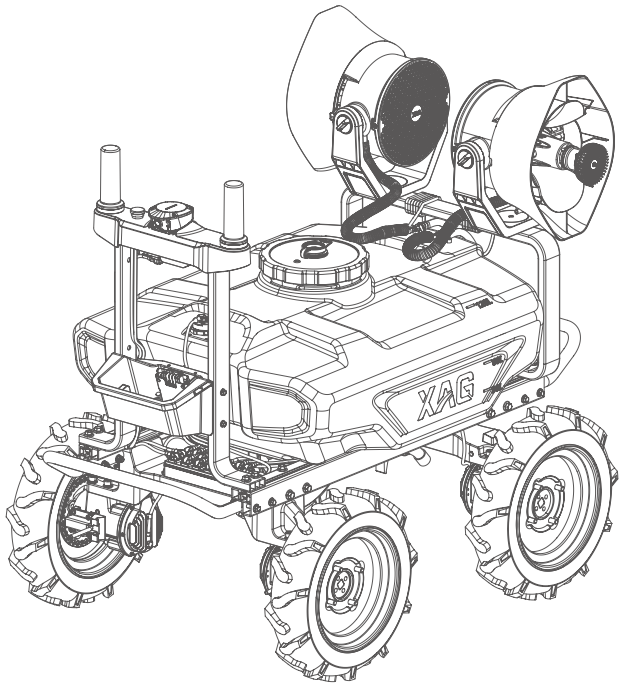
XAG **R100** 2025 Agricultural Rover RevoSpray

(Model: 3WDFZ-120AH1)

User Manual

Version 1.0 EN



XAG ADVANCING AGRICULTURE

To User

Dear user, thank you for choosing XAG's products.

For safety purposes and better user experience, it is highly recommended that you read this manual carefully and strictly follow the instructions hereof.

Contact Us

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Technical Support Team: support@xa.com

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Disclaimer

1. Please read this document carefully before using the product, as it concerns both operational safety and your legitimate rights and interests. You shall be deemed to have fully read, acknowledged, understood, agreed to, and accepted all the terms and content of this document upon the use of the product.
2. The product is not intended for recreational use and carries certain safety risks. It is NOT suitable for individuals under 16 years old, those with limited or no capacity for civil conduct, or individuals with mobility impairments. Please ensure that individuals falling under these categories do not come into contact with or use this product. Exercise extra caution when operating in the presence of children, crowds, or animals.
3. This product is the XAG R100 2025 Agricultural Rover, for agriculture/forestry/livestock/aquaculture use only. Please read this User Manual carefully to scrutinize your legitimate rights and interests, responsibilities, and safety guidelines, or it may pose risks of property loss, accidents, or personal injury.
4. You undertake to use this product only for legitimate purposes within the limits of applicable law, and you consent to these terms and any related policies or guidelines that may be issued by XAG. You acknowledge and accept that operational records and data generated during use will be stored in the XAG Go app. XAG bears no responsibility if such records or data cannot be saved or analyzed due to user-related causes.
5. Please install, use, transport, and maintain the product under the instructions of the User Manual. Unless otherwise agreed by XAG, do not modify or disassemble the product without authorization. Any malfunction or damage caused by improper use, authorization modification, or disassembly will not be covered under the warranty, and all resulting financial and legal responsibilities shall be borne solely by the user.
6. To the maximum extent permitted by law, under no circumstances shall XAG offer an explicit or implicit guarantee for this product, including but not limited to implicit guarantees pertaining to vendibility, fitness for a particular use, or non-infringement.
7. To the maximum extent permitted by law, XAG shall not be liable for all losses incurred by user's improper use. Also, XAG shall not be liable for any indirect, consequential, punitive, accidental, special, or exemplary damage, including any loss resulting from your purchase, use, or inability to use the product, even if you have been advised of the possibility of such loss.
8. You understand that in the use of any products, accidents may occur due to single or combined factors, including but not limited to improper operation, surroundings, and communication networks. You understand that the aforesaid accidents are reasonable and acceptable in the use of the product, and that XAG shall not be held accountable for such accidents.
9. On any account, purchaser or user shall comply with the applicable laws and regulations of the country and the region where the product is used. XAG shall assume no liability arising from your violation of relevant laws and regulations.
10. Please note that, as services provided by the product may involve the capture, storage, and processing of geographic information and data, the use of the product shall comply with local laws and regulations dealing with such issues. Otherwise, the user shall bear the sole responsibility, both financially and legally, for any illegal acts.

11. As exclusion clauses may be prohibited by some laws and regulations, your rights and interests may vary. However, this does not imply that the terms contained in this Disclaimer are necessarily invalid. If any provision is deemed invalid for any reason, such invalidity shall not affect the validity of the remaining provisions.
12. To the extent permitted by law, XAG reserves the rights for final explanation and revision of the terms and conditions hereinabove. XAG also has the right to update, modify, or terminate these terms and conditions via channels including its official website, the User Manual, and online App, without prior notice.

Warning

Read the User Manual completely before use. Improper operation of the agricultural rover may cause injury to yourself or others, product damage, or property loss, for which the user will be financially and legally responsible. Exercise caution and follow the User Manual for installation, maintenance, and lawful use.

