CHASING

reddot winner 2023

CHASING M2 PRO MAX

Industrial-Grade Underwater ROV

Easy | Powerful

< New flagship products in the industry >

CHASING M2 PRO MAX
Industrial-Grade Underwater ROV

CHASING M2 PRO MAX provides more user-friendly, professional and reliable underwater operation solutions for various industrial applications, such as underwater emergency rescue, hull and dock inspection, aquaculture inspection, water conservancy and hydropower inspection, and scientific exploration and environmental protection inspection.

Easy

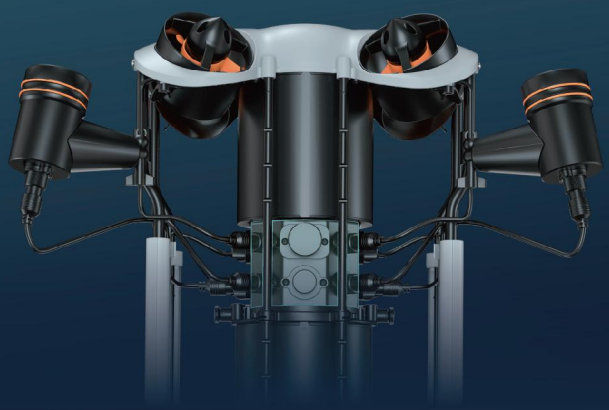
- Convenient to disassemble/assemble the accessories
- Easy to operate
- Portable and simple in storage

Powerful

- Attach 5 accessories at a time
- Meet the needs of different application scenarios
- Enable 24/7 missions without failure

Five Ports Integrated Simplifies the Installation Of Multiple Accessories

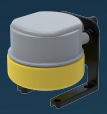
The docking station is built into the control cabin, simplifying the installation of multiple accessories. The new layout of the five reserved ports supports up to five accessories at a time.



More Than 20 Innovative Accessories and Third-party Hardware Can Be Installed for Extensions.

LASER Scaler

Auxiliary Camera



DISTANCE LOCK SONAR

Imaging SONAR

WaterLinked DVL A50

Adapter Box

WSRC

USBL

Grabber Arm 2

Control Console

CHASING Water Sampler (500ml)

Multiparameter Sonde

C-SPSS

Easy and Convenient Assembly and Disassembly

The quick accessory assembly and disassembly technology allows you to install accessories on the ROV by combining the slide-in mounting platform and the ROV support rod, which is convenient, reducing the time and effort spent on assembly and disassembly.

CHASING Shore-Based Power Supply System (C-SPSS) Enables 24/7 Missions

CHASING Shore-based Power Supply System (C-SPSS) features a battery compartment design for easier installation and an increased output of 1,500W, ensuring continuous operation and no power-off when the ROV works at full power.

CHASING C-MOTOR 2.0 Enhances Power and Reliability

The ROV is equipped with eight vectored thrusters and second-generation anti-stuck motor (C-MOTOR 2.0) with a design of new materials, innovative technology and fluidization, which have 30% more power, giving the ROV an enhanced anti-stuck performance and making it more reliable and easier to clean.

30%
Increased power

External Floodlights Illuminate Every Detail

Two external floodlights can provide a sum of 8,000 lumens illumination and achieve the best beam angle at 150°, which can resolve the visual interference caused by the reflection of floating debris. This feature also allows stepless adjustment of brightness in the range of 0-100%, allowing you to illuminate each detail in the underwater environment as needed. The floodlights can work folded or unfolded underwater, meeting various needs for complicated underwater application scenarios.

