

Viewfinder

Applied Electronics Limited

Your Complete Technology Partner



JUNE 2011
VOLUME 17 • ISSUE 2

Vancouver

8573 Commerce Court
Burnaby, BC V5A 4N5
604.439.7228
Fax 604.439.7210

Edmonton

11442 Winterburn Rd. N.W.
Edmonton, AB T5S 2Y3
780.462.8275
Fax 780.462.8238

Calgary

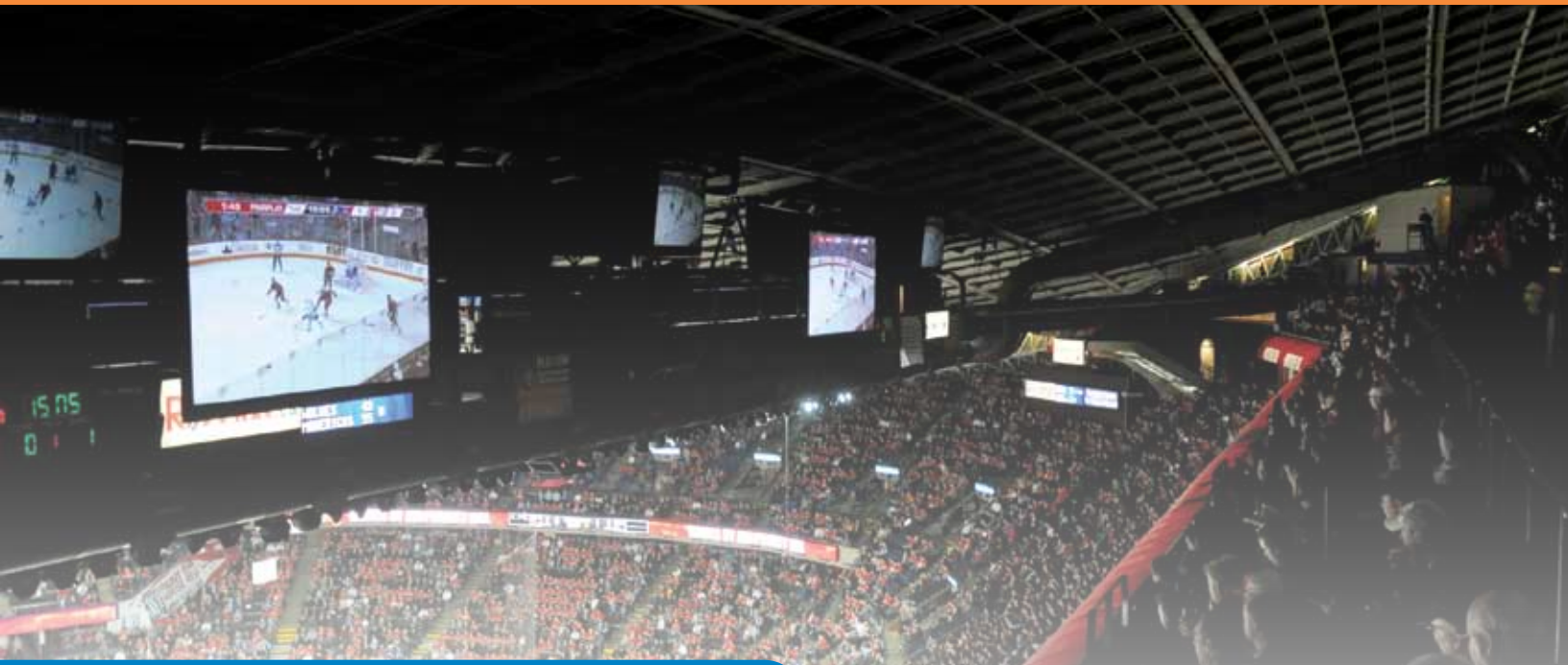
3, 1815-27th Ave. N.E.
Calgary, AB T2E 7E1
403.291.5143
Fax 403.291.5188

Toronto

5170B Timberlea Blvd.
Mississauga, ON L4W 2S5
905.625.4321
Fax 905.625.4333

Montréal

7715, Boul. Henri-Bourassa Ouest
St-Laurent, QC H4S 1P7
514.333.3324
Fax 514.333.1512



Scotiabank Saddledome

Home of the Calgary Flames & Big Screen Entertainment!

