## **RadioCom**

## BTR-800 / TR800 wireless intercom



## Competitive Analysis

**Frequency Agility** – The RadioCom BTR-800 wireless intercom system offers users the ultimate in useable frequency agility and spectrum management.

**RadioCom BTR-800** – Offers two 18 MHz operational bands. That's an unprecedented 36 Megahertz of available spectrum, accessible in 25KHz increments for a total of 1440 selectable frequencies

**Vega Q-700** – Offers one 30 MHz band with 1200 available frequency selections.

Easy User Interface with LCD Display on Both Base and Beltpack – With all those frequencies to choose from you'll want a wireless intercom system that lets you get at, and change them easily when you need to.

**RadioCom BTR-800** – Offers an extremely powerful, yet simple to use graphical user interface that easily allows users to change frequencies, change operational parameters, individually program beltpacks separate from the base, scan for clear spectrum and much, much more. Changes of virtually any setting can be made via the push of a couple of buttons.

**Vega Q-700** – Requires a computer for much of its programming. Beltpacks must be connected to the base via a special cable for any change to be made. Frequencies must be calculated from codes using special offset formulas. There is no way to know what frequency a beltpack is operating on just by looking at it. It must be hooked to the base and checked via a mandatory computer.

**Factory Selected Intermodulation Free Groups** – There are many combinations of frequencies that will cause harmful interference due to Intermodulation. You need a system that has compatible frequency schemes calculated for you.

**RadioCom BTR-800** – Offers 24 factory defined preset groups of Intermodulation free frequency sets. You can also store up to 12 sets of your own favorite frequency groups in user definable memory. That means that you have 36 groups of frequencies that are right at your fingertips.

**Vega Q-700** – Offers no preset groups of intermod free frequencies. You left to fend for yourself.

**Enhanced ClearScan Auto frequency Selection** – ClearScan changes everything! With this advanced spectrum scanning and analyzing function you can have a clear set of operational frequencies within minutes regardless of where you are or who else has RF equipment on site.

**RadioCom BTR-800** – YES! The 800 has Enhanced ClearScan so you can find frequencies quickly!

Vega Q-700 – NO. The Vega system has no way of "seeing" what's out there.

Range – One of the biggest factors in choosing a wireless intercom system is operational range. There are many factors that contribute to good range, TX power, use of subcarriers, RX sensitivity, antenna type and others. The key is not to put too much weight in any one specification, but to look at the big picture and most importantly, real results. In an independent side-by-side real world test the RadioCom BTR-800 achieved operational ranges of 1.5 to 2 times greater than the Vega Q-700. Remember, subcarries reduce the effective range of a system by 3 to 6 dB or more. That means you loose precious range on the Vega subcarrier system. The RadioCom BTR-800 does not use subcarriers, has much better TX/RX isolation and just goes farther.

Intelligent Power Control™ (IPC) – Only on the RadioCom BTR-800! This revolutionary technology intelligently monitors how far the beltpack is from the base and automatically reduces the beltpack output power when it is close the base. That means that close beltpacks no longer desense the base receivers of beltpacks that are far away. This is critical for maintaining proper system performance in real world environments. It also saves battery life for extended use!

**RadioCom BTR-800** – YES! The 800 has IPC for better system range and performance and increased batter life.

**Vega Q-700** – NO. No other professional intercom system has IPC.

**Audio Quality** - When you have to listen to intercom all day you want clean, crisp, low noise audio that won't leave you with an aching head. You want the most natural sounding audio you can get so that you can do your job without losing your mind.

**RadioCom BTR-800** – Offers the lowest noise and most natural sounding audio in the industry. There is not a trace of control signals or artifacts to distract you from your job.

**Vega Q-700** – High levels of companding noise and digital control artifacts make listening a chore, especially in long events.

**All Metal Beltpack** – This is the real world, not some showroom floor. Things get dropped and banged and generally abused. You need the rugged dependability of an all metal beltpack. After all, the show must go on!

**RadioCom BTR-800** – Offers the rugged reliability of an all metal, cast magnesium beltpack. That's the incredibly strong, yet light weight material "Mag" wheels are made from. It doesn't get any tougher than that!

Vega Q-700 – Uses a less rugged plastic beltpack. Will it last?

**Detachable Beltpack Antennas** – Antennas get caught in doors and ripped out during scene changes. It happens! No matter how careful your crew is, sooner or later you are going to have to replace your beltpack's antennas.

**RadioCom BTR-800** – The TR-800 beltpack antennas are brutally rugged. They are made from speedometer cable with a virtually indestructible space age over molding. Oh yeah, they're field replaceable with a solid stud type connector for when all else fails.

