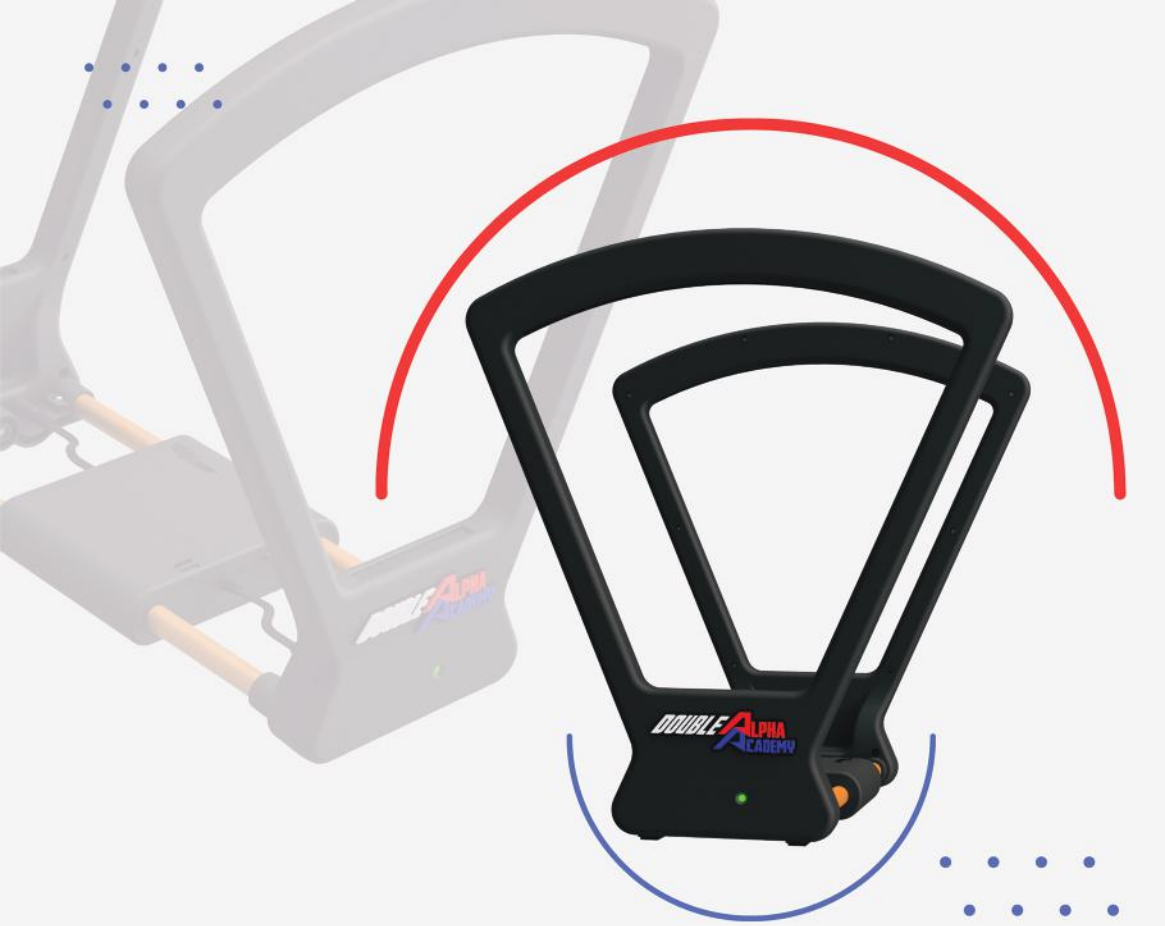

ARC CHRONO

USER MANUAL

MODEL: 1224

DOUBLE ALPHA ACADEMY

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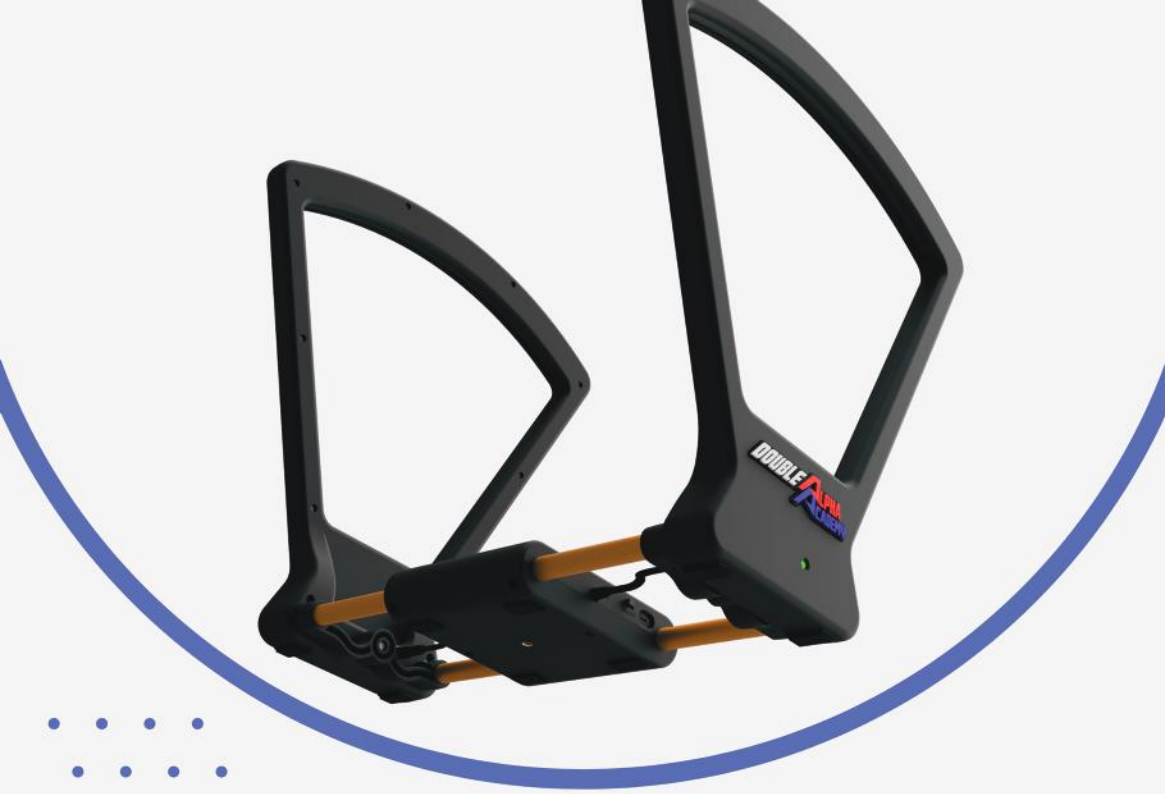

INTRODUCTION

Welcome to the **DAA ARC Chronograph**, a cutting-edge infrared-based chronograph designed for precision shooting sports. This manual provides detailed instructions on setting up, operating, and maintaining your device to ensure optimal performance.

The ARC Chronograph utilizes high-frequency modulated infrared (IR) LED strips for precise velocity measurement of projectiles under any lighting condition, whether indoors, outdoors, in sunlight, fluorescent lighting, or complete darkness.

To conserve power, the IR LED arcs automatically turn off after 30 seconds of inactivity. However, this delay can easily be adjusted within the app to suit your needs. If the arcs power off, you can quickly reactivate them through the app's interface, where your velocity readings are also displayed. This ensures smooth, uninterrupted operation during your sessions.

SAFETY

FIREARM

- Always ensure firearms are unloaded when setting up or operating the chronograph.
- Never point a firearm at anything you do not intend to shoot.
- Use the Chronographs only in Shooting Ranges legally approved for your caliber.

OPERATIONAL

- Shoot slowly and deliberately, aiming each shot through the center of the Arc windows.
- Make sure the Chronographs is well supported on a flat table, or mounted to a sturdy tripod.