Safety Guidelines

Safety Rules

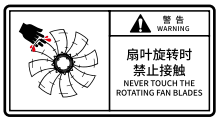
- Before use, inspect the product in accordance with the User Manual to ensure all parts are intact and functions are normal. Confirm that the parking lever lock works properly and the emergency stop switch is functional.
- Inspect the area before operation. Keep clear of obstacles and crowds, and eliminate potential safety hazards.
- Do not operate the rover if you are elderly, physically weak, ill, pregnant, fatigued, intoxicated, in poor mental condition, or a child.
- Keep people and animals at least 5 meters away from the rover before or during operation to avoid injury from pesticide spray or other hazards.
- Do not travel or operate the rover on urban roads, national highways, expressways, or other motor vehicle lanes, or in unsuitable environments. Always comply with applicable laws and regulations during operation.
- This product is intended for use in agriculture, forestry, livestock, and aquaculture. Unless otherwise specified by XAG, the user assumes all responsibility for personal injury or property loss arising from use in other scenarios or for other purposes.
- Ensure the device firmware and the XAG Go App are up to date before operation.
- Do not touch the rover or its payload system during operation or driving. Do not operate in water deeper than the chassis height, and never move the rover by dragging it.
- Keep the rover away from heat sources to prevent component damage or fire hazards.
- Spraying operations must be carried out in weather without rain and with wind speeds below Beaufort scale 3. Monitor wind speed and direction, and never operate in extreme conditions such as thunderstorms, hail, sandstorms, or strong winds.
- Use dedicated tools to measure and prepare pesticides strictly according to the User Manual. Do not use muddy or polluted water, as this may reduce efficacy or cause sediment. Operators must wear long sleeves, trousers, protective clothing, masks, hats, and gloves. Eating, drinking, or smoking during operation is prohibited. If the fan is obstructed by foreign objects, immediately press the emergency stop switch to stop operation.
- Do not leave the rover parked on slopes for long periods. For temporary stop, lock the parking lever and place sturdy chocks under the wheels to prevent sliding.
- Before operating on a slope, ensure the rover stops securely.
- When operating on a slope, always monitor the rover and stay within the maximum angle allowed in the User Manual.
- In case of emergency or danger during operation, immediately stop the rover using the emergency stop switch.
- Before transportation, remove the battery and store it separately in a safe, level place. Secure the rover, lock the parking lever, and place chocks under the wheels to prevent sliding or falling during transport.
- In case of a malfunction, lock the parking lever and power off the rover before inspection. Never perform inspection, repair, or maintenance underneath the rover unless it is securely locked.

- Do not use flammable, explosive, corrosive, highly viscous, or particle-containing liquids to prevent device damage or accidents.
- If pesticide accidentally comes into contact with eyes, nose, mouth, or ears, rinse immediately with plenty of clean water. If dizziness, nausea, or other adverse reactions occur, stop operation at once and seek medical attention promptly with the pesticide packaging.
- After operation, clean the tank, tubing, spray discs, and rover body with laundry powder solution to remove pesticide residues. Operators should also wash thoroughly and change clothes to minimize exposure risks.
- When not in use, during long-term storage, or for long-distance transport, remove and properly store the battery, empty and clean the liquid tank, and keep the rover in a cool, clean place.
- Do not modify the power system, motor, gearbox, or payload system. Any other modifications must comply with local laws, regulations, and safety guidelines.
- Do not use non-genuine XAG parts for maintenance or operation. Doing so may cause compatibility issues, compromise safety, or shorten the product's service life. Unless otherwise agreed by XAG, damage arising therefrom is not covered under warranty.
- Never take human bodies, animals (whether stationary or moving), or other hazardous objects as obstacles for stop or avoidance testing.
- Use dedicated tools to measure pesticides. Before preparation, carefully read the pesticide instructions, preparation methods, and precautions. Handle with care during mixing to avoid spilling.
- Always prepare pesticides with clean water. Muddy or polluted water reduces dispersibility, wettability, and permeability, weakening efficacy by causing sediment or even breaking down active ingredients.
- Dispose of pesticide waste in accordance with the manufacturer's instructions and environmental regulations. Do not discharge arbitrarily.
- After operation, promptly clean up leftover pesticides and packaging. Protect the environment and do not contaminate rivers and drinking water sources.
- When using Cloud RTK, a 4G connection is required. Users should verify local network coverage before purchase.
- The device comes with a pre-installed SIM card. Upon activation, XAG provides each account with a basic data plan. Additional data can be purchased through the "XAG Go" App. SIM cards with no activity for two consecutive years will be automatically deactivated.
- Never use the rover for purposes prohibited by law or regulation.
- Purchase only through officially authorized local channels. Products from unauthorized channels may have limited functions.
- This product does not store location, images, videos or other private data.
- Only after obtaining the user's consent and receiving the SN number will our after - sale support staff remotely check the device logs and other information.
- When the device is connected to the network, it will automatically transmit log files periodically for remote monitoring and after-sales service.

Safety Sign



Caution: Hand Injury



Do Not Touch



Risk of Pinching Hand



Risk of Pinching Hand



Wear Protection



Toxic Hazard

Read/Download E-Document

Scan the QR code to read/download this User Manual.

Note

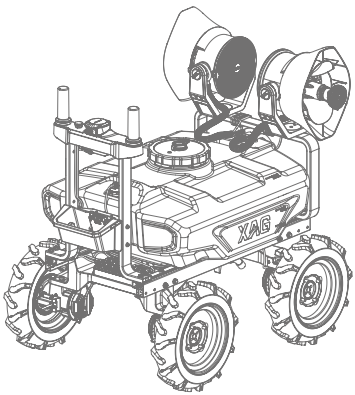
⚠ You can scan the QR code to read/download the latest XAG R100 2025 Agricultural Rover RevoSpray User Manual.

Introduction

The XAG R100 2025 Agricultural Rover RevoSpray (hereinafter referred to as the "Rover") features a lightweight design combined with an independently driven four-wheel system. It is equipped with the SuperX 5 Ultra smart controller, a wide-area vision system, and the RevoSpray air-assisted spraying platform. When used with the SRC 5 Smart Remote Controller, it enables high-precision navigation and operation, automatic visual row-following, and accurate auto flowrate spraying, making it a next-generation air-assisted spraying rover designed specifically for orchard crop protection.

List of Items

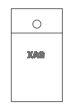
When unboxing, check the package contents against this list. Immediately contact your seller regarding any missing items.