Unfolded

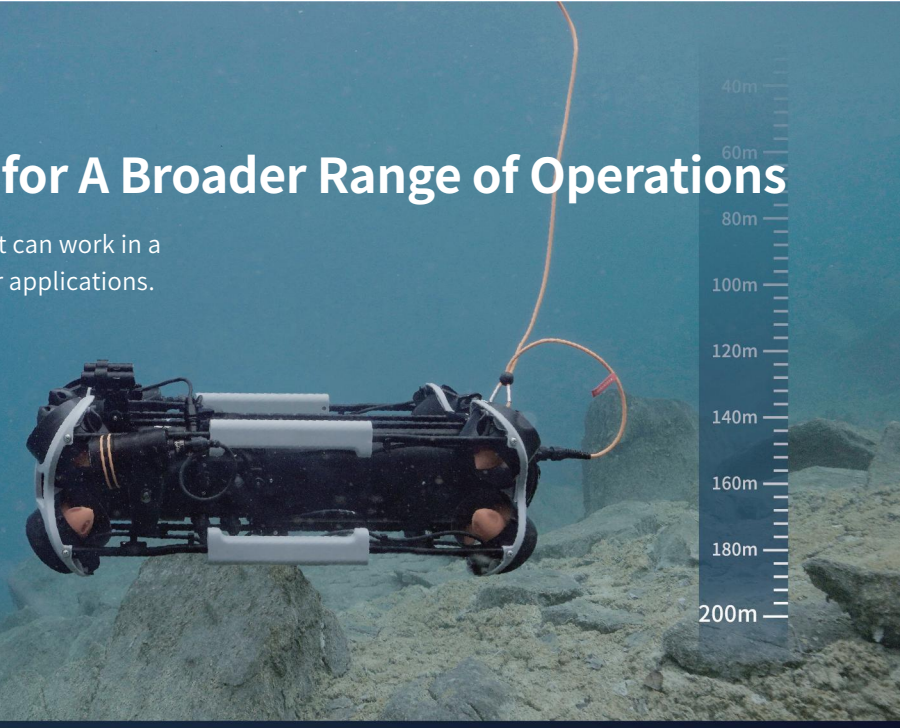
Folded

200 Meters Depth Rating for A Broader Range of Operations

Combining with different lengths of tether cables, it can work in a broader range and meet more needs of underwater applications.

Diving depth
200M

Maximum movement radius
400M



4k+electric Image Stabilization F2.8 Aperture

4k video

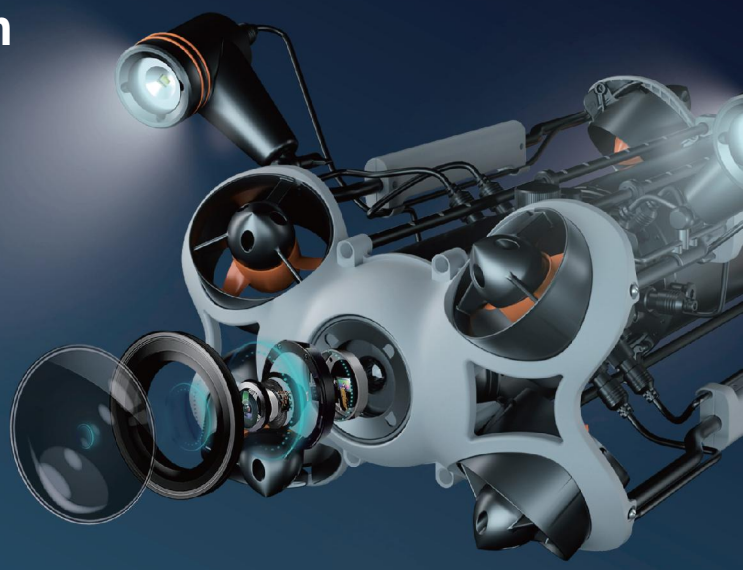
12 megapixels

EIS

F2.8 aperture

150 ° field angle

1/2.3" CMOS



Removable SD Card, Download Anytime and Anywhere

The built-in 128G SD card is removable, allowing users to use their own SD card of different capacities (up to 512G).

Applications in Underwater Emergency Rescue

Industry Overview:

Underwater rescue, also known as waterside rescue, is a rescue project that is highly sudden,time-critical, technically demanding, and difficult and dangerous to the rescue. Underwater rescue is normally performed by professional divers. Since the underwater conditions are complicated and the drowning people have poor competence in self-aid and are prone to lose their consciousnesses, it is a time-critical, heavy-duty, and dangerous task to salvage drowning people or valuables. The most difficult and time-consuming task of underwater rescue and salvage is to investigate the landform and detect the depth of water, breadth of water surface, water flow direction, flow velocity, water turbidity and so on.

