

# Quantum5X

Quantum5X (Q5X) is a privately owned corporation that specializes in wireless solutions for challenging audio problems in sports, broadcast and entertainment.

<b>Headquarters</b>	30 Adelaide Street North, London, Ontario, N6B 3N5
<b>Year Established</b>	2002
<b>NAICS</b>	334220 - Radio and television broadcasting and wireless communications equipment manufacturing
<b>Employees</b>	20
<b>Major Expansions</b>	N/A
<b>Exports</b>	US
<b>Parent Company</b>	N/A
<b>Other Locations</b>	N/A

Splash, splish splash, splash... the sound of the oars slicing the water will be crystal clear, even if you are watching the 2016 Summer Olympics from the comfort of your couch instead of in sunny Rio. And it will be thanks to Quantum5X, wireless microphone transmitter manufacturer nestled right in the heart of London, Ontario. They may be local, but they are a global game changer, in more ways than one.

Q5X is in the business of connecting audiences with their stars. They specialize in wireless transmitters, receivers and remote controlled audio systems for sports, broadcasting and entertainment. Players or performers wear the tiny transmitters on their body, and transmit the sounds of the game or performance real time to their audience. In the case of the 2016 Olympic rowing competition, the transmitters will be installed on buoys marking the racing lanes.

Fans want to get closer to the stars, and players want to develop the special rapport that means better media and better pay. Having such an intimate, real time connection means higher entertainment value, a win-win game.

In the case of hockey, Q5X makes professional sports more accessible. Referees can turn on their microphone and announce the penalty straight to their spectators both live in the arena and televised, especially useful when the majority of spectators do not understand the hand signals.

Another major client is the NBA. As the only makers of soft, rubber-enveloped transmitters, Q5X is basketball courts ahead of the competition. When players cannot be as padded as hockey players, it's essential that they can fall safely while wearing the transmitters.

Q5X has also ventured into film production. Their equipment has been used in various movies and shows such as Pacific Rim, RoboCop, and a TV series about figure skaters teaching hockey players how to dance on ice. Canada, eh?

When it's time for some fun, Q5X dives into tap dancing. Before adopting Q5X wireless transmitters, the Rockettes of NYC's Radio City Music Hall danced to a soundtrack of prerecorded taps. With their commitment to live shows, Radio City decided to install transmitters in the heels of the tap dancers shoes.

“300 transmitters and 300 shoes later, Q5X and Radio City Music Hall boast the worlds’ largest installation of wireless transmitters,” says Paul Johnson. For other theatre productions, Q5X transmitters can also be worn under a wig or in the actor’s clothing.

London-raised Johnson is the CEO of Q5X. A Harvard MBA and McKinsey Consulting graduate with a mechanical engineering background from the University of Waterloo, Johnson runs two other companies besides Q5X. We hear that he sleeps, too.

Q5X was originally founded in 2002 by a group of local inventors through contacts in the entertainment, TV and film industries. They were quickly approached by the NHL for referee microphones, and then by the NBA for the same technology, but remote-controlled.

We're given a tour of their facilities, where almost a thousand transmitters are created a year. In the rapid prototyping lab, we pass by coloured vats full of materials that will be mixed and poured into hot pink molds. There's also a pressure chamber, 3D printer and laser for etching on the bold Q5X logo.

While their Adelaide Street office might appear upbeat and laid back, Johnson's hiring techniques are anything but. He grills candidates with successive technical questions, to discover whether they truly have engineering in the blood. One employee Johnson hired, for example, primarily qualified because of his hobbies – other students in his class would not have stood a chance.

Employees come from London and the surrounding area. When local Spartan Electronics closed several years ago, Q5X was able to employ several of the people, providing them with precious electronics positions in a city with only modest demand.

Many firms make wireless microphones, but Q5X lays claim to the world's smallest broadcast quality transmitter. They give the same high quality performance as the larger, chunkier ones from competitors, but are half as large, cushion cased, fully rechargeable and remote controlled. Although they will always be a niche player, Q5X's agility, responsiveness, creativity and ability to work small volumes will ensure competitiveness in years to come.

While customers like the NHL and NBA have only 30 teams each, they have become flagship clients as Q5X pivots to the burgeoning U.S. college sports market. “We're the only people in the world doing exactly what we do,” says Johnson. “and the market for tiny and rugged transmitters is growing rapidly”

Johnson says they have considered American expansion. While they may locate a distribution facility south,



they would never move production from Canada. “United States and the rest of the world respect Canada’s leadership in radio technology,” Johnson explains.

“From an industry perspective, being Canadian is a huge asset.”