R100 Rover
×1



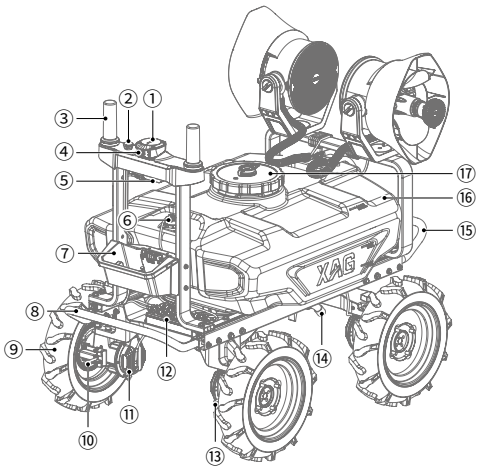
Bumper (with screws and nuts)
×2



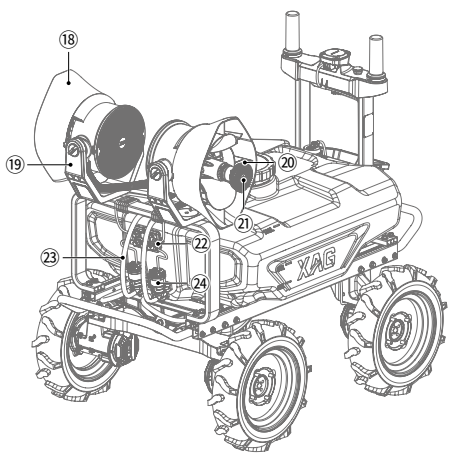
Tool Kit
×1

Main Components

Rover Structure



① Status Indicator Light
② Emergency Stop
③ 2-in-1 Antenna
④ FPV Camera
⑤ SuperX 5 Ultra Smart Controller
⑥ Smart Liquid Level Sensor
⑦ Battery Compartment
⑧ Front Bumper
⑨ Wheel
⑩ Parking Lever
⑪ Main Motor
⑫ Main Cable Hub
⑬ Parking Lever
⑭ Drain Valve
⑮ Rear Bumper
⑯ Liquid Tank
⑰ Tank Lid



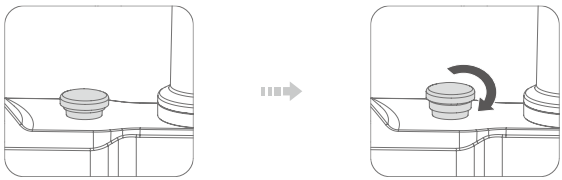
⑱ JetSprayer
⑲ JetSprayer Adjustment Bracket
⑳ Spray Disc Mist Guide Ring
㉑ Spray Disc
㉒ Small Cable Hub
㉓ Liquid Tube
㉔ Water Pump

Emergency Stop

When the vehicle is driving on flat terrain and encounters an emergency, pressing the emergency stop button will immediately stop the vehicle.

Pressed Status: Pressing the button will brake and stop the moving vehicle,and both left and right JetSprayers will stop simultaneously.

Released Status: Turn the button clockwise gently to release the emergency stop button. The vehicle will switch to standby mode.



Pressed Released

⚠Note

⚠ Pressing the emergency stop button does not cut off the vehicle's power supply. If necessary, please turn off the smart battery before performing other operations.

⚠ Do not press the emergency stop button while driving on a slope.

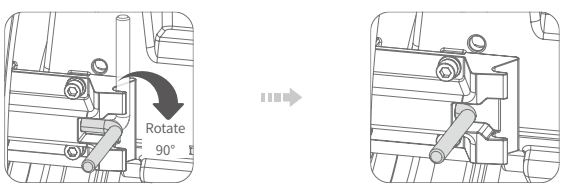
⚠ Before powering on the vehicle each time, ensure that the emergency stop button is in the released status; otherwise, the vehicle cannot be started.

Parking Lever

The rover is equipped with parking levers on both the left and right front wheels. The parking lever can be used to lock or unlock the wheels (the right parking lever is shown as an example), keeping the rover braked and preventing it from sliding.

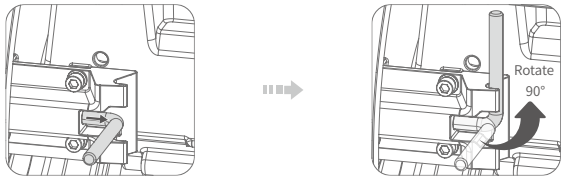
Lock

Rotate the parking lever downward by 90° , then push it toward the center of the rover until it is fully inserted into the locking slot. The rover will remain in a braked state and cannot be moved.



Unlock

Pull the parking lever toward the center of the rover, then rotate it upward by 90° . The rover wheels will be free to move.



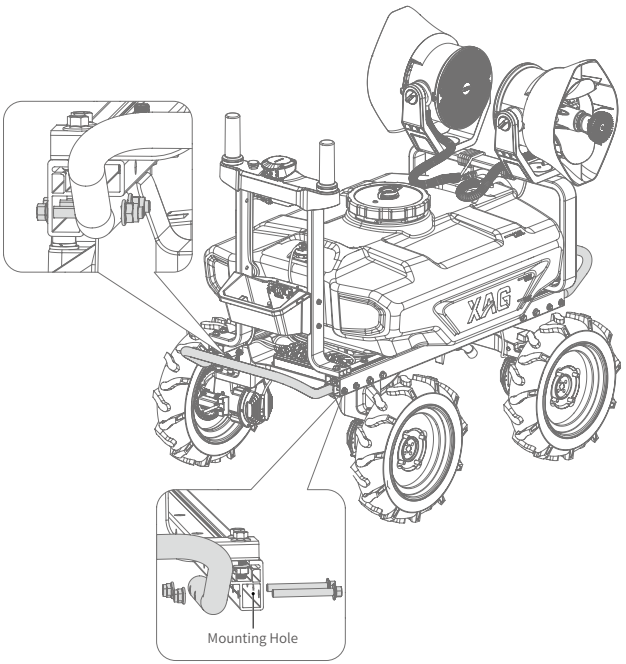
⚠Note

- ⚠ Before using the rover for the first time, be sure to unlock the parking levers before proceeding with further operations.
- ⚠ For safe operation, place the rover on a flat ground and ensure it is stationary before locking or unlocking.
- ⚠ During rover operation, both parking levers must remain unlocked. Otherwise, operating the rover after powering on may cause damage to the parking levers.
- ⚠ To ensure proper braking performance, always lock both parking levers simultaneously.

Prepare Rover

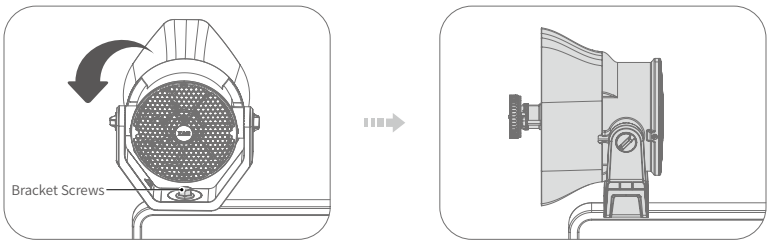
Install Bumper

Insert the screws of the front bumper (2 on each side) through the mounting holes on both sides of the vehicle frame. Then, tighten the nuts with a wrench to secure the bumper. Repeat the same steps to install the rear bumper of the vehicle.