Fans attending events at **Calgary's Scotiabank Saddledome** in the new year will notice 4 large projection screens recently installed in the upper level of the stadium. AEL was approached by the **Calgary Flames** management in the fall of 2010 to come up with a creative solution to augment the fan experience in the 300 level of the building. The solution included the addition of 4 high definition large screen projection systems that would work in conjunction with the building's existing state-of-the-art LED scoreboard system. During a proof of concept demo at the building, it was clear that there were challenges as to where the screen and projectors could effectively be mounted. Nick Eriksen, AEL's Lead Technician on the project, suggested the Christie projectors could be mounted on the front bulkhead of the 300 level seating area, and be hidden under the existing red awning that runs along the front bulkhead (seen in the picture). With some small modifications to the awning to accommodate airflow, this turned out to be the perfect solution. The second phase of the project involved adding 4 Panasonic HD robotic cameras to the 300 level, Flames dressing room hallway and penalty box areas. The cameras are controlled from an operator's console in the video control room. High definition video signals are carried over fiber between the video control

room, cameras and projectors. Operational control and diagnostics of the new equipment is via Ethernet using the building's existing LAN. The three existing smaller video screens seen in the picture have since been repurposed for digital signage applications. The new projection system was operational on-time and **under** budget for the second half of the Flames NHL season.

AEL Design Team:

Sales: **Julian Fraser**

Project Management: **Rob Judd**

Lead Technician: **Nick Eriksen**

Technology at Work:

- 4 Christie Digital DHD800 HD projection systems
- 4 Draper 10'x18' StageScreens
- Ross Video/down/cross conversion and fibre optic interfaces
- 4 Panasonic AW-HE50SN Integrated HD POV cameras
- 1 Panasonic AWRP50N compact Pan/Tilt Camera controller

Orad Radio TV

Orad's exciting new Radio TV production system enables the automatic broadcast of radio shows over digital media. Radio TV offers potential new revenues sources and allows you to retain your existing radio production workflow while incorporating the benefits of multi-camera video and 3D graphics.

As more radio stations are broadcasting over the Internet and DTV channels to increase their audience and advertising revenue, Orad has developed a complete solution which incorporates live video feeds from cameras, video clip playback, and a ready-made set of 3D graphics templates including supers, title, crawls, logos and other elements. Radio TV also supports playback of full frame video promos and advertising as well as music video clips in multiple formats.



Once set up, the system is completely automated and relies on unique audio detection software to identify the radio talent and determine which camera to be on air along with the relevant graphics.



Features

- Enables automatic broadcast of radio show over visual media
- Generate new revenue streams without increasing staff
- Automatic camera cuts based on audio detection; no need for video production switcher or operator
- Supports up to eight camera inputs, video clips, and graphics with live data; allows for sponsored crawls and squeezebacks
- Interfaces to common radio automation systems
- Comes with a set of ready-made graphic templates and tools to create your own
- Increase local content and visibility; great for cross-promotion between radio & TV stations
- Economical solution to automate the distribution of your live content over internet or broadcast television



Ryerson @ NAB 2011

For the fifth year in a row, Ryerson University's Radio and Television Arts (RTA) students flew down to Las Vegas to attend NAB 2011. Students got the opportunity to gain valuable knowledge and hands on experience with the latest technologies in the broadcast industry. With the help of various corporate sponsors - including Applied Electronics Limited, Ross Video, Kino Flo Lighting Systems, AVP, uknow2, Haivision and Global Campus Project - students were able to attend the trade show sporting their attention grabbing branded t-shirts which promoted their sponsors.

Below: As usual, Applied Electronics is proud to be involved in such a marvellous initiative. AEL's President **Paul Stechly** (back row, third from the right) and V.P. **Susan Stechly** (far left) joined in a photo session with the RTA group. **Richard Grunberg** (far right), Head of Video / Assist. Professor/Technical Producer/Director of Photography for the Radio and Television Arts Department at Ryerson University, once again did a fantastic job of coordinating this amazing learning experience for the students.