- Allow a distance of 1.5-2 meters between your muzzle and the Chronograph.
- Ensure the shooting area is clear of obstructions and follow all range safety protocols.

PACKAGE CONTENTS

- **DAA ARC Chronograph** Main Unit.
- Two Infra-red Arcs.
- USB-C power cable and dual-voltage charger.
- Storage bag.
- Quick user guide.

KEY SPECIFICATIONS

- **Velocity Range:** 10-10,000 feet per second
- **Powered by:** 4x AA Batteries or powered via USB-C connector.
- **Connectivity:** BT
- **Size (fully assembled):** 46cm x 45cm x 41cm
- **Weight:** 1.65 kg
- **Operating Temperature:** 0°C to 50°C

SETUP INSTRUCTIONS

BATTERY INSTALLATION

1. Open the battery compartment on the top of the Main Unit.
2. Install 4 AA batteries, ensuring correct polarity.
3. Close the compartment lid securely.

INSTALLING THE ARCS

1. Slide the arcs onto the designated orange rods. Make sure to seat them all the way in.
2. Plug in the cables to both arcs.
3. Ensure the arcs are fully seated onto the rods, with the plastic bridge flush against the arcs.

Note: The arcs are held in place by magnets, so there is no risk of them sliding off. But handle the assembled unit gently and avoid knocking or dropping it.

SETTING-UP THE CHRONOGRAPH

1. Place the chronograph downrange, either on a sturdy table-top or mounted to a tripod using the threaded mounting-point on the bottom of the device.
2. Ensure the unit is at shooting height and both stable and level.
3. You can shoot through the arc in either direction. We suggest positioning it with the on/off switch facing you.