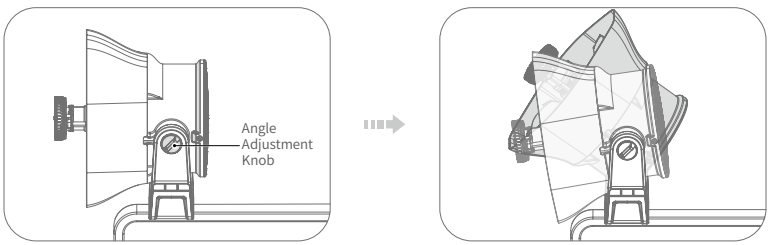


Set JetSprayer Direction

① Use the wrench from the tool kit to loosen the screws on the JetSprayer adjustment bracket. Then, rotate the bracket left or right to set the horizontal direction of the JetSprayer (taking the left JetSprayer as an example).



② Manually rotate and loosen the angle adjustment knobs on both sides of the JetSprayer adjustment bracket. Then, adjust the JetSprayer up or down to set its pitch direction.



③ After confirming the desired direction, securely tighten both the bracket screws and the angle adjustment knobs to complete the JetSprayer direction setup.

Prepare Battery

The XAG R100 2025 Agricultural Rover is compatible with three models of Smart SuperCharge Batteries: B13960S, B13970S, and B141050 (hereinafter referred to as "battery"). This manual uses the B141050 Smart SuperCharge Battery as an example.

Power On/Off

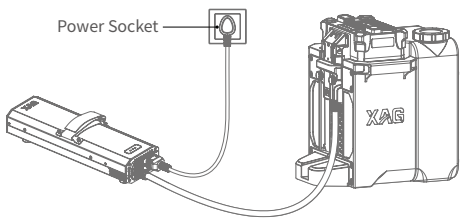
Press and hold the power button for 2 seconds to power on or off the battery. When the battery is off, connect it to a charger or powered device, then press and hold the power button for 2 seconds. The power indicator lights will turn on, indicating a successful startup.

When the battery is on, press and hold the power button for 2 seconds until all power indicator lights turn off, indicating a successful shutdown.

Charging

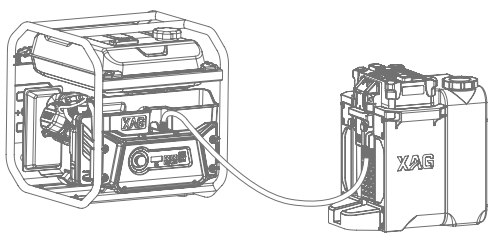
Use the Supercharge Station or a charger to charge the battery. When the battery is fully charged, the supercharge station or charger will automatically stop charging, and the battery will power off automatically.

CM13600S Charger



Supercharge Station

GC4000+ Supercharge Station

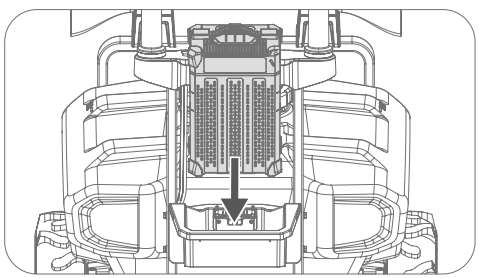


⚠Note

- ⚠ For water or mist cooling, submerge the battery in clean, non-corrosive water for a maximum of 60 minutes. Ensure that the water level remains between the Min and Max marks on the battery casing for optimal heat dissipation. Do not fully submerge the battery in water.
- ⚠ Before charging, please see that the power contact is clean and dry and the charging plug and battery interface are free of any metal objects or liquid residue.
- ⚠ While charging, monitor the water level in the battery cooling tank/battery cooling tower. If it falls below the Min mark, refill with fresh water without exceeding the Max mark.
- ⚠ During charging, avoid water splashing from the battery cooling tank or battery cooling tower onto the charger or supercharge station, as this may cause power interruption or damage to the charger, supercharge station, and battery.
- ⚠ If you need to remove the battery during charging, please turn off the battery or the supercharge station first. Direct removal may cause the supercharge station to trigger over-voltage protection, resulting in a shutdown.
- ⚠ Please remove the battery before draining the battery cooling tank/battery cooling tower.

Install Battery

Place the battery into the battery compartment, ensuring the battery latch is securely fastened to complete the installation.



⚠Note

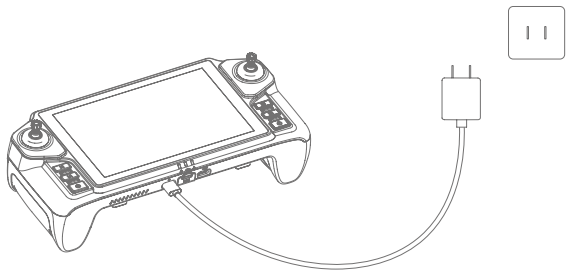
- ⚠ Before installing the battery, keep the rover's power interface and the battery interface clean, dry, and free of metal debris and liquid residue.
- ⚠ Before powering on the battery, make sure the battery is fully inserted into the compartment to avoid accidents caused by incomplete contact with the rover's power interface during operation.

Prepare Remote Controller

Charging

Insert the Type-C cable into the charging port of the SRC 5 Smart Remote Controller (hereinafter referred to as "SRC 5") and the charging adapter, then connect to the power supply.

During charging, if a fast-charging adapter is used, the power indicator will flash rapidly and the buzzer will beep. When the power indicator remains solid green, the SRC 5 is fully charged.