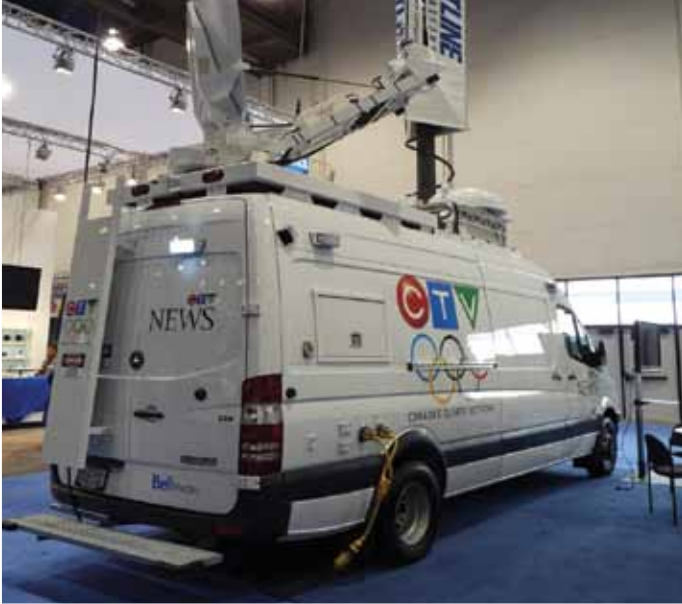
Canadian Suite

Where Canada Connects at NAB

2011 Sponsors

A big thank you to all of them!

Advanced Broadcast Cabling	Joe Sutherland Rentals
Airdate Traffic Services Ltd	JVC Professional Products Canada Inc.
AJA Video Systems	LARCAN
Anixter Wire and Cable Canada	Lectrosonics Canada
Annex Pro	Lorne Lapham Sales & Rentals Inc.
Anton/Bauer, Inc.	MaestroVision
Applied Electronics Limited	Majortech
Autocue/QTV	Marketing Marc Vallee Inc.
Avid Technology	Matrix Video Communications Corp.
AVP MFG & Supply Inc.	Middle Atlantic Canada
Axcera	Miranda Technologies
Belden Canada Inc.	Montana Engineering Inc.
BLUEARC - High Performance NAS	Nautel
Broadcast Systems & Equipment Inc.	Novanet Communications
Broadcaster & Mediacaster Magazines	Oakwood Broadcast Inc.
Camera Dynamics Inc.	Orad
Canon Lens Division	Ordigraphe
Capella Telecom. Inc.	Panasonic Canada Inc.
Cartt.ca	peg corp
Century Optronic Inc.	Pippin Technical Service Ltd.
CEV	Power & Tel.
Christie	Quantel
Chyron	RBE Video Inc.
CINEQUIPWHITE Inc.	RCS
COMAD/SIRA	R.F. Wireless Systems Inc.
DAVICOM, a division of Comlab Inc.	Rogers Communications
Delco Wire and Cable Limited	Rohde & Schwarz
Deltech Communications Group Inc.	Roland Systems Group
Dome Productions	Ross Video
Dynamix	Roynat Lease Finance
Ericsson	RTS Telex
Evertz	Ryerson University - Rogers Communications Centre
FCI Technical Installations Inc.	Sennheiser (Canada) Inc.
Frontline Communications	Sharp Electronics of Canada Ltd.
Fujifilm Canada Inc.	Sim Video
Fujinon	Sonotechnique
Genesis Matrix Video	Sono Video
Gepeco, A General Cable Company	Sony of Canada
GerrAudio Distribution	Standard Integration Inc.
Harris Canada Systems Inc.	S.W. Davis Broadcast Technical Services Ltd.
HHB Communications Canada Ltd.	Tektronix Canada
Hitachi Kokusai Electric Canada, Ltd.	Teslat
Ikegami	Total Media Systems Inc.
Image Video	VIDCOM
Incospec Communications Inc.	Videoscope
Isilon Systems	Vimsoft
Jampro Antennas, Inc.	Vizrt Inc.
	Winsted



CTV Toronto Sprinter DSNG

The latest Frontline-AEL News truck to join the **CTV Toronto** fleet made its on-air debut on election night, May 2nd. Two weeks earlier, the **DSNG-ENG Sprinter** was a crowd pleaser on the Frontline stand at NAB. This vehicle sports a dual 200watt CPI TWTA RF system pushing data through Tandberg E8040 HD encoders to a 1.8m GD Satcom/Vertex 4-port antenna. The Sprinter is powered by an 8kw Onan diesel. It has a Will-Burt 14.6m (48') mast and DTEC warning system. Special thanks to CTV for allowing the van to be showcased at NAB.

SUN TV News DSNG-x2!

