



This is a article appears in the February 2009 Issue of Sound & Communications Magazine

Modern-Day Auctioneer

Conferencing and IP set stage for innovation in bidding.



Ritchie Bros. Auctioneers, "the world's largest industrial auctioneer," deals in equipment, trucks and other assets used in a number of industries.

It's Showtime! Here we are at an auction day in Medford MN at Ritchie Bros. (RB), the world's largest industrial auctioneers. An eager crowd awaits the parade of dozers, excavators, track hoes, backhoes and other heavy equipment to assemble on the outside ramp. A mammoth multi-paned glass door opens up for full views of each piece of heavy equipment. Fortunately, the crowd is comfortably tier-seated in a climate-controlled building, even though it may be snowy, rainy or hot outside. So, there's just enough of a hint of weather for the spectators to intensify the auction experience. Despite the high noise levels generated by the machinery nearby, the auctioneer introduces the sale and takes charge over a PA that overrides the cacophony.

Credits

Before we launch into the story, we have several sources to acknowledge. Background material was gleaned from the Ritchie Bros. website and company spokespersons at the Vancouver home office. This writer toured the Medford facility and conversed with two assistant project managers. We were able to incorporate viewpoints from many sources into this report, including extensive information from Brian Cook, senior audio designer at Southeastern Sound, Inc., in Nashville, which did the Medford AV install.

Cook is an install veteran of Ritchie Bros. facilities in Nashville TN, Columbus OH, Kansas City MO and Houston TX. He noted that there's AV design uniformity among the facilities for ease of installation and servicing. Credit also goes to Rick Redfern, senior project manager at Southeastern Sound, and Ritchie Bros. overseas consultant Rue Salazar, both of whom help on technical issues.

Live Local, Internet Bidding

We'll explore the AV systems that serve the live auction theater and virtual ramp rooms. But first, here's some insight into the auction experience itself. "When you come to a sale, it's like a carnival," declared Debi Blake, assistant project manager at the new Medford Ritchie Bros. facility. "It's exciting. I find it more 'fairgrounds' than going to antique auction sales. From the territory manager to the salesmen, we call it 'Showtime'."

This Ritchie Bros. Auction House is a 120-acre site about 60 miles south of Minneapolis on interstate 35W. The facility opened for business this month for live on-location and simultaneous online bidding. Paradoxically, back in the heart of downtown Minneapolis, the venerable Minneapolis Grain Exchange live trading went silent in December 2008. The shouts from the floor moved to electronic online trading. This writer's Dad occasionally used to make the trek from northeast South Dakota to the old Grain Exchange. Founded in 1881, this commodity exchange was the first live open pit to go dark in the United States. In direct contrast, Ritchie Bros. auction houses are bustling! Indeed, the excitement of live trading augmented by internet trading is alive and well, and will be a hallmark of the new Medford facility.

The auction building comprises two rooms: the main theater and the smaller virtual ramp room. The theater seats from 500 to 750 people, and is used for live auctions. One main auctioneer and four to five bid catchers work the room. While this local auction is taking place, an internet auction is also happening in real-time. The local audio is fed to Ritchie Bros. headquarters and people throughout the world can bid instantaneously. The internet bid catcher can be heard throughout the system just as the local bid catchers can be heard in the local auction house.

While the auction is taking place on the main floor, there's a VIP room upstairs, which overlooks the bidding action. With its large glass window, the 30'x40' space is akin to a luxury box. We'll detail the AV for all areas in the auction building later.



Representing the style of facility Ritchie Bros. Auctioneers hosts, these locations seat up to 750. The theater is used primarily for live auctions, with one main auctioneer and four to five bid catchers.



Refurbishing

There's also a refurbishing building where water and sand are recycled in the process. Big machines enter this building and are sandblasted and painted in a specified color such as "CAT Yellow" (as in Caterpillar earth-moving equipment). Then that owner's equipment is put up for sale. The service is provided at an extra cost. However, refurbished equipment tends to bring in more money.