**Vega Q-700** – The Q-700's beltpack antennas are thin and fragile and most importantly not field replaceable. That's right, you have to send in your "can't live without" beltpack so that the antenna that got ripped off in the middle of the show can be replaced. By the way, what did you do for the rest of that show?

**Individually Programmable Beltpacks** – The ability to change beltpack operational parameters and button functionality is critical. No other system offers the ease and convenience of beltpack programming than the RadioCom BTR-800.

**RadioCom BTR-800** – Virtually all of the operating parameters and button functionality of the TR-800 wireless beltpack can be modified or changed on the fly. Using the 800's Unique LCD based user interface you can change, limit, or lock out what each button does, depending on who will be using it!

**Vega Q-700** – To change any operational parameter or button functionality you MUST connect the beltpack to the base via a special cable and utilize the mandatory computer to make a change.

**Auto-Sensing Headset Connector** – Some headset microphones are dynamic, others are lectret requiring phantom power to run the mic. Dynamic mics have lower output levels and require different gain structures in the mic preamps. In the past it was necessary to find the "hidden" switch and make the change whenever a new type of headset would be used. If you forgot, it just wouldn't work.

**RadioCom BTR-800** – offers a unique and revolutionary new auto-sensing technology that automatically makes the necessary changes to accommodate either Dynamic or lectret mics. Never more will that fateful cry go up just before the curtain, "My headset won't work!!!".

Vega Q-700 – Where was that switch again?

**Full Duplex Talk/Listen Station at the Base** – It is often of the utmost importance to be able to communicate with the wireless beltpacks from the base when you are setting up or troubleshooting. Also, having a full talk/listen station at the base gives you another point of access to the hardwired intercom system without buying another master or user station.

**RadioCom BTR-800** – Offers a complete talk and listen headset station at the base for complete full duplex communication with or without an external hardwired intercom system.

**Vega Q-700** – Offers a monitor only ½" jack. That means that you can not communicate with any of the wireless beltpacks from the base. You can only listen. Tough action.

9/5/2001 Page 3 of 4 Prepared by: Tom Turkington

**Independent Visual signal Indication for Each Beltpack** – This could be critical when things are happening fast in a show. You need to be able to quickly tell the operational status and "who's doing what" for each beltpack. You have to have the right information so that you can get the job done.

**RadioCom BTR-800** – A control freak's dream! The status and "who's talking to who" of each beltpack on a bright clear LCD display that you can see from across the room! No mystical LEDs or unlabeled buttons to deal with, just real time information in a format you can understand.

**Vega Q-700** – The front panel of the Q-700 is crowded and tough to read. It's very difficult to tell what's going on at any given time. There is no LCD display that clearly lists all the information you need in one convenient location. This could cost precious time in an emergency situation.

**Simultaneous 2-wire and 4-wire operation** – In today's ever changing world it is best to keep as many possibilities open as you can. Both 2-wire and 4-wire hardwired intercom systems are prevalent in different industries today. Being able to interface with either is a key.

**RadioCom BTR-800** – Allows easy selection between 2-wire and 4-wire intercom systems. Any combination of 2-wire or 4-wire external intercoms can be used on either of the 800s intercom ports. In the rare case where two different types (both 2 and 4 wire) of intercoms must be used on one intercom port, the Aux In and Aux Out connections make it a breeze.

**Vega Q-700** – Though there have been claims to the contrary, the external intercom ports on the Q-700 do not handle both 2 and 4 wire intercoms simultaneously. This is a nulling nightmare for the Q-700 user and just never quite settles down to be stable.

**Price!** – Let's face it, price is always an issue. No one wants to pay more than they have to for the quality they need. Features, Quality, Performance and Price. They all matter.

**RadioCom BTR-800** – There is no other intercom on planet Earth that gives you the bang for the buck like the BTR-800 system.

BTR-800 Base \$4,395 TR-800 Beltpack \$1,375 BTR-800 4-Pack system \$9,895

**Vega Q-700** – The Vega system is very expensive.

Vega Q-700 4-Pack system \$17,400

Difference \$ 7,505 Less Money for the BTR-800 4-Pack

Availability - Proven Tough and Reliable — Now we get down to the intangibles. There are numerous RadioCom BTR-800 systems in the field with Television Networks, Rental Houses, Touring Productions and many more. The BTR-800 system has been tested under fire in live show environments now for months. Months. It sounds like a short time, but during that period the RadioCom BTR-800 has been put to the test in hundreds of real world applications just like yours. It works. It's tough. And it's living up to the needs of communications professionals everywhere. The Vega Q-700 on the other hand is just starting to emerge. Very few have actually been delivered and used in the field. Only time will tell if it's plastic beltpack and cryptic user interface and less stable RF platform will stand the test.