Power On/Off

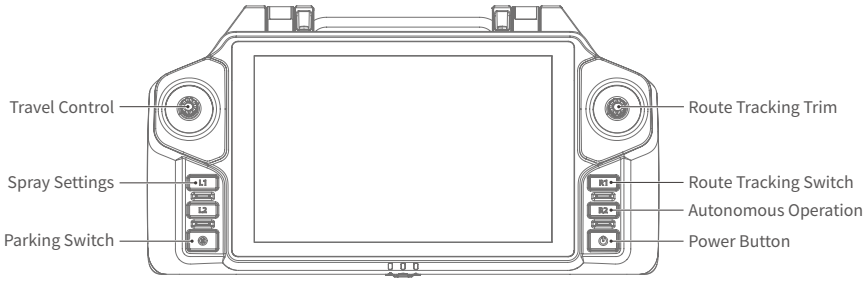
Power On: Press and hold the power button for 2 seconds. The battery indicator will remain solid, and the "Power On" sound will be played, indicating a successful startup.

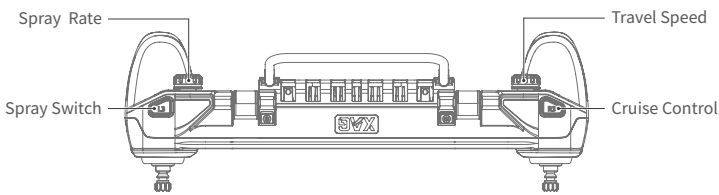
Power Off: Press and hold the power button for 2 seconds. All indicators will turn off, and the "Power Off" sound will be played, indicating a successful shutdown.

⚠Warning

- ⚠ The remote controller is exclusively designed for use with XAG products. If the remote controller is used with non-XAG products, functionality incompatibilities may occur. Users assume full responsibility for any losses or legal liabilities arising therefrom.
- ⚠ Only use charging device provided by XAG to charge the remote controller. Users will bear responsibility for any faults or damage caused by unauthorized use of other charging devices.
- ⚠ The remote controller is not waterproof. Do not expose it to water or immerse it in water during charging or use. Users will be responsible for any faults or damage caused by water ingress.
- ⚠ When operating the rover with the remote controller, ensure the surrounding environment is open and maintain a safe distance from the rover. Keep the rover away from people, animals, and other obstacles.

Use of Remote Controller





Travel Control: Controls the rover to move forward/backward and left/right

Spray Settings: Tap to enter the spray settings screen

Parking Switch: Tap to engage or release the electronic parking brake

Spray Rate: Rotate clockwise to increase spray rate; rotate counterclockwise to decrease spray rate

Spray Switch: Tap to turn on or off the spray mode

Route Tracking Trim: Adjust left or right direction in route tracking mode

Route Tracking Switch: Tap to enable or disable route tracking mode

Autonomous Operation: Short press to select a nearby route; long press to execute the route

Power Button: Long press for 2 seconds to power on; long press for 2 seconds again to power off

Travel Speed: Rotate clockwise to accelerate the rover; rotate counterclockwise to decelerate

Cruise Control: Tap to enable or disable cruise control mode

Use of Rover

Add Remote Controller

For first-time use of the SRC 5, it must be added in the XAG Go. This step can be skipped if the remote controller has already been used before. Follow the steps below to add the remote controller.

1. Power on the SRC 5, open the XAG Go, enter your phone number to register, and log into your account.
2. After logging in, the App will automatically redirect to the Add Remote Controller screen. Check the current remote controller information, then tap "Confirm" in the upper-right corner.

Note

⚠ The XAG Go can only be accessed and used via the SRC 5. Other mobile devices are not supported at this time.

Rover Pairing

When using the rover for the first time, it must be paired with the SRC 5 through the XAG Go. Follow the steps below to complete pairing.

1. Power on the SRC 5, open the XAG Go, enter your phone number to register, and log into your account.
2. On the Home screen (main screen), tap "Pair Device" in the lower-right corner. The App will automatically scan for devices.
3. Once the device has been detected, tap "Pair".
4. When the screen displays "Pairing Successful", the rover has been successfully paired.

Note

⚠ Before pairing the rover, ensure that location service is enabled on the SRC 5, and that the XAG Go has been granted location access.

Device Details

On the Home screen (main screen), tap "Enter Operation", then tap" "in the upper-right corner to view the device details for the corresponding rover.

- Tap " " to enter the General screen, where you can enable/disable AI-assisted safety, adjust control feel, update firmware, and view rover information.
- Tap " "to enter the Power screen, where you can view the status of the four main motors, battery level, and battery power.
- Tap " "to enter the Communication screen, where you can check the current network status (signal strength, SNR, communication quality) and configure carrier settings.
- Tap " " to enter the Positioning screen, where you can view the rover's RTK positioning status, RTK reference, RTK latency, the number of connected satellites, positioning accuracy, heading accuracy, and switch between positioning modes.
- Tap " "to enter the Spraying screen, where you can view the remaining liquid volume in the Smart Liquid Tank and the JetSprayer parameters, as well as enable/disable Auto Spray, perform spraying calibration, and other related operations.

Firmware Update

Before using the device, check the current firmware version. If the device firmware is not the latest version, be sure to update it to the newest version.

1. Open the XAG Go, tap Enter Operation on the Home screen (main screen), then tap" "in the upper-right corner. Select the rover for the operation to enter the Device Details screen. Tap " " to enter the General screen, then tap Check for Updates to check for firmware updates.
2. If an update is available, tap Download and Update. After the firmware update is complete, tap Done to return to the Device List screen. Check that all operation-related devices have been updated to the latest firmware. If not, repeat the update steps until all devices are up to date.

App UI



Speed Setting: Tap to set the rover's travel
Rover Speed: Current speed of the rover
Remote Controller Battery: Current battery level of the remote controller
Rover Battery: Current battery level of the rover
Tank Level: Remaining liquid in the Smart Liquid Tank
Device Details: Tap to view device details

Map Mode: Tap to switch FPV mode
My Location: Current user location
Rover Location: Current rover location
Driving Assist Line: Rover driving assist line
Control Center: Tap to select the operation mode
Spraying Settings: Tap to configure spraying parameters

Create a Route

Before performing autonomous operations, the rover requires a route. A route can be created either by **Route Recording** or **Route Marking**. The following sections introduce these two methods.

Route Recording

Users can record a route by manually controlling the rover with the SRC 5.

1. On the SRC 5, open the "XAG Go" app. Tap "Enter Operation" on the home screen (main screen) to enter the operation screen.
2. Drive the rover to the starting point of the operation zone. Tap the ⌘ icon in the lower right corner and select " Record Route"(or tap " Route / HD Map" - "Route" - "Record Route" in the lower left corner).
3. Drive the rover to the end point of the operation zone. After completing the recording, tap "End" at the lower right of the screen.
4. Name the route and tap "Save". The system will automatically generate the route.

