Hydra Arm Mini Parameter Setting and Various Functions

Button Name	Function	Operation Process
Frontal Horizontal Setting Button	Adjust the Mini Arm to be horizontally aligned to the front direction	Set the front direction as needed
Pan Limit Setting	Define the operational range of the Pan axis.	First, set the left point (Point A), then set the right point (Point B). If the position limiting red line is not displayed, it means the horizontal position limiting is disabled.
Tilt Limit Setting	Define the operational range of the Tilt axis	First, set the high point (Point A), then set the low point (Point B). Pay attention to the low point to prevent the device from touching the ground.
Left-Right Control Setting	Configure the control gesture for left and right movement	During the setup, perform slow tests to prevent incorrect gesture settings that could lead to accidents.
Direction Setting	Define the arm's rotation direction, Set the Mini Arm's direction of rotation	During configuration, test slowly to avoid incorrect direction settings that might result in unintended operations.
Pro Mode and Normal Mode	In Pro Mode, you can only control the arm. In Normal Mode, the gimbal can also be controlled.	When in Normal Mode, first test control of the arm and then proceed to test gimbal control.
Load Setting	Coming Soon	
Stabilization Setting	Enhances stabilization	It's turned off by default and should be activated by the user as required.
Factory Reset	Revert to factory settings	A password is needed to initiate the factory reset.
Joystick Calibration	Press this if you notice the Mini Arm drifting.	When calibrating, ensure hands are off the joystick, letting it rest in its central position.

Button Name	Function	Operation Process
Gyro Calibration	Align the Tilt axis of the Mini Arm horizontally.	If the Mini Arm appears level but the on-screen Tilt indicator is off, calibrate. Ensure the Mini Arm remains visually horizontal during the process.
Language Switch	Switch between Chinese and English.	
Pan UI Calibration	Correct the mismatch between the Pan indicator and the Mini Arm.	Hold down the record button, then select Pan UI Calibration to align the Mini Arm's horizontal direction with the indicator.
Tilt UI Calibration	Correct the mismatch between the Tilt indicator and the Mini Arm.	Hold down the record button, then select Tilt UI Calibration to align the Mini Arm's vertical direction with the indicator.
Upgrade	Update the Remote's Firmware	When a new firmware is available, connect the remote to a computer using a TYPE-C cable. Transfer the firmware to the remote and power it on to initiate the upgrade.
Wheel Calibration	Calibrate for Head Drift	When the head axis managed by the wheel starts to drift, you can proceed with the wheel calibration.
EZ Mode	Connect to Heads	

*If you have any questions, please contact us via **tilta.com**.

www.tilta.com
1901 W Magnolia Blvd, Burbank, CA 91506

Hydra Arm Mini Comprehensive Troubleshooting Guide

Issue	Instruction
Remote signal, motor, and control icons appear functional, yet the Mini Arm remains unresponsive.	Ensure that the bottom shell button is not inadvertently pressed.
After powering on, the Mini Arm is restricted to movement in just one direction.	In regular operation conditions, press the bottom shell button. Manually align the Mini Arm to face directly forward and ensure it's level. Once you shut down and restart, it should operate normally.
After startup, the Mini Arm behaves erratically.	Immediately activate the emergency stop button. Then, proceed with the joystick calibration procedure. Ensure both hands are OFF the joystick during this process.
Mini Arm malfunctions when attempting control after startup.	The proper startup procedure for the Mini Arm may not be followed properly. The left-right control, forward-reverse settings, and your manual operations aren't synchronized or calibrated.
Difference between the emergency stop button and the pause knob	The emergency stop button is recommended when there's uncertainty about controlling the Mini Arm. Activating this will lock the Tilt function, but allow the Pan to move freely. Furthermore, if the Mini Arm isn't expected to be in use for a prolonged period, pressing the emergency stop button will shut off power to the motor, conserving battery life. Conversely, for short intervals without Mini Arm usage, it's advisable to use the pause knob.
After powering on, there's no display on the screen and the indicator light on the bottom shell is blinking.	This suggests that a cable may have come loose. Kindly turn off the device and inspect the connections.

Issue	Instruction
After turning on, the Tilt axis grazes the ground during initial testing due to set limits.	Always ensure that the limits are set slowly and carefully. If the Tilt axis happens to touch the ground, press the button on the bottom shell while in control mode, manually elevate the Mini Arm, and restart. It should then operate as expected.
Vertical jitter when the Tilt axis stops.	This suggests that the titanium ruler dampers might not be optimally adjusted.
Horizontal wobbling when the Pan axis stops.	This suggests that the rotary dampers might not be optimally adjusted.
Vertical shaking is observed in the footage.	This suggests that the primary damping settings are not appropriately calibrated. Fine-tune the synchronization between the shock absorbing head and the gimbal head.
Horizontal shaking is observed in the footage.	This suggests that there's suboptimal synchronization between the gimbal head and the shock absorbing head.
Signal is functional, yet no change in motor icons after engaging emergency stop.	This could be due to a disconnected motor drive or the main switch control line being unplugged.
Universal Troubleshooting Method	While in control mode, press the bottom shell button and manually adjust the Mini Arm to a visually horizontal tilt position. Navigate to the gyro calibration in the sub-menu, then turn off and restart. This general approach should address a majority of typical problems.
When the control arm swivels side to side, there's a distinct jolt upon starting and stopping. The belt appears to be too loose.	Ensure even adjustment on both sides when tightening the belt, and always prioritize safety while making adjustments.
When filming, there's a seesaw-like shake from side to side in the frame. This may be due to an overload, the damping plate being fully compressed, or the gimbal needing adjustment.	Replace with a heavy-duty damper plate (steel wire damper). Ensure the lateral damping adjustment isn't too aggressive, and coordinate with the gimbal's lateral damping settings.
Turret horizontal assembly, the function of the 4Pin port located between the power socket and the control cable socket.	Electric suction cup interface; it's used in conjunction with the optional electric suction cup accessory that can be purchased.

Issue	Instruction
When the Tilt axis isn't installed on the single Pan axis, the remote doesn't respond and the light on the base flashes.	The turret needs to be fully assembled before use as a safety precaution. If any irregularities are detected in the turret's wiring, the system will automatically enter a protective mode.
Problems with upgrading the remote controller on a MAC system.	Do not use a Type-C to Type-C data cable because it doesn't support the required protocol. The computer side should have a standard USB port.
Belt misalignment issue.	Please contact customer service to request a belt retaining ring.
Shock absorber head's left-right damping is leaking oil.	Check if the left-right damping has any sense of jamming. If not, replace it with a new rotary damping bracket.

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