Kurt Stadther, an assistant project manager at Medford, described an additional service with an example: "[The customer] buys a scrapper. We'll tear it all apart here and put it in 40-foot shipping containers. We'll do whatever it takes to get it into a shipping container. If they have to cut the frame, they'll cut the frame. Then when it gets to its destination, they'll put it all back together."

Furthermore, Kim Schulz, Ritchie Bros. corporate communications manager at headquarters, noted that the company now provides a shipping service for buyers, as well. Although buyers may have already selected a transportation provider for their equipment, if they haven't, then RB has staff onsite to help customers transport items via uShip. Specifically, "uShip is an online bidding process where a number of different transportation service providers can all vie for the same business. The customer would say, 'I need to ship XY to Z.' At the end of the day, our customers would have the service they need."

Company Overview

Ritchie Bros. didn't start out in the auction business. The company began in 1958 as a small family-run business in British Columbia, Canada, where it sold surplus furniture store inventory. In 2008, Ritchie Bros. celebrated its 50th anniversary (see Ritchie Bros. sidebar, page 42). Online bidding offers the convenience of the internet. According to the Ritchie Bros. website, many people are willing to travel long distances to attend the company's auctions, but bidders who can't make it to the auction site can bid over the internet, live and in real time, using the company's rbauctionBid-Live online bidding services.

A major feature of every Ritchie Bros. auction is that it's unreserved, meaning there are no minimum bids and no reserve prices. And every item is sold to the highest bidder on auction day. Bid-ins and buy backs are also forbidden, which means that only legitimate bidders are able to raise the bid price.

Thus, the knowledge that Ritchie Bros. auctions are fair and transparent is one reason that each auction attracts an average of 1300 bidders from around the world, helping equipment sellers transcend local market conditions and achieve global fair market value for their valuable assets.



Speakers are configured throughout the facility, inside the theater and outside, so equipment operators will know what's going on inside the building and can cue up for their entrance onto the ramp.



Main Theater

Let's highlight the live auction audio system in the main theater. AV equipment is housed in a Lowell rack in the auctioneer's booth. All speakers are Electro-Voice, which are driven by QSC amplifiers. Processing and delay are via a Rane RPM.

In the main theater, there are 10 EV ZX5 speakers configured in two rows and mounted in front of the auction house doors. One speaker is turned 90 degrees and aimed at the auctioneer. "Typically, we put five speakers across the front, and then halfway back we put another row, which are delayed," explained Cook. The ZX5s are driven by three QSC RMX amps.

Outside the building and covering the ramp are four Electro-Voice University ramp horns with compression drivers mounted high above the doors. These allow equipment operators to know what's going on inside the building, so they can cue up and prepare for their entrances onto the ramp.

Back inside, the VIP room overlooking the main theater has four EV C4.2 ceiling speakers. The room also has a computer monitor that shows the internet feed. The outside horns and the VIP room speakers are driven by one QSC ISA amplifier. Rane handles all speaker processing and required delay. Furthermore, the ATI distribution amplifier takes the main house feed and sends each output to the Anchor monitors used by the bid catchers, so it gets the auctioneer's feed.

Bid Catchers

Bid catchers use Shure 515 mics. There are four or five bid catchers on the floor, depending on the length of the room and the number of bidders present. For example, let's say the bid catchers are standing, facing the audience, and the backhoes (or whatever equipment) are at their back on the ramp. Each bid catcher is responsible for the people in the rows nearest him and addresses them via his Anchor monitor to overcome the high ambient equipment noise level.

"When the auctioneer is standing at the counter of his enclosed booth, which has a clear view of the bid catchers and the seated bidders, just to his left are two Anchor monitors," explained Cook. "One monitor gets a feed from the internet, so he can hear that person calling out bids. And on the other monitor next to it, he hears the bid catchers in the main theater. That's how he can hear them announce, 'Number 318 just purchased that'."