OPERATING INSTRUCTIONS

TURNING ON/OFF

- **Power On:** Slide the power switch on the side of the Main Unit to "ON." A green light will illuminate on the top of the Main Unit.
- A red light will appear on the front face of each Arc. This indicates that the Arc is connected – but that the IR LEDs in the Arc are OFF. When you turn them ON to shoot, using the app, the LED on the Arcs turns green. When the Arc times-out (goes to sleep), the LED turns red.
- **Power Off:** Slide the switch back to "OFF" to shut off.

USING THE DAA ARC CHRONO APP

The **DAA ARC Chronograph** can only be operated via the **ARC Chrono App**, which is available for both Android and iOS. The app provides enhanced control and data management, serving as the main interface for using the chronograph.

Scan below to download the app (iOS/Android):

APP OVERVIEW

The **ARC Chrono App** offers a user-friendly interface with a minimalist design that emphasizes functionality. The app's primary functions include: running the chronograph, creating, viewing and exporting logs, managing user settings and configuring the time-out delay of the infra-red Arcs.

CONNECTING

1. **Bluetooth Connection:** Ensure Bluetooth is enabled on your mobile device.
2. **Turn on the ARC Chronograph:** The device will enter pairing mode.
3. **Open the ARC Chrono App:** Click the "Pair Chrono" button and the app will detect the ARC Chronos available near you. Tap the Chrono thumbnail to pair.

APP KEY FEATURES

- **Bluetooth Pairing for Remote Operation:** Easily connect to the chronograph via Bluetooth for remote control and data monitoring.
- **Shooter Profiles:** Create multiple users to store settings for each. This is useful for personal use or shared chronographs in clubs and groups.
- **Real-Time Data Display:** View shot by shot data, as well as shot by shot updated averages for each string. Available information includes Min and Max velocities, average speed, velocity spread and standard deviation. Power factor and energy info is available (provided you enter projectile weight).
- **String Load Specifications:** Enter load data for each string, such as powder weight, bullet weight, gun ID, so you can easily review and analyze the results later.
- **String Recording:** Save and review shot strings. Each string includes all individual shot velocities, averages and load data.
- **Exporting Data:** Strings can be exported from the app and shared.
- **Weather Data:** Use your phone's Geo Location to include the temperature and barometric pressure to your String's data. Can also be entered manually.
- **Settings Customization:** Select Units of Measurement (velocity and energy), adjust IR Arc sleep delay, and choose to auto or manual environmental data.

VIEWING AND MANAGING DATA

- Open the **Logs** tab in the app to scroll through recorded Strings and individual shot velocities.
- Review the logs in the app or export for external review and sharing.

CHRONOGRAPH WORKFLOW

1. Create user (First-Time Use)
   - Enter the shooter's name to create a user profile.
2. Select your units of measurements
   - Connect to the chronograph via the app.
   - Select the units of measurement and shot parameters.
3. Position and align
   - Position yourself 1.5–2 meters from the chronograph.
   - Activate the IR Arcs by pressing "TAP TO SHOOT" in the app. A green light on the front of the Chronograph confirms the Arcs are active.
     - Note: The IR Arcs will remain ON until no shots are detected for the length of time set in the timeout settings (default is 30 sec). This timeout duration can be customized in the app settings.
4. Shoot and register velocity
   - Aim to shoot through the centre of the two arcs:
   - Fire your shots and view the data in the String Log window.
   - Use the String Log to insert comments on or remove shots from the string, if needed.
   - To end or start a new string, click either End String or New String.
5. End Session
   - When finished testing, turn off the device using the switch on the chronograph.

TROUBLESHOOTING

NO LIGHT ON THE FRONT OF THE ARC

- Check batteries.
- Ensure the Main Unit is turned on.
- Check the plug to the Arc is well seated.

TAP TO SHOOT DOES NOT WORK

- Ensure the cables are properly connected to the Arcs.

ARCS TURNING OFF TOO QUICKLY

- Increase the time-out delay under Settings->Device (create a user in order to change and save device settings)
- Batteries may need replacement.

MAINTENANCE AND CARE

- The ARC Chrono is not waterproof and must not be used in the rain.
- Avoid contact with harsh chemicals.
- Store the chronograph in a cool, dry place. Remove the batteries if not expecting to use for extended periods to prevent leakage or corrosion.
- If used in dusty conditions, wipe down to clean the diffuser at the top of the Arc and the transparent window at its base.

WARRANTY

The DAA ARC Chronograph is covered by a worldwide 1-year limited warranty, protecting against defects in materials and workmanship. To make a claim, contact our support team with proof of purchase.

FCC 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. Any 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. To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum 20cm distance between the radiator your body: Use only the supplied antenna.

FCC - FRN - 0036430478

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