

BLUETOOTH. IT'S BEEN A BIG PART OF POPULAR TECHNOLOGY FOR OVER FIFTEEN YEARS NOW, IN FACT THE FIRST SHIPMENT OF A BLUETOOTH HEADSET BOTH TOOK PLACE IN THE YEAR TWO THOUSAND, BUT WITH THE RECENT RELEASE OF APPLE'S WIRELESS HEADPHONES AND THE ELIMINATION OF THE HEADPHONE JACK IN THEIR NEW IPHONE SEVEN -WE'RE GOING TO TAKE A CLOSER LOOK INTO THE MECHANICS THAT MAKE THIS EVER GROWING MARKET PROSPER. I'M ALEX CROOKSHANKS AND YOU'RE LISTENING TO WORKS.

THERE'S TWO MAJOR COMPONENTS IN THE BLUETOOTH WE USE EVERYDAY - RADIO TRANSMISSIONS AND LONGEVITY. TO BEGIN WITH, THE TECHNOLOGY IS LOW POWER, MEANING THAT IT'S ABLE TO FUNCTION ON LESS ENERGY FOR LONGER. DEVELOPERS TAKE ADVANTAGE OF THIS AS THEY CREATE SMALLER SENSORS THAT RUN OFF TINY COIN CELL BATTERIES FOR EXTENDED AMOUNTS OF TIME. IT'S THESE DEVELOPMENTS THAT HAVE ALLOWED BLUETOOTH RADIO CHIPS TO BE SMALL ENOUGH TO PUT INTO THINGS LIKE EARBUDS.

MORE IMPORTANT THAN THE BATTERIES, HOWEVER, IS THE RADIO CHIPS THEMSELVES. BLUETOOTH FUNCTIONS MUCH LIKE RADIOS, TELEVISION, AND OTHER TRANSMISSION CENTERED TECH. IN FACT, IT EVEN OPERATES ON THE SAME RADIO WAVES AS WIFI. THE MAIN DIFFERENCE IS THAT BLUETOOTH IS ONLY MADE TO COMMUNICATE OVER SHORT DISTANCES OF AROUND 30 FEET.

AND THE WAY THAT YOUR DEVICE IS ABLE TO HOOK UP TO YOUR CAR, OR YOUR HEADPHONES, OR YOUR PRINTER WIRELESSLY IS ACTUALLY PRETTY NIFTY TOO. BASICALLY THERE'S SEVENTY-NINE DIFFERENT BANDS USED BY ALL BLUETOOTH DEVICES -AND THAT INCLUDES EVERYTHING FROM KEYBOARDS TO PACEMAKERS- BUT DON'T WORRY, YOUR OWN DEVICES AREN'T GOING TO INTERFERE WITH SOMEONE'S MEDICAL TECH. IN ORDER TO CONNECT, TWO DEVICES USE A THING CALLED SPREAD-SPECTRUM FREQUENCY HOPPING AND IT ALLOWS THEM TO RANDOMLY SWITCH TO BLUETOOTH FREQUENCIES WHEN OTHERS ARE OCCUPIED. THIS HOPPING PATTERN CAN EVEN BE ADAPTED TO EXCLUDE CERTAIN FREQUENCIES USED BY INTERFERING DEVICES.

THIS IS CONTROLLED BY THE MASTER DEVICE AND THE SO CALLED SLAVES CONNECTED TO IT. PUT ALL OF THESE TOGETHER AND YOU HAVE A CONNECTED NETWORK CALLED A "PICONET" -FINALLY MAKING THE BLUETOOTH WE KNOW AND LOVE TODAY.

BUT WHY DO WE LOVE BLUETOOTH SO MUCH? WE'VE BEEN ASSOCIATING WIRELESS WITH CONVENIENCE SINCE THE VERY FIRST BROADCAST OVER ONE HUNDRED YEARS AGO. AND WHEN TALKING TO USERS OF BLUETOOTH MANY OF THEM HAVE THE SAME THOUGHTS ON THE MATTER

[START INTERVIEWS]

"IT'S WIRELESS, THERE'S NO WIRES. IT CUTS OUT A LOT OF THE HASSLE I FEEL LIKE"

“BECAUSE IT’S FANTASTIC. IT’S CLEAN. YOU HAVE NO WIRES TO DEAL WITH. IT WORKS BETTER THAN WIRES”

“IF YOUR WIRE BREAKS YOU JUST- IT’S JUST GAME OVER. WITH WIRELESS THE POSSIBILITIES ARE ENDLESS”

“I MEAN BLUETOOTH...WIRELESS STUFF IS JUST THE BEST. IT’S OUR FUTURE, MAN”

[END INTERVIEWS]

ACCORDING TO THE ATLANTIC'S INTERVIEW WITH GENEVIEVE BELL OUR LOVE FOR TECHNOLOGY SUCH AS BLUETOOTH IS A HUMAN RESPONSE WE’VE HAD SINCE CHILDHOOD. THAT’S JUST WHY WE CONTINUE ON WITH THIS PODCAST FOR WHJE THIS HAS BEEN ALEX CROOKSHANKS. FOR MORE PODCASTS LIKE WORKS VISIT OUR WEBSITE AT [W-H-J-E.COM](http://W-H-J-E.COM)