There's a Shure audio mixer at the main booth for feeding the live auction to the internet, and a pair of dbx compressors for the internet. For the auction house PA, the main audio mixer is a 16-channel Mackie. The backup mixer is a rackmounted Alesis MM12R. "If the Mackie mixer would die, you'd flip one toggle switch and it automatically would switch all the outputs over to the Alesis mixer, so we don't miss a beat," Cook pointed out. "They might have to adjust the volume to be consistent with the Mackie. What we did is put one toggle switch in with double pole/double throw relays." Rick Redfern, senior project manager at Southeastern Sound, designed the circuit and the relay network.

"We're old school," Cook emphasized. "We do things with relays and diodes. Practically everybody wants to do it with internet protocol and all that stuff. We can make the world go around with a relay. I had a meeting with a consultant and a programmer. They talked about writing code. I said, 'Give me a contact closure. I'll make it happen for a few dollars'."

Now onto the mic'ing. The auctioneer's Shure 515 mic goes through an Aphex 300 voice processor and on its way to the mixers via the Whirlwind splitter. "That's how we get the mics to both mixers. And we love that little [Aphex 300] magic box," he pointed out. There's also an Electro-Voice RE-2 wireless for general announcements and talking to the crowd. In addition, there's a Denon CD player.

Virtual Ramp Room

The virtual ramp room is separated from the much larger main live auction theater-type room by an in-between gathering space and a thick wall. According to Medford's Stadther, this room is for bidding on smaller, "100 lot" items. "We have our own terminology. So '100 lot' means small equipment, especially if a guy is going out of business and he wants to sell the whole lot. The large equipment goes across the ramp [in the big auction room]." Examples of smaller items welcomed in the virtual ramp room are scissor lifts and generators.

Medford's Blake pointed out that the virtual ramp also allows for days when the weather outside is bad. "In years past, there was a sound truck that would literally drive through the yard and auction equipment. But the bidders can go out on the site at any time and 'kick the tires,' if you will, on any of our equipment."

The stadium-style seated room utilizes a suspended Sanyo video projection system. In addition, still photos and audio bidding are fed online via a Telos system to other RB sites for bidding and participation at other RB sales events.

According to Southeastern Sound's Cook, the signal path from internet to projector starts with the data or network drop signal fed to a laptop where the Medford personnel log onto their network. It goes from the laptop output to the Extron VTT that sends it via Cat5 to the Sanyo projector mounted overhead. Although most RB AV installs use overhead screens, recent exceptions are the Medford and Atlanta facilities, where silver paint is applied on sheetrock walls for a screening surface.

Two Different Sources

Karl Werner, vice president of auction operations at Ritchie Bros., explained that the company has a custom-built application where data is accessed from two different sources where the screen presentation is built within minutes of the entire auction. "The images are taken by our staff onsite with a regular digital camera.

Then we have two internal systems. One, called DITIP [digital transfer image protocol], is an application we wrote internally that sizes the pictures. And then it does an FTP [file transfer protocol] transfer up to our head office here to all our servers. Once [the image files] get here, the staff uses a virtual ramp location to grab the equipment descriptions and then build the slide show. The system was custom-built by the Ritchie Bros. IT department. We build a lot of custom applications that are used by our operators.”

Now back to Brian Cook for the accompanying audio side of the virtual ramp room. This “100 lot” room has four SX300 speakers, which are driven by a QSC power amplifier. An Alesis mixer handles the phone audio into Telos, which feeds the internet. “The auctioneers’ microphones are kind of a wild card, with each auctioneer bringing his own personal microphone. It could be the available Shure 515. Most auctioneers carry a mic like a hunter carries his rifle.” Then the mics go through the Whirlwind splitter to the main mixer and then to the internet.

Summing up RB’s use of AV at Ritchie Bros, Karl Werner noted that there are other systems out there being used by other auction houses. “But the way we broadcast live audio, the images, the information and real-time bidding is fairly proprietary to Ritchie Bros. And we feel that ours is right up on top as far as functionality and user-ease.”