Route Marking

New HD Map

Before using Route Recording, it is recommended to first create a new HD map. Users may follow the steps below.

1. On the SRC 5, open the "XAG Go" app. Tap "Enter Operation" on the home screen (main screen) to enter the operation screen.
2. Drive the rover to the starting point of the operation zone. Tap the ⌘ icon in the lower right corner and select " + New HD Map"(or tap " Route / HD Map" - "HD Map" - "New HD Map" in the lower left corner.
3. Drive the rover to the end point of the operation zone. Tap the FPV window in the upper right corner of the screen to switch the controller screen to FPV view. After completing the recording, tap "End" at the lower right of the screen. The system will automatically generate the HD map.
4. Tap "Cancel" to cancel the current HD map generation.

Route Drawing

Once the HD map has been generated, users can create a route by marking points on the map.

1. On the SRC 5, open the "XAG Go" app. Tap "Enter Operation" on the home screen (main screen) to enter the operation screen.
2. Tap " Route / HD Map" at the lower left, select the HD map to be marked, and tap " Draw".
3. Tap on the map to mark the desired route (tap the ↩ icon below to undo a marked point). After completing the marking, tap "Save". The system will automatically generate the route.
4. Name the route and tap "OK".

Autonomous Operation

Once the route has been created, the rover can begin autonomous operation.

1. On the SRC 5, open the "XAG Go" app. Tap "Enter Operation" on the home screen (main screen) to enter the operation screen.
2. Select the desired route on the map. Tap "Start Operation" at the bottom right of the "Route Details" window and the rover will automatically begin spraying operation.

Spray Settings

Before operation, tap the icon in the lower right corner of the operation screen to access the spray settings.

- In the "Atomization" section, set the droplet size.
- In the "Airflow" section, adjust the airflow of the JetSprayers。
- In the "Dosage" section, set the application rate per meter within the operation zone.
- Tap "Left" or "Right" to enable the corresponding side JetSprayer for operation.

Note

⚠ During operation, ensure that "AI Safety Assist" is enabled on the " General" screen under the rover's device details.

Route Tracking

The rover can automatically identify crop row patterns and generate guidance lines. Enabling Route Tracking mode allows the rover to remain aligned with the guidance lines. Users may enable Route Tracking Mode following the steps below.

1. On the SRC 5, open the "XAG Go" app. Tap "Enter Operation" on the home screen (main screen) to enter the operation screen.
2. Tap the icon at the lower right and tap " Route Tracking" to enable the mode.
3. Use the right joystick to adjust driving direction. Tap the icon at the top of the operation screen to adjust driving speed.
4. Tap "Exit" at the lower right to disable Route Tracking.

Note

⚠ Before enabling Route Tracking, ensure that "AI Safety Assist" is enabled on the " General" screen under the rover's device details.

Cruise Control

Cruise Control allows the rover to travel at a fixed speed autonomously. Users may enable this mode following the steps below.

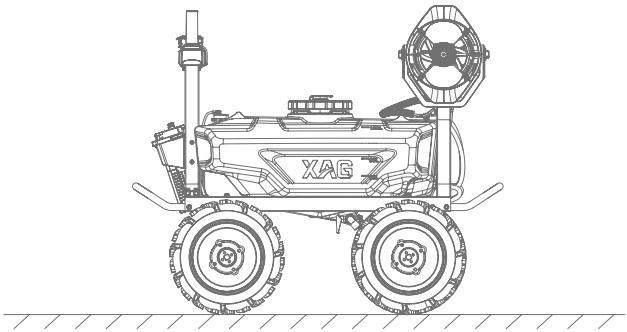
1. Press the button on the SRC 5 to enable Cruise Control.
2. Use the left joystick to adjust driving direction.
3. Press the button again to disable Cruise Control.

Note

⚠ Before enabling Cruise Control, ensure that "AI Safety Assist" is enabled on the " General" screen under the rover's device details.

Safe Parking

When parking the rover, ensure it is on a flat and level surface to prevent sliding or falling, which could cause accidents.



Maintenance

After each operation, promptly clean the parts and exterior of the vehicle. Regular maintenance of the vehicle is also required.

Post-Operation Cleaning

Pesticides are caustic and could corrode the device, shortening its lifespan. Clean the device timely after each operation. The cleaning steps are as follows:

Detergent: soapy water or laundry powder/water mixture

A. Liquid Tank: Clean the interior and wipe the surface of the liquid tank with a rag.

B. Vehicle:

① Fill the liquid tank with soapy water or the laundry powder/water mixture. Start the spraying system to clean pesticide residues in the spraying system.

② Fill the liquid tank with clean water and start the spraying system to wash off residual soapy water or the laundry powder/water mixture in the spraying system.

③ Empty the liquid tank and start the spraying system until all liquid tubes are drained, avoiding damage to other objects during transportation or storage.

④ Wring out the damp rag and wipe the surface of the vehicle to remove pesticide stains and mud. Empty the liquid tank and drain the liquid tubes if you need to transfer the vehicle to another place or expect the vehicle to sit unused for an extended period.

C. FPV Camera Cleaning: Use a damp cloth to gently wipe off pesticide residues, stains, or dirt from the FPV camera lens. Ensure the lens remains dust-free.

Regular Maintenance

Wear and tear as well as malfunctions in/of the device could occur as a result of ordinary use. Regular maintenance ensures that the device performs at its best in future farming applications with fewer malfunctions and improved efficiency. The maintenance steps are as follows:

① Check if any screw on the vehicle is loosening or missing.

② Check if all component connectors for secure connection and signs of oxidation. Inspect the battery socket for deformation.

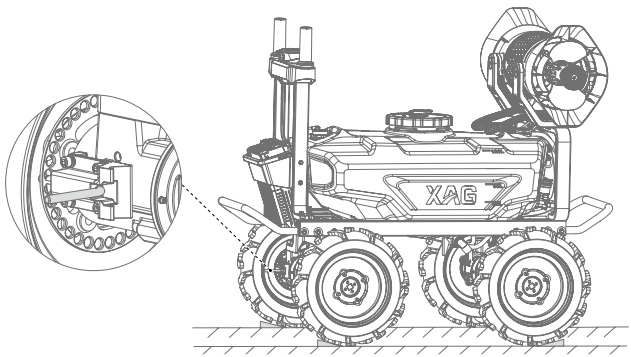
③ Check if the 2-in-1 antennas are deformed.

