

Wireless communication systems for Lacrosse Referees



VOKKERO™, THE BEST OF TECHNOLOGY

▶ As the authorities on fair play and rule observance, Lacrosse referees and umpires can leave nothing to chance. To reduce the risk of errors and ensure the correct calls are made, it is **essential that they react in a quick and concerted manner**.

▶ It is in this context that ADEUNIS RF developed **Vokkero™**, a wireless communication system that permits **referees and line judges to stay in continuous contact**, with **excellent sound quality** even in the most noisy environments.

▶ The VOKKERO™ system was tested by **US Lacrosse at the Women's College Club Championship** in Arizona. The officiating teams were quite impressed by the contribution that the VOKKERO™ system made to the game management. In the words of one of the tournament officials: "I enjoyed the opportunity to use the headset for the game. We were able **to communicate so easy & quickly**. I did like the ability to hear what we were saying. Great to be able **to verbally communicate while play is in progress**. Great for unusual situations. I can see it being **a neat asset for officiating crews**."

▶ The Vokkero™ system is overwhelmingly supported by the major team sports federations (CAF, AFC, CONCACAF, EHF, IHF, ...). It has been used during prestigious events such as the rugby World Cup in 2007, the World Handball Championships in 2009, and the football World Cup in 2010...

ADVANTAGES OF THE VOKKERO™ SYSTEM

- ▶ **Continuous contact** between referees.
- ▶ **From 2 to 6 users:** suited to different refereeing configurations.
- ▶ **Hands-free system:** instant speaking with nothing to press.
- ▶ **Patented noise filter:** voice recognition and elimination of all extraneous noises (shouting and other crowd noise).
- ▶ **Secure communication:** digital encryption permitting totally private exchanges.
- ▶ **Multi-channel:** several systems can be used on the same site.
- ▶ **Convenient size, light and rugged** (IP54 norm).
- ▶ **"Speaker mode" function:** option of making public announcements & commenting on decisions affecting the game.



LACROSSE
OFFICIATING

SOCCER
FIELD HOCKEY

FOOTBALL
WATER POLO

ICE HOCKEY
BASKETBALL

POLO
BASKETBALL

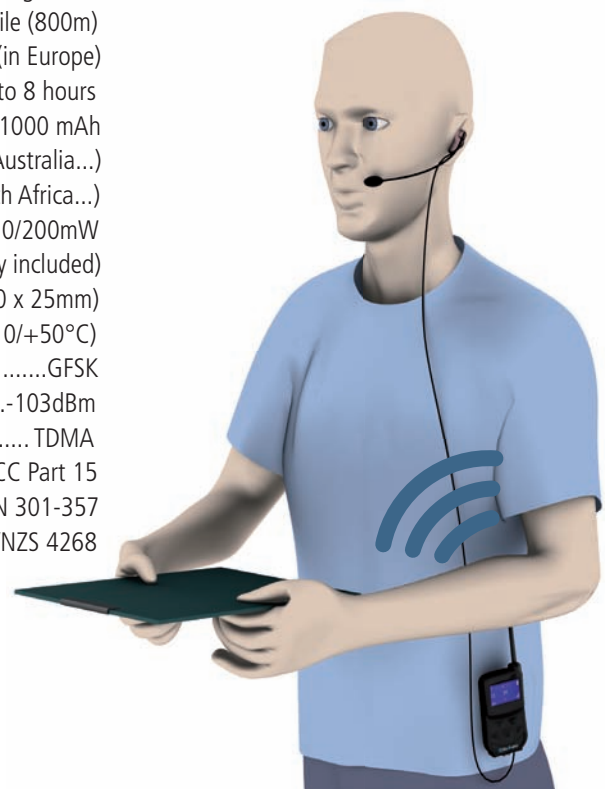
VOKKERO™

Wireless communication systems for top level sports referees



TECHNICAL DETAILS

Number of users	2 to 6 in full duplex mode + an unlimited number in listening mode
Range	Up to 1/2 mile (800m)
Channels	FHSS (US, Canada) - 3 (in Europe)
Battery life	Up to 8 hours
Battery	Rechargeable Li-Polymer 3.7V 1000 mAh
Frequencies	902-928 MHz (USA, Canada, Australia...)
.....	863-870MHz (Europe, South Africa...)
Power	10/200mW
Weight	5.3 oz - 150g (battery included)
Dimensions	4.7" x 2.4" x 0.8" (120 x 60 x 25mm)
T° range	14/122°F (-10/+50°C)
Modulation	GFSK
Sensitivity	-103dBm
Technology.....	TDMA
Norms	USA: FCC Part 15
.....	Europe: EN 300-220 / EN 301-357
.....	AS/NZS 4268



PRODUCTS & ACCESSORIES

Wireless communication system

VOKKER Audio transceiver

Headsets

- KEN 010** Generic micro-earphones
- KEN 020** Generic micro-earphone with on/off switch
- MAE 010** Professional micro-earphone audio pro single ear
- PHO 010** Professional micro-earphone "custom"

Charger, battery & push-to-talk button

- BCH 030** 3 battery charger
- BAT 010** Battery
- PTT 010** Push-to-Talk button

Equipment

- SOC 010** Carry bag
- ABD 010** Armband
- BEL 010** Belt
- HAR 010** Harness