Accessory Solution

- CHASING M2 PRO MAX
- CHASING Grabber Arm 2
- Blueprint Oculus Imaging Sonar
- CHASING USBL KIT
- CHASING Control Console
- CHASING Shore-based Power Supply System

Value of the Solution

Diving depth 200M, Maximum movement radius 400M. Two external LED floodlights can provide a sum of 8,000 lumens illumination and achieve the best beam angle at 150°, preventing visual inteference during underwater search and rescue.

Blueprint Oculus Imaging Sonar, provides collection of image data in turbidity areas.

A CHASING Grabber Arm 2 can be installed to clamp, drag and salvage the target objects.

A USBL Underwater Positioning Kit installed can precisely locate and identify the position and range of search in real time.

A CHASING Control Console is optionally provided with a 13.3-inch screen which is clearly visible under strong sunlight and suitable for watching by many people at the same time.

CHASING Shore-based Power Supply System (C-SPSS) is optionally assembled to satisfy the needs of 24/7 underwater search and rescue.

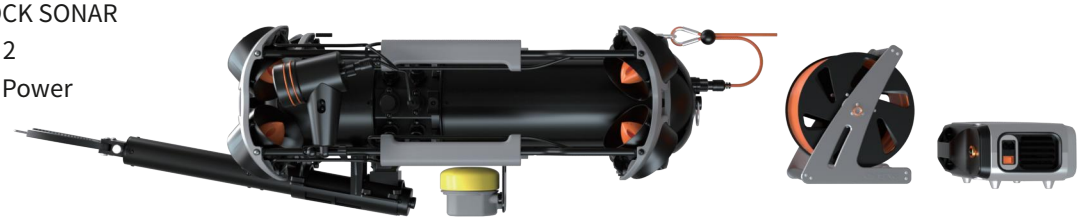
Applications in Hull Inspection

Industry Overview:

Hull inspection is required to demonstrate that the ship's technical condition complies with all applicable rules, regulations, and standards, to guarantee ship operation safety, and to prevent damage to the marine ecosystem. In addition to being a legal necessity, hull inspections are an essential safety measure to verify that ships remain in excellent condition and function safely. The requirements of the vessel and the laws of the waters in which it operates will determine the precise frequency of hull inspections. The ship must do the following inspections in accordance with the rules in order to maintain the attained class: annual inspections, intermediate inspections, dock inspections, special inspections, and other inspections.In general, the most difficult, time-consuming and expensive inspections are conducted on the underwater parts of the ship, for example, check whether the propeller blades are damaged, the marine organisms attached to the hull, the hull corrosion, and damage to the anti-fouling coating.

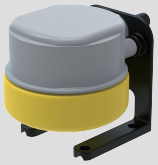
Accessory Solution

- CHASING M2 PRO MAX
- CHASING DISTANCE LOCK SONAR
- CHASING Grabber Arm 2
- CHASING Shore-based Power Supply System



Value of the Solution

Two external LED floodlights can provide a sum of 8,000 lumens illumination and achieve the best beam angle at 150°, meeting various needs for complicated underwater application scenarios, presenting clearer real-time images for hull inspection.



A CHASING DISTANCE LOCK SONAR with an anti-collision feature can reduce the difficulties in ship inspection.

A CHASING Grabber Arm 2 can be installed to remove the objects attached and entangled at the propeller and other parts

A CHASING Shore-based Power Supply System (C-SPSS) is optionally available to satisfy the needs of long-time inspections in full coverage.

Applications in Aquaculture Inspection

Industry Overview:

The aquaculture industry is one of the agricultural production sectors, in which humans cultivate aquatic animals for food, recreation, and other purposes. It involves the controlled breeding, rearing, and harvesting of fish, shellfish, seaweed, and other aquatic species in artificial or natural environments available for farming with aquaculture technologies and facilities following the ecological habits of the farmed objects and the requirements for the environmental conditions of the waters. In the application scenarios of the fishery industry, fish farm owners usually need to regularly conduct detailed inspections on the damage of fishing nets and cages, the growth and health of cultured animals according to regional or periodic requirements, and ensure that the quality of water and other environmental conditions meet the standards.

