then return to Mijia APP



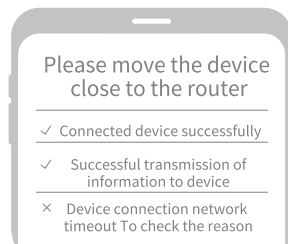
3.The APP automatically connects to the device and displays "Device added successfully"



- 4.Choose room or customize (It is more convenient to manage equipment)
- 5.Name the device or skip it (more convenient to find the device)
- 6.Device "added successfully" (you can choose whether to share this device or not according to the prompts)
- 7.Click "Start Experience" to enter the control interface of the smart fish tank APP

If device connection network timeout

Please confirm whether the network is 2.4GHz or whether the Wi-Fi password is correct, and then repeat steps 2 and 3, and follow the prompts to reconnect to the network.



4 Smart Feeder

Feeder is a smart hardware created by DESGEO for intelligent fish tank, it supports manual feeding and remote automatic feeding. Remote automatic feeding needs to be used with a smart box.



Installation method: Place the feeder vertically at the corresponding POGO PIN point of the top lid. After proper installation, the indicator light (located at the manual feeding button) will stay on.

The feeder can hold about 22g of fish food, and each feeding is about 0.1g.

Note: The feeding effect will be better if use round pellet fish food with a diameter less than or equal to 2mm.

Product Parameter

Size: 123mm*63mm*55mm

Material: ABS, PMMA upper lid

Gross weight: 300g

Input: 3.3V $\pm$ 0.3A

Maximum power: 1W

Model: AF100

5 Q&A

Why can't I search the device?

1. Turn off the device and then turn it on again and ensure that the phone is close to the device.
2. Please check whether the Wi-Fi function, bluetooth and positioning function of the mobile phone are turned on.
3. Please check the status of the indicator light on the smart box:
The indicator light is purple, indicating it has entered the distribution network mode; The indicator light is always blue, indicating the device has been connected; The indicator is flashing in blue, indicating no connection to the Internet. You can reset the device, make sure the indicator light is purple to search the device and get connected through your APP. The indicator light isn't working? Please check the power cord and make sure it's plugged in.

The device can be searched, but the connection fails or has no response?

1. The unresponsive connection might be caused by the unstable Wi-Fi signal. Try to search and connect again.
2. This device does not support 5G networks, make sure your Wi-Fi is a 2.4GHz network.
3. Make sure the Wi-Fi name is only combination of English characters and numbers.

No response from the feeder?

Please check the status of the indicator light (located next to the manual feeding button): the indicator light is always on, indicating that it is normally connected and ready for use; The indicator light is off, please check whether the feeder is correctly connected to the POGO PIN point.

6 Precautions

- The Smart Box needs to be connected to a 5V/2A power adapter;
- Do not put the product near high temperature, strong magnetic, flammable and explosive gases (such as natural gas, biogas, etc.) to avoid damage to the device, function failure or fire accident;
- Do not plug/unplug the power plug with wet hands to avoid electric shock;
- Keep pogo pin point of feeder dry and clean, and pay attention to waterproof;
- The Smart Box and the Feeder contain circuits and other components, be caution with waterproof and moisture-proof. No direct flushing;
- Requirements for fish food: Use round grain fish food with diameter $\leq$ 2mm, otherwise the feeder will be blocked;

Warning:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines. This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.



Scan the code to download Mijia app
start experiencing

All the pictures in this manual are for reference only, please refer to the real object
Actual product functions may not conform to the specifications due to technical
upgrades and firmware updates. For the latest feature introduction and safe use
guidance information, please contact the online customer service of the
purchasing platform or call the official service hotline
www.desgeo.com

Edition V3.0