Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 <u>http://www.rheintech.com</u> Client: FlightScope (Pty) Ltd Model: X2 ELITE Standards: FCC 15.245/IC RSS-210 FCC/IC ID: QXP-HP2441/4612A-HP244 Report #: 2014207

# Appendix K: Manual

Please refer to the following pages.

# FlightScope<sup>®</sup> X2 Elite **User Guide**



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# Hardware Setup - Position and Alignment



### **STEPS**

- 1. Choose your tee position
- 2. Select your target line (tree, flag, or other marker)
- 3. Place the FlightScope behind the tee on the target line.
- 4. Rotate the FlightScope so that its face points along the target line

Recommended distance behind tee: 8 ft. to 14 ft. (2.4 to 4.2 m)

Sensor Roll range is ±0.5°. Tilt range is 9.5° to 11°. Adjust floor or feet if needed.

FCC Statement: Changes or modifications not expressly approved by FlightScope (Ptv) Ltd could void the user's authority to operate the equipment. 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 an office or 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 other electronic equipment, which can be determined by turning this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Increase the separation between the equipment causing and experiencing the interference. Install a radio frequency shield between the equipment causing and experiencing the interference. Consult your dealer for help. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

IC Statement: This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Déclaration IC: Cet appareil est conforme au CNR-310 d'Industrie Canada. Son exploitation est autorisée aux deux conditions suiv-antes : (1) l'appareil ne doit pas produire de brouillage préjudiciable, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est suscepti-ble d'en compromettre le fonctionnement.

#### **Motorized Feet**

FlightScope X2 Elite's motorized feet will automatically adjust the tilt and roll angles to compensate for any uneven surfaces after switching on, and during operation.

#### Environment

- Use where the floor or ground is reasonably level
- Ensure that there are no obstructions in front of the FlightScope sensor
- Fluorescent lights and certain electrical equipment can interfere with measurements. Switch interfering lights off, or install a wire mesh screen in light diffusers or over interfering machines.

### **Battery Charging**

- Recharge your batteries before an important session. The battery requires approx. 7-8 hours to fully charge.
- To charge: Connect the power supply unit to mains power. While charging, the Charging LED (amber) will flash on and off at an interval of approximately 1 Sec
- When the battery is fully charged, the Charging LED will remain on.



# **The Handle**

The handle can be used for carrying, but is also the rear support. It is locked in both UP and DOWN positions by spring-loaded pins.

#### Putting the Handle Down

Slide both the thumb sliders on the back of the unit inwards, and at the same time pull the handle backwards. Swivel gently - do not force. The handle will "lock" in the fully down position.

#### Putting the Handle Up

Slide both the thumb sliders on the rear of the unit inwards, and at the same time move the handle UP. Swivel gently – do not force. It handle will "lock" in the upright stowed position.

# Connecting Sensor with Ethernet Cable (PC operation)

- Plug the Cable into both the FlightScope and Computer
- Optional plug in the power adapter
- Press the ON button and release
- Run the software program it will connect automatically to the FlightScope, otherwise run the Setup Wizard, select "Refresh", select the FlightScope and "Open"



# Setting up a Wi-Fi connection with a PC

# First time use

- 1. Note the X2's serial number e.g. "X2E-00179".
- 2. Switch the FlightScope on with no cable connected.
- 3. On the PC, set up a Wireless Network, e.g. right-click the Wi-Fi icon on the toolbar, Scan for available networks and Connect to the displayed FlightScope X2E-##### unit
- 4. The FlightScope Wi-Fi requires a password. These are the same 9 characters as the X2 serial number e.g. X2E-00179. Use a capital "X" and include the dash (-) character.

Once the connection is established, the FlightScope program will display a "Connected" status, the system is now ready to be used.

# Each Time Thereafter

If the PC has been connected to the X2E by wireless network before, it will automatically connect to the X2 when both are switched on.

# **Application Features**

- Measure and compare clubs, balls, and player performance
- Club comparison, Ball comparison, Player comparison, Chipping training, Swing training, Play only modes
- Measured golf shot results:
  - ball speed, spin, distance, trajectory, smash factor, grouping 0 club speed, attack angle, club path, swing plane
- Load and review historic session data
- Upload session data to MyFlightScope.com for later review, comparison with • friends and others, and further online services

# Load History

**Review Historic Data** 

- Historic Data, is data saved from previous Sessions
- Go to Main Menu, select Player's name, Select Load History
- Select the file (name contains date and time), and Open Click Resume to list the loaded details.
- Navigate between screens, shots and clubs as needed



# Publishing results to e-mail or printer

Press the Publishing Icon to generate a report either to printer, PDF file, or to an email address. Report options are:

- Summary
- Screens
- Detailed

# Setting up Wi-Fi connection with Tablet or Smartphone

# First time use

all

- Note the sensor serial number (example: X2E-00179).
  - With no cable connected, follow steps 1-6 below:
  - 1. Select the Settings icon
  - 2. Select the Wi-Fi function. Set Wi-Fi to ON if OFF
  - 3. Select your FlightScope serial number, e.g. X2E-00179 from the 'Choose a Network' list.
  - 4. Enter your Password: These are the same 9 characters as the X2 serial number e.g. X2E-00179. Use a capital "X" and include the dash (-) character.
  - Press Join on the keyboard to be connected. 5.
  - After connecting to the network, scroll to the bottom of the screen and 6. turn 'Ask to Join Networks' Off.

# **Each Time Thereafter**

Place the sensor in position and switch ON. Switch ON your smartphone or tablet, and continue to use the software. The previously used Wi-Fi set-up will be used automatically.

# Software Screens

- Shot plot in 3D
- Grouping
- Club analysis
- Ball trajectory
- Dashboard
- Tables of results

The Screen Map icon allows easy navigation between screens:

# Indoor & Outdoor measurement

# Indoor measurements

- 1. Select 'Indoor' mode.
- 2. Make sure ball flight is at least 13 ft. (4 meters).
- 3. Mark the ball with a single metal disk for spin measurement. (See figure on right)
- 4. Tee ball up with metal disk facing toward the target.

# **Outdoor measurements**

Select 'Outdoor' mode.

# Long Indoor measurements

If your ball flight is restricted but is still 40 yards or more, select "Long Indoor' mode.

# **Rear Panel LED Status Display (Normal States)**



# Set up a Session

- Enter new Player name or look up existing Player name
- Choose the mode (Club/Player/Ball)
- Enter the Clubs (or Players, or Balls) to compare
- Advanced Tab allows detailed choice of Clubs or Balls
- Continue to start

Hit shots (minimum 4-6 per club/player/ball for a good sample statistic). Move to Next club/player/ball



# Visit www.flightscope.com/support

Call FlightScope Customer Support at: +1 407 - 412 - 9400 +44 203 - 239 - 4186

Email us at <a href="mailto:support@flightscope.com">support@flightscope.com</a>

- USA EUROPE