Accessory Solution

- CHASING M2 PRO MAX
- CHASING Grabber Arm 2
- CHASING Water Sampler (500ml)
- CHASING Multiparameter Sonde
- CHASING DISTANCE LOCK SONAR
- CHASING Shore-based Power Supply System

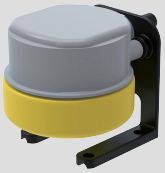
Value of the Solution

Diving depth200M, Maximum movement radius 400M. Two external LED floodlights can provide a sum of 8,000 lumens illumination and can work folded which suitable for cage inspection.

A CHASING Grabber Arm 2 can be installed for fast salvage of dead fish and foreign objects to the shore.

A CHASING Water Sampler (500ml) can real-time record PH, dissolved oxygen, turbidity, conductivity, salinity and collect other data of aquaculture water quality.

A CHASING Multiparameter Sonde can sample and test the water quality of aquaculture waters.



A CHASING DISTANCE LOCK SONAR can be arranged with a fixed inspection distance from the cages, featuring automatic avoidance and automatic cage inspection.

A CHASING Shore-based Power Supply System (C-SPSS) is optionally available to execute 24/7 missions and satisfy the needs of long-time inspections in full coverage.

Applications in Water Conservancy and Hydropower Inspection

Industry Overview:

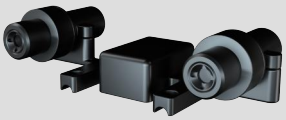
The walk-around inspection of water conservancy and hydropower dams is featured by comprehensiveness, timeliness and intuitiveness. Staff are required to identify the hidden safety hazards through regular walk-around inspection and checking, prepare repair plans in time to maintain the dame to operate safely. In the application scenarios of water conservancy and hydropower inspection, staff usually works out whether there are hidden safety hazards in the dam through data transmission and conversion by underwater sensors in combination with dam body observation. The existing inspection solutions are time-consuming and inaccurate, making it impossible to accurately identify damage to the underwater dam sections and potential safety hazards. CHASING M2 PRO MAX can provide accurate and complete dam inspection solutions for water conservancy and hydropower inspection to guarantee the safe operation of water conservancy and hydropower dam.

Accessory Solution

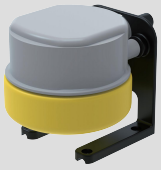
- CHASING M2 PRO MAX
- CHASING DISTANCE LOCK SONAR
- CHASING LASER Scaler
- CHASING USBL KIT
- CHASING Shore-based Power Supply System

Value of the Solution

CHASING M2 PRO MAX is equipped with two external LED floodlights can provide a sum of 8,000 lumens illumination and achieve the best beam angle at 150°, providing clearer real-time images for water conservancy and hydropower inspection



A CHASING LASER Scaler can be mounted to record the size of cracks in the dam precisely.



A CHASING DISTANCE LOCK SONAR can be arranged with a fixed inspection distance from the dam, featuring automatic avoidance and automatic dam inspection.

A USBL Underwater Positioning Kit can be equipped to precisely locate the hidden safety hazards.

A CHASING Shore-based Power Supply System (C-SPSS) is optionally available to execute 24/7 missions and satisfy the needs of long-time inspections in full coverage.

Applications in Scientific Exploration and Environmental Protection Inspection

Industry Overview:

The living environment of underwater animals and plants has a direct impact on the health and development of people who live near the source of water. Protecting underwater ecology is also safeguarding the human living environment. Underwater observation equipment is required for researchers to monitor the growth of underwater organisms and plants, as well as to sample and investigate specimens. Furthermore, the inspection of underwater sewage discharge is a major industry concern. Sewer pipe leakage, rupture, and fracture will have an impact on water quality. Sewage systems are typically distributed around human settlements, and dumping sewage at random will not only destroy the living environment of underwater animals and plants but will also have an immediate effect on human well-being and sustainable development. Environmental protection personnel for scientific research usually need to send frogmen to dive into the water several times for long-term shooting and recording. The traditional method is time-consuming, cannot cover some vertical and horizontal areas of the bracket, and the inspection is not thorough. Polluted waters can also harm a frogman's health.