The new **SUN News** channel got a pair of sizable boosts to its coverage capabilities with delivery of a pair of Frontline/Applied DSNG vans. The vans are based on the Ford E350 Supervan chassis with a Frontline high top added. **DSNV 509** is based in Toronto; **DSNV 510** is illuminating satellites from Calgary. The vans were integrated at the AEL facility in Mississauga with a complete suite of production equipment. The RF system uses an MCL 200 watt antenna-mount TWTA to feed to the 1.6m AVL antenna through an Ericsson E5788 HD encoder. Production highlights include a Panasonic AW-HS50N video switcher with multi-viewer and BT-LH1710P video monitor. Video is monitored via a Tektronix WVR5000 rasterizer. Intercom is by Telex and IFB by Lectrosonics.



HDCC Series™

Ancillary Data and Captioning Solutions

Wohler is proud to introduce the new HDCC Series, a complete range of ancillary data and captioning solutions. The HDCC series product line consists of a rich set of dual channel, multi-function cards that fit in popular modular frames to provide high density, high integration, low-power consumption and extremely reliable captioning solutions, both for encoding, decoding, transcoding and monitoring.



A complete set of efficient and reliable captioning solutions.



708MULTI CEA-608/708 Complete Captioning Solution

Encode • Bridge • Transcode • Decode • Monitor • GPI Encode/Decode

708MULTI is a full featured dual channel solution that supports both CEA-608 and CEA-708 closed captioning formats on a single card with functionality for the most challenging captioning applications. [Model # HDCC-708MULTI]

OP47MULTI WST/OP-47 Definitive Subtitling Solution

Encode • Bridge • Transcode • Decode • Monitor • GPI Encode/Decode

OP47MULTI provides a complete dual channel solution for WST/OP-47 subtitling formats on a single card with unrivaled capabilities. [Model # HDCC-OP47MULTI]

ANALYSIS RANGE Dual Channel Decoding and Monitoring

The Analysis range is available for WST/OP-47 or CEA-608/708 standards analysis and monitoring. Each card provides powerful software and hardware capability for analysis of captions/subtitles and associated data with external logging and monitoring, together with on-board OSD monitoring. Dual raw or CDP data extraction through Ethernet or serial ports. Two OSD decoded captions/subtitles outputs that retain original video formats.

- Independent dual channel operation, both SD/HD with automatic format detection
- Dual bypass-relay protected pass-through video outputs

WST/OP-47 Analysis - [Model # HDCC-OP47MON] | CEA-608/708 Analysis - [Model # HDCC-708MON]

TRANSMIT RANGE Dual Channel Captioning/Subtitling Encoders

Encode • Bridge • Transcode

The Transmit range is available for WST/OP-47 or CEA-608/CEA-708 standards. Each card provides powerful caption/subtitle encoding capabilities. WST/OP-47 Transmit - [Model # HDCC-OP47TX] | CEA-608/708 Transmit [Model # HDCC-708TX]

HDCC-GPITX Synchronous GPI Cues Transmission

The dual channel SD/HD GPI transmitter and receiver allows up to 4 GPI cues per channel to be encoded and decoded. Securely encodes/decodes GPI cues in VBI (SD) or VANC (HD). [Model # HDCC-GPITX]

HDCC-V608 CEA-608/VANC608 Closed Captions Transcoder

The V608 model is a dual channel transcoder solution that converts CEA-608 ("Line21") data to/from VANC608 data, according to SMPTE334 specifications; it also supports direct encoding and decoding in CEA-608 or VANC608 formats. [Model # HDCC-V608]

info@wohler.com www.wohler.com +1 888 5 WOHLER



McMaster University, Michael DeGroot School of Medicine

This is a multi-site, distance learning application which AEL has worked on for McMaster over the last 4 years. The project encompassed designing, supplying and installing the following systems:

Hamilton Campus – 200 seat lecture hall with 122 push-to-talk student microphones, 3 large screen projection displays, custom request to speak system, custom lectern with preview monitors, control system to allow full operation of remote campus lecture halls (Waterloo & Niagara) and receive content and RTS requests. Also included at this site are multiple multi-purpose classrooms all with display systems, student microphones and interactive whiteboard technologies. All classrooms contain HD cameras and microphones which are fed back to a central equipment room via twisted pair or fibre. The central equipment room houses multiple shared HD videoconferencing codecs and media archiving devices. Centralized control and monitoring of all rooms is achieved in the central equipment room. This space also houses a small recording room intended for instructors to record content for streaming or archiving. AEL is currently installing a Health Forum Debate facility and a large multi-use atrium presentation space.

