

CUNA2

User Installation Manual



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1. Preinstallation Precautions

■ Preinstallation Precautions

- ① In principle, the installation work should be installed directly from ARGOSDYNE.
- ② Any installation problems that arise when an installer other than us performs installation work are the responsibility of the installer, and in this case, we do not provide free service.
- ③ The safety precautions listed below are intended to prevent unexpected hazards or damage.

CAUTION

- Failure to follow instructions may result in death or serious injury to the user. In addition, property damage can occur.
- This can cause fatal damage to the equipment.

■ Warning (On Installation)

- ① A qualified technician must perform electrical work in accordance with this installation manual and use a specific circuit.
 - Improper power capacity and poor electrical work can cause fire and electric shock.
- ② Be sure to do grounding work.
 - Failure to ground will cause an electric shock.
- ③ Be sure to install a circuit breaker (ELCB) and a dedicated switch.
 - Failure to install may result in fire and electric shock
- ④ Do not use damaged circuit breakers (ELCBs) or dedicated switches.
 - Causes fire and electric shock.
- ⑤ Do not power the product without assembly during installation, service, or repair.

■ Caution (On Operation)

- ① Install it so that it does not harm other equipment or people when operating noise and opening and closing the door.
- ② Please level the product when installing it.
 - The imbalance can cause vibration and failure.
- ③ Don't let the public touch the product..

2. Installation Considerations

■ Considerations when selecting an installation location

- ① When installing the station, install it in a place where there are no obstacles around it.
- ② Install where there are no high voltage wires or poles.
- ③ Install where it is not exposed to strong winds.
- ④ Install in a place where there are no obstructions around it.
- ⑤ Do not install in places with corrosive gases, such as acidic or alkaline gases.
- ⑥ Install warning signs, hazard signs, and precautions if necessary.
- ⑦ It is recommended to build fences or fences around to keep people or animals away.

■ Considerations when preparing for installation

- ① Make sure that the station is well positioned to support its weight.
- ② Before electrical work, make sure that the power is off.
- ③ Use the specified tool to work.

■ Electrical and communications considerations

- ① Make sure that the electricity is of the prescribed capacity.
- ② Check the voltage in your country.
- ③ Make sure it is a LAN cable that can communicate.

■ Operational Considerations

- ① Check for peripheral obstructions.
- ② Check the horizontal status of the station
- ③ Do not let the public access it.

3. Installation Environment

■ Place

- Installation space
 - Station size: 1135 mm × 1096 mm × 1086 mm
 - Make room at least (horizontal, vertical) 2000mm x 2000mm
- Floor horizontal state
 - Check the horizontal state using the horizontal meter.
- Remove surrounding obstructions
 - Check for obstructions around a radius of 10 meters.

- Surrounding environment
 - Make sure that there are no obstacles that could cause the drone to take off and land.

- Additional Options
 - Fence (horizontal x vertical x height)
 - Please select an accessible location for inspection and operation.
 - Installation specification (4000 mm × 4000 mm × 2000 mm)
 - Floor (Width x Length x Height)
 - Install on ground bearing the weight of the station.
 - Installation specification (4500 mm × 4500 mm × 200 mm)
 - Terminal Box (Electrical, Communication Box)
 - Install in a place where there is no electrical equipment around.

4. Cable Specification

- Ethernet Cable
 - CAT5 or higher recommended

- Input power cable
 - 2.5SQ 3C or higher recommended (power supply)
 - Input power specification: AC / 15A

- Use a stable power supply and a power cable with the correct gauge specification.

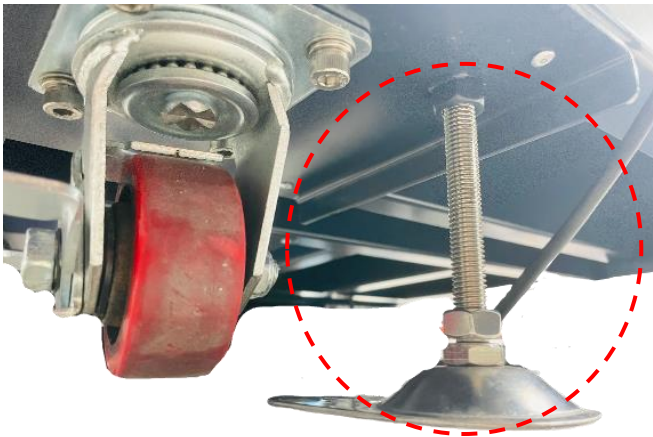
5. Installation order

■ Installation Location Selection



- Install in the center of the footprint.

■ Horizontal adjustment



- Level using the four adjustment seats at the bottom of the station.

■ Fixing the ground

- Lift the station to the anchor seat or to the adjustment seat.

■ Electrical and communication connections

- Terminal box outlet connection
- LAN cable connection

- Check the operation
 - Use argosALES or an interlocking program to verify the operation.
 - Check door opening and closing operation
 - Check charging operation
 - Check GPS status

6. Transportation method and precautions for transportation

- When suspending the station from a crane or the like, carry the rope through the lower door support.
- Always connect a rope to the four door supports to lift the station to avoid impact.
- Carry a forklift fork between the bottom wheels of the station. (No clamping, do not carry forklifts on the side.)