④ Regularly clean the FPV camera lens.

⑤ Perform thorough cleaning of the device, including hard-to-reach areas such as the tank connector and battery socket.

Transportation

When transporting the rover, place it on a flat and level surface. Insert sturdy wheel chocks beneath both the front and rear wheels, and lock the parking lever. During transportation, always ensure the rover remains in a braked state.



Appendix

Indicator Description

The status of the rover can be determined from its status indicator lights. The definitions are as follows:

Status Indicator		Description
Solid Green		Manual remote-control mode
Solid Blue		Semi-auto remote-control mode / fully autonomous operation
Solid Yellow		Low battery / low liquid level
Solid Red		Device malfunctioning
Solid Purple		Firmware updating

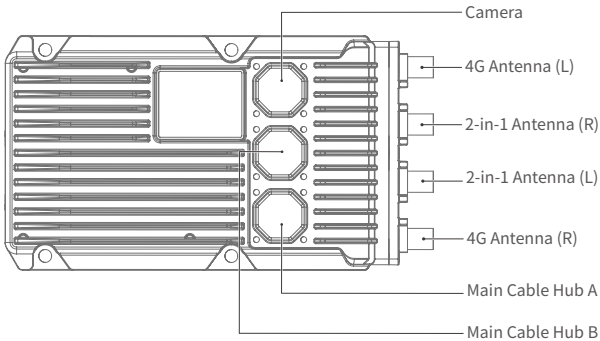
Troubleshooting

Solutions to Issues and Faults

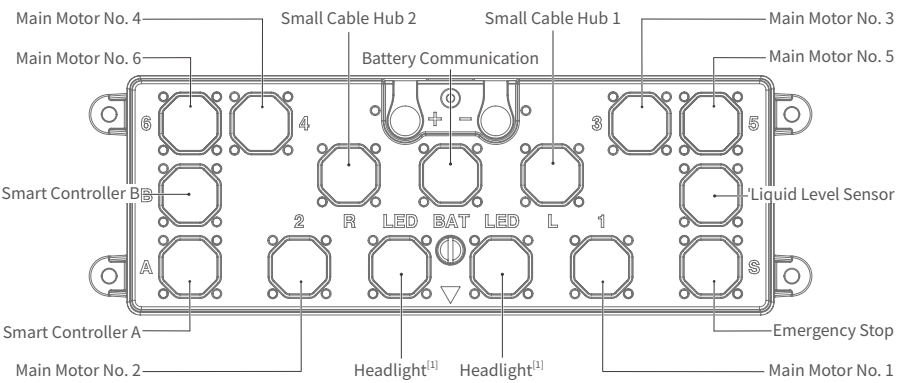
Module	Description on App	Solution
Vehicle Control Unit	Emergency stop activated; device has ceased all operations	The emergency stop switch has been pressed. 1. To resume normal standby, first check the device status. Once safe, release the emergency stop switch. 2. If the warning persists after release, check the wiring of the emergency stop switch for damage or poor connection. 3. If the issue persists, please contact after-sales support.
Positioning System	Positioning system error	1. Check if the antenna is obstructed. 2. Check if the surrounding environment has large obstacles blocking the antenna. 3. If the issue persists, please contact after-sales support.
Power System	Battery removed	1. If the battery has been physically removed, the smart controller will be powered by the backup battery in standby mode. High-power functions will be unavailable. This is normal. 2. If the battery has not been removed, check the battery communication wiring for damage or poor contact. 3. If the issue persists, please contact after-sales support.
Powertrain	Motor offline	1. Check wiring for damage or poor connection. 2. Restart the rover. If the issue persists, please contact after-sales support.
	Motor overcurrent	Please restart the rover. If the issue persists, please contact after-sales support.
	Motor IQ overcurrent	Please restart the rover. If the issue persists, please contact after-sales support.
	Motor hardware overcurrent or overvoltage	Please restart the rover. If the issue persists, please contact after-sales support.
RevoSpray	Nozzle offline	1. Check if the wiring is properly connected and restart the rover. 2. If the issue persists, please contact after-sales support.
	Fan offline	1. Check if the wiring is properly connected and restart the rover. 2. If the issue persists, please contact after-sales support.
	Pump offline	1. Check if the wiring is properly connected and restart the rover. 2. If the issue persists, please contact after-sales support.
	Liquid tank offline	1. Check if the wiring is properly connected and restart the rover. 2. If the issue persists, please contact after-sales support.

