



Coaches' Communications: Today and Tomorrow

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Introduction

With each new season, the demanding wireless environment of a football stadium on game day introduces new challenges for wireless manufacturers and users. Whether on the sidelines, up in the press box, or on the field, the need for reliable communications far exceeds most participants' awareness. The primary users include broadcasters, safety and medical personnel, game operations, referees, and, of course, football coaches. CoachComm, the leading manufacturer for professional and coaches' communications, continues to pave the way by providing the most advanced, reliable, and secure wireless communications for as many users as possible.

State of Wireless Frequencies

Today, 93% of FBS programs use 900 MHz wireless communications technology developed by CoachComm. Given this, and CoachComm's efforts to educate conferences on the limitations of frequency band options each year, conferences and schools must start protecting the 900 MHz frequency band from interference on game day. Past trends in frequency allocation prove it is imperative that schools and conferences alike coordinate and prioritize users and frequencies for the game day environment. Prioritizing coaches' communications helps ensure they stay uninterrupted on game day.

Over the last decade, 2.4 GHz ISM and UHF frequency options have been forced to become secondary and tertiary options, respectively. For a number of years, the 2.4 GHz ISM band (2400–2483 MHz) successfully served as the primary option for coaches' communications. However, the "fan experience" movement and the expansion of stadium Wi-Fi systems quickly led to CoachComm's pioneering the aforementioned 900 MHz (902–928 MHz) products as an ancillary option on game day. Similarly, the outdated UHF band (482–698 MHz*) has become overly congested and unreliable on game day, thanks in part to multiple government auctions selling large portions of the band for tens of billions of dollars. This trend of frequency reduction and congestion will continue to be a pressing issue for all users as regulators continue to accommodate the growing corporate demand for more frequency bandwidth.

**482–698 MHz refers to portion of UHF band used by BTR-1/TR-1 intercom systems used in past coaches' communications systems.*

Demand for More Users

The sidelines have changed over the last 25 years. In 1991, the average sideline consisted of 8 coaches wearing a headset on a wired system. In 2016, that average doubled to 16 on a wireless system. At some schools, the number can go as high as 24—all wireless! And the sidelines don't stop with coaches—there are more equipment managers, more doctors, more trainers, and more players, too. These days, the need to communicate better, faster, and more efficiently to anyone and everyone is a big part of a successful program.

X-System™, the latest innovation in coaches' communications from CoachComm, can support the high number of coaches and additional wireless users required on game day. It enables an entire football program to operate seamlessly (or separately) on the same, unified system with no additional need for frequency coordination.

Future Features and Workflows

Traditional coaches' communication systems serve only one purpose—being a headset system. Advancements in radios and technology are opening the door to new opportunities for the coaching industry. One example is CoachComm's X-System, which is much more than a communication tool. The system offers a variety of new features and workflows aimed at improving a coach's ability to better prepare his staff and team from week-to-week. Below are just a few examples of how CoachComm's X-System could potentially use technology to enhance the coaching industry:

Player Communications

The use of player communications has already made its way to college football practice fields. Not *if*, but *when* it is approved for use in games, CoachComm's X-System will deploy its own brand of player communications with no additional frequency coordination. For the purposes of practice, the system will support an entire team of in-helmet receivers. Player groupings can be created from the system's user interface, X-Ware, enabling position coaches to have direct, isolated communication to each of their respective groups.

Two-Way Radio Interconnectivity

Two-way radios are widely used on game day as a means of communications for non-coaching personnel. For some individuals, the need to both monitor coaches' communications and communicate via a two-way radio with other game day personnel can be cumbersome. Because of X-System's high user capacity, those individuals could potentially monitor coaches and communicate separately with game day personnel all through an X-System Radio Pack.

Fiber Connectivity

The use of fiber-optic connections with X-System will have a positive impact on the world of coaches' communications. Fiber will ensure a more secure, digital connection than traditional copper wiring from field to press box. Unwanted crackles, hums, and noises commonly found in copper stadium wiring will become a thing of the past. Fiber-optic cabling from field to press box is an important consideration when performing any stadium upgrades or new construction.

Conclusion

With 93% of FBS programs using 900 MHz technology developed by CoachComm, tomorrow's game day success depends on the protection of coaches' communications, and on innovative products such as CoachComm's X-System. By using state-of-the-art audio, robust wireless capabilities, and enhanced workflow options, X-System is the future of coaches' communications for seasons to come.

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For more information on CoachComm or the X-System, contact us at 1.800.749.2761 or visit us at: www.coachcomm.com.

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