Accessory Solution

- CHASING M2 PRO MAX
- CHASING Grabber Arm 2
- CHASING Water Sampler (500ml)
- CHASING Multiparameter Sonde
- CHASING WaterLinked DVL Mounting Kit
- CHASING DISTANCE LOCK SONAR
- CHASING USBL KIT
- CHASING Shore-based Power Supply System

Value of the Solution

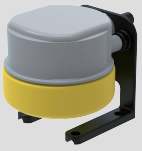
The ROV' s posture can be changed in operation so as to inspect the narrow places.

A CHASING Grabber Arm 2 can be installed to sample the observed objects.

A CHASING Water Sampler (500ml) can sample water quality in scientific exploration area at fixed points.

A CHASING Multiparameter Sonde can sample and test the water quality in scientific exploration area.

A CHASING WaterLinked DVL Mounting Kit can be mounted to enable positioning and directional observation of the objects under scientific exploration.



A CHASING DISTANCE LOCK SONAR can be arranged with a fixed inspection distance from the sewage pipes, featuring automatic avoidance and automatic pipe inspection.

A USBL Underwater Positioning Kit can precisely locate the pipe breakage.

A CHASING Shore-based Power Supply System (C-SPSS) is optionally available to execute 24/7 missions and satisfy the needs of long-time inspections in full coverage.

ROV

SIZE(mm)	608x294x196mm(Excluding the floodlight)
WEIGHT	≈8kg
MAXIMUM DEPTH	200m
Runtime(Actual duration is subject to the App prompt)	4h
BATTERY	300Wh (Optional battery and Unlimited endurance)
OPERATINGTEMPERATURE	-10°C~45°C
Load (FORWARD/DRIFT UPWARDS/TRAVERSE)	5.7/4.0/3.6kg

Sensor

IMU	Three-axis gyroscope
	acceleration / compass
DEPTH SENSOR	＜±0.25m
TEMPERATURE SENSOR	＜±2°C

Camera

CMOS	1/2.3" CMOS
APERTURE	f/2.8
FOCAL LENGTH	0.3m~∞
ISO RANGE	100-6400
FIELD OF VIEW	150°
MAXIMUM IMAGE RESOLUTION	12M
IMAGE FILE TYPES	JPEG/DNG
NORMAL VIDEO	4K:3840×2160@25/30fps
	1080P:1920×1080@25/30/50/60/100/120fps
	Slow motion4X:1920×1080@30fps (120fps)
	Slow motion8X:1280×720@30fps (240fps)
VIDEO MAXIMUM STREAM	60M
VIDEO TYPE	MP4
MICRO SD CARD MEMORY	128G

Adapter

ADAPTER	25.2V/8A
ROV CHARGING TIME	2.5H
REMOTE CONTROLLER CHARGING TIME	2H

LED Lights

BRIGHTNESS	2 x 4000LM
COLOR TEMPERATURE	5000K~5500K
CRI	85
DIMMING	Three adjustable

E-Reel

SIZE	296x189x279 mm
WEIGHT	3.5kg
MAX STORAGE LENGTH	200 meters
BATTERY CAPACITY	4800mAh
NUMBER OF CYCLES	>300 times
RUNTIME	30 times
WIPING SPEED	3 gears
TAKE-UP SPEED	Fast Speed 220s；
(200M)	Low speed 9min
OPERATING TEMPERATURE	-10°C~45°C
CHARGING TIME	2H (12V) /4H (25.2V)

Remote Controller

SIZE	160x155x125mm
WEIGHT	685g
BATTERY CAPACITY	2500mAh
BATTERY LIFE	⩾6H (Depend on working condition)
WI-FI	Wi-Fi support
HDMI	Lightning, Micro USB, USB-C
PHONE/TABLET CLIP	Maximum support 10 inches

* For product information, please refer to the actual products on the market.
For the latest information, please refer to the official website:www.chasing.com

Main Components

ROV

E-Reel

Remote Controller

CHASING

CHASING INNOVATION TECH CO.,LTD

Official Website

www.chasing.com

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