Wiring Quick Guide

Smart Controller Wiring Diagram

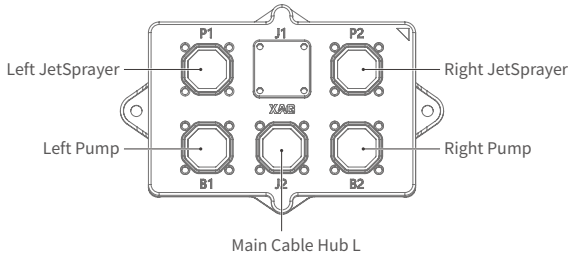


Main Cable Hub Wiring Diagram

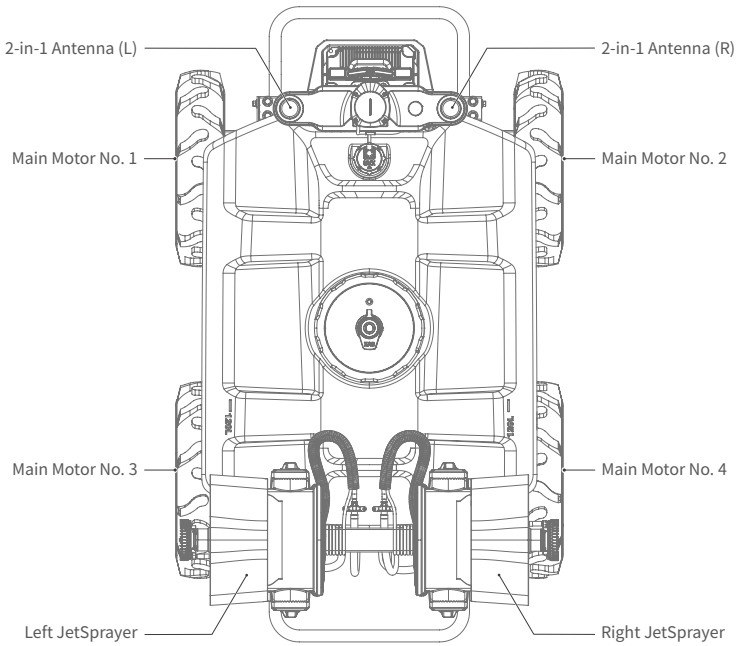


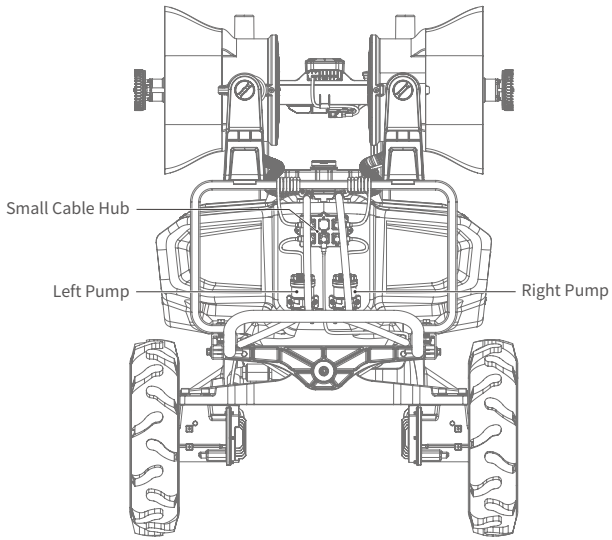
[1]: The headlight is an optional accessory and must be purchased separately if required.

Small Cable Hub Wiring Diagram



Module Layout Diagram





⚠Note

- ⚠ Never assemble or disassemble any module while powered on.
- ⚠ Power may only be turned on after all modules are properly installed.
- ⚠ Keep all connectors, slots, and sealing rings clean.
- ⚠ Connectors feature an anti-misplug design; ensure proper orientation and insert gently. Do not force insertion.
- ⚠ After connectors are inserted, screws must be tightened to maintain protection.
- ⚠ All unused ports must be covered with end caps and screws tightened to prevent failure of protection.

Specifications[1]

Basic Parameters

Model	3WDFZ-120AH1
Dimensions	1325 × 808 × 1086 mm
Wheel Track	705 mm
Wheelbase	650 mm
Min. Ground Clearance	270 mm
Net Weight	80 kg
Max. Payload	126 kg
Max. Speed	1.5 m/s
Max. Climbing Angle	12°
Operating Ambient Temperature	0 °C ~ 40 °C

Powertrain

Drivetrain	Independent 4WD; differential steering
Rated Motor Power (Single Motor)	100 W
Tyre Size	16-inch pneumatic tyre
Tyre Inflation Pressure	30 psi

Power System

Battery Quantity	1
Battery Type	Lithium polymer battery
Compatible Battery	XAG B141050 Smart SuperCharge Battery XAG B13970S Smart Supercharge Battery XAG B13970 Smart Supercharge Battery

[1]: The supported communication frequency bands and their corresponding available ranges vary by country/region. For detailed parameters, please scan the QR code below.

RevoSpray System

Liquid Tank Rated Capacity	120 L
JetSprayer Quantity	2
Atomization Mode	Centrifugal atomization
Pump Quantity	2
Horizontal Spray Width[2]	7 m
Total Flow Rate[3]	4.0 ~ 8.0 L/min (dual pumps)

Control System

Max. Effective Signal Range[4]	500 m
Compatible Remote Controller	XAG SRC 5 Smart Remote Controller

[2]: Measured under windless conditions for reference only. Actual horizontal spray width may vary depending on vehicle speed, liquid tank atomization settings, and wind conditions.

[3]: The spray volume can be adjusted according to operational needs.

[4]: Measured in open, unobstructed, and interference-free environments. The actual control range may vary and is provided for manual control reference only.

Compliance Information

FCC Compliance Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense .

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

This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

⚠ Warning

⚠ Cancer risk from exposure to [Pb;DINP;DBP;DEHP]. For more information go to ***www.P65Warnings.ca.gov.***

FCC Supplier's Declaration of Conformity

Brand name / model number: 3WDFZ-120AH1
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.
Suppliers Name(FCC): Pegasus Spray Inc
Suppliers Address (FCC): 2265 116th Ave NE, Suite 110, Bellevue, WA 98004, United States
Suppliers Email Address: arthur@pegasusrobotic.com

EU Compliance Statement: Guangzhou Xaircraft Technology CO.,LTD.All Rights Reserved.hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the RED Directive. This equipment must be installed and operated in accordance with provide instructions and the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operation in conjunction with any other antenna or transmitter.End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

"Hereby, ***[Guangzhou Xaircraft Technology CO.,LTD.]***, declares that this ***[XAG R100 2025 Agricultural Rover RevoSpray]*** is in compliance with the essential requirements and other relevant provisions of 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
www.xa.com/en/service/downloads"

Brand name / model number*：*3WDFZ-120AH1
Suppliers Name(EU)*：*NIK ELECTRONICS LTD
Suppliers Address (EU)*：*Sofia, 11B Brussels Blvd., fl.13
Suppliers phone number and / or internet contact information*：*00359899952228

사용자 안내문

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서사용하는 경우 전파간섭의 우려가 있습니다.

NBTC statement

1.Marking for technical standard conformity.

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามมาตรฐานหรือข้อก าหนดทางเทคนิคของ กสทช.

2.Marking regarding safety to human health.

เครื่องวิทยุคมนาคมนี้มีระดับการแผ่ คลื่นแม่เหล็กไฟฟ้ าสอดคล้ องตามมาตรฐานความปลอดภัยต่อสุ ขภาพของมนุษย์จากการใช้ เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่ งชาติประกาศก าหนด.

3. Marking regarding Regulation for selling radio communication equipment as per radio communication act B.E.2498 (Mandatory).



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XAG ADVANCING AGRICULTURE

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