7. FAQ and Customer support

Please check the FAQ for instructions for troubleshooting CUNA2 drone stations. For more information about your product, please use our Help Center.

- FAQ

Q: The station is not working.

A: check the following statuses.




- 1) Make sure the power plug is connected properly.
- 2) Check if the earth leakage breaker inside the power management door is lowered.
- 3) Check if the main switch inside the power management door is turned on.
- 4) Verify that the station registration is correct in argosALES
- 5) Checking the Link Status  of a Station in argosALES

Q: The drone does not start charging automatically.

A: Check the power connection status of the station. The station's main power must be on to start charging. If the main switch does not turn on the power, check the connection status of the power cable.

A: If charging does not start even though the station is turned on, check the status of the drone. Check the connection of the drone's battery power cable.

A: Make sure that the charging terminal mounted on the drone is in contact with the charging plate on the station top. If the grounding condition is unstable due to poor contact or foreign objects, charging may not start.

A: Make sure the startup status is set to ON  in the 'Device Information' window, if it is set to OFF , set it to 'Charging' in the 'Station Control' window of argosALES, and then make sure ON  is enabled in the Device Information window.

A: If all of the above items are correct, but the problem persists, please contact customer service.

Q: The drone does not land accurately at the station.

A: Please check if there are any magnetic structures nearby. If the drone's GPS sensitivity is low, it may affect the aircraft. If GPS sensitivity is constantly poor, it is recommended to move the station's location to operate.

A: Check the LED status of the GPS module mounted on the station top.

Due to communication shading, the signal sensitivity of the GPS may be poor, the accuracy of the station landing may be reduced due to abnormalities in the IR Landing Beacon or malfunction of the LIDAR sensor mounted on the drone. If you suspect or are in poor condition of these parts, we recommend that you stop operating the station and aircraft and seek service through the customer support center.

Q: What is the Rondo Mobility System?

A: Rondo Mobility System is Argosdyne's automated drone operation platform utilizing ground control system (GCS) + drone (UAV) + station. Rondo enables multiple drone control, integrated management between drones, multiple station control, automatic charging, and can control the execution of drones in various communication environments and conditions. Please contact the customer support center to inquire about building the system.

Q: Do I need heavy equipment to install the station?

A: CUNA2 weighs 170 kg and requires heavy equipment for long-distance travel and installation.

Q: Tell us about the mobile station.

A: Mobile station Portus is sized and weighed to be carried in vans, vans, etc., so it can be moved and operated in any position depending on the situation. And on flat terrain, the wheels make it easy to push and move the position. Typical stationary stations are difficult to change position easily once placed due to their weight. Mobile stations have the advantage of being able to quickly move and operate to the required area in situations where the area where the control mission must be performed is large or changes frequently.

Q: Tell us about the fixed station.

A: The fixed station CUNA2 can automatically return, charge and store the drone after performing the mission when regular and long-term control service operation is required at a designated location, and it is manufactured with a dome-type structure that allows the upper cover to open and close during the mission to take off and land, and to protect against external environments and dangers such as weather, theft, and damage after performing and returning to the mission. In addition, by minimizing the influence from the external environment, the need for airframe and equipment management through manpower can be reduced.

Q: Can argosALES check the location of stations as well as drones?

A: CUNA2 is equipped with GPS that allows you to determine the location coordinates of a station. If the station is connected to the Internet, argosALES can determine the exact location of the station and accurately select the mission flight path and landing site.

Q: Can I only use the station with a drone from Argosdyne?

A: By equipping the 'companion board' provided by Argosdyne, you can operate other companies' aircraft (drones). For reference, it is necessary to check whether the aircraft specifications, expansion slots, and programs are compatible with the aircraft you have. Please contact the customer support center to inquire about the use of third-party products.

A: Not necessarily, but at the moment only drones from Argosdyne can take advantage of the station's full capabilities. This is because in order to enable automatic charging,

precision landing, and remote control with the station, the drone aircraft must also have a module paired with the station.

A: Depending on the structure of the aircraft, there are some products that cannot work, but the majority of medium-sized industrial drones can be linked to Argosdyne's stations through a separate work process. However, even in this case, it must meet the drone landing skid standards allowed by the station, so it is necessary to check whether it can be linked through a separate consultation.

- **Argosdyne Customer Support Center**

☎ 070-5102-1388

CUNA2 Drone Station and Drone Automatic Operation System - For inquiries regarding the construction of the Rondo Mobility System, please use the Argosdyne Customer Support Center.

※ For customers using communication networks such as LTE/wifi through the Rondo Mobility System, problems related to the use of plans, etc. can be resolved by contacting the contracted carrier.

- **Product Maintenance**

The free maintenance period of CUNA2 drone station is one year from the date of purchase. Except in cases where the product itself is defective, free support is not provided for matters caused by the user's fault or natural disasters.

- **Feedback on this article**

To help us improve this article, please send us your suggestions, comments or errors to info@argosdyne.com.

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