Ritchie Bros. Auctioneers

Established in 1958 in Kelowna, British Columbia, Canada, Ritchie Bros. Auctioneers is the world’s largest industrial auctioneer, selling more equipment to onsite and online bidders than any other company in the world. The company has more than 110 locations in 25 countries, including 38 auction sites worldwide, serviced by close to 950 full-time employees.

Ritchie Bros., through unreserved public auctions, sells a broad range of used and unused industrial assets, including equipment, trucks and other assets used in the construction, transportation, agricultural, material handling, mining, forestry, petroleum and marine industries.

In February 2008, Ritchie Bros. conducted the largest auction in company history. The five-day unreserved auction, held at the company’s permanent auction site in Orlando FL, featured almost 6200 lots and generated gross auction proceeds in excess of \$190 million. The auction attracted more than 6000 registered bidders from 71 countries, including all 50 US states and every Canadian province and territory.

For additional information, go to www.rbauction.com.

Southeastern Sound, Inc.

Southeastern Sound, Inc. (SSI), Nashville TN, is an electronics system contractor/integrator offering design, engineering, sales, installation and service. SSI’s team is dedicated to remaining on the cutting edge of technology to provide sound solutions for its customers. The company is committed to leading the industry through innovation and customer satisfaction. It has been a member of NSCA since 1980.

Recently completed projects in Nashville include Frist Center for the Visual Arts and Metro Nashville Main Library.

For additional information, go to www.southeasternsound.com.

Equipment

Main Theater

- 1 Alesis MM12R rack mounted back-up mixer
- 6 Anchor AN-1000X powered monitor speakers
- 1 Aphex 230 master voice channel processor
- 1 ATI 208 distribution amp
- 4 Atlas Sound D11 BE flanges, PB11XEB booms for bid catcher mic
- 7 Audio-Technica AT 8314-15 flex mic cables
- Conquest Sound cable mounts, stereo plugs
- 2 dbx 1066 dual compressor limiter gates
- 1 Denon DCM-280 CD player

- 1 Electro-Voice RE2-N7 wireless handheld system
- 1 Electro-Voice ND 767 A general-purpose test mic
- 2 Electro-Voice C4.2 ceiling speakers
- 10 Electro-Voice ZX5 White PI weather-resistant arena front fold back speakers w/brackets
- 4 Electro-Voice CobraFlex III outdoor ramp horns
- 4 Electro-Voice ID60DT commercial sound compression drivers
- 1 Lowell L267-77 44-space rack/adj. rails 27" deep w/accessories
- 2 Lowell 25LVC-RM VC 25W auto-trans 3dB step rackmounts
- 1 Mackie 1642 VLZ Pro main audio mixer
- 2 Monster AP 2500 AC power conditioners
- 3 QSC RMX 4050HD power amps
- 1 QSC ISA 500TI 70V ramp horn, ceiling-mounted speaker
- 1 Rane RPM 26z programmable multiprocessor
- 1 RDL ST-VCA2 voltage-controlled amp
- 5 Shure 515BSM unidirectional dynamic mics
- 1 Shure SCM262 stereo mic mixer
- West Penn mic, speaker cable
- 2 Whirlwind wall-mounted volume control plates
- 1 Whirlwind SPC-83 8-input, 1 direct output, 2 ISO mic splitter
- 5 Whirlwind 1-gang bid catcher mics

Virtual Ramp Room

- 1 Alesis MultiMix 12R rackmounted mixer
- 4 Electro-Voice SX-300PI W room speakers w/yokes
- 1 Extron VTT/VTR CAT5 transmitter/receiver
- 1 Lowell L25317LD rack w/accessories
- 1 QSC RMX 4050HD power amp
- 3 RDL TX-LM2 line level to mic level transformers
- 1 Sanyo PLC-XF46N overhead video projector
- 1 Telos online internet interface
- 2 Whirlwind 1x3 mic ISO splitter auctioneer mics