Waterloo Campus – 120 seat lecture hall with 64 push-to-talk student microphones, 3 large projection screens, etc. This room is a mirror image of the Hamilton 200 seat lecture space and can operate as the host lecture space or receive lectures from Hamilton or Niagara. This site also houses; 2 audio/video conference meeting rooms, 4 tutorial teaching classrooms, and 4 clinical skills simulation labs. All signals from these spaces, along with the lecture hall signals, are transmitted to a central equipment room. The central equipment room houses multiple shared HD codecs and media archiving devices.

Niagara Campus – This is currently a temporary campus. Construction of the new campus has begun and is slated for completion next fall. When complete, this campus will be very similar to the Waterloo campus.

McMaster University at Waterloo

Extension of McMaster University MDCL distance education program
New facility at Waterloo
Distance Education Classrooms

Designed by **Mike Dalton**
System programmer **Freelance**
Audio designer **Johnathan Stein**
Project Manager **Wolfgang Pechmann**

CELEBRATING MILESTONES!

20 YEARS OF SERVICE TO AEL



Mike Dalton (June 10, 1991)

Mike received an Electronics Engineering Technology Diploma in 1991. Since then he has completed several business management courses while gaining extensive industry knowledge and experience in A/V system design and integration. Michael worked his way up to Sales Manager of our A/V group in 2002 and 4 short years after, he brought the A/V sales up to a respectable one third of our total annual business. Our A/V systems group has designed,

supplied and installed many large complex A/V Systems from coast to coast. To date, some of the larger installation projects AEL has been involved with include Corus and the Simulation Centre for SickKids Hospital. Mike and his wife, Jill, have two children, Kevin and Rachel. Thank you Mike, for 20 years of service!



Dave Netzke (May 27, 1991)

Originally from Hanover, Ontario (approximately 164 KM west and two and half hours away from Mississauga), Dave joined AEL in 1991 as an AV technician and 20 years later, he has become a valuable member on the team. He received a Bachelor of Science degree from the University of Western Ontario and a Technology Diploma from Conestoga College. Prior to joining AEL, Dave worked at an Appliance Store, chicken hatchery

and a paint factory. Since joining AEL, he has enjoyed working on the announcement system at Union Station as well as working on anything digital. Dave's favourite past time is collecting country music. For the 20 years of dedication to AEL and the A/V Division, we thank you Dave!



Campbell Brown - 15 Years (June 10, 1996)

After graduating from the University of Toronto with honors, Campbell joined AEL 15 years ago as an A/V installer. He is a valued and devoted member of our A/V integration team and since joining Applied he has gained boundless knowledge in his trade. He is also a Crestron programmer with extensive audio, video, IT and control system experience. Campbell and his wife,

Dalia, have two children, Matteo and Marika.



Jennifer Gould - 10 Years (May 29, 2001)

Born in London, England, Jen has been with AEL for 10 dedicated years as our AV Administrative Supervisor. She received her training through college, night school classes and on-the-job training and came to AEL with experience in various customer service positions. Jen does her best to try to keep the AV division running smoothly with a smile on her face and staying composed. In her spare time

she loves to golf, cycle, play crossword puzzles and enjoys family vacations. Jen has two children, Jason and Dana, and one grandson, Dylan. Congratulations and thank you for 10 years, Jen!



Gerry Gauvreau - 10 years (June 18, 2001)

Before joining AEL Montreal's branch in Shipping/Receiving & Inventory, Gerry worked in Canada's Foreign Service in Ottawa and served at the United Nations in N.Y. as well as the Canadian Embassy in Washington. Gerry's favorite pastime is watching any and all sports from the comfort of his Lazy Boy. He is a huge fan of "The Food Network" especially the show "Cake Boss" where he has

picked up more than a few tips on his other hobby; baking and decorating cakes for friends and family, all contributing to help him achieve and maintain his 250 lb figure. Gerry's philosophy is "SMILE, it's free and non-taxable" which has certainly contributed to his happy marriage and family of three daughters, three granddaughters and a grandson.



Robert Thériault - 5 Years (February 27, 2006)

Robert joined AEL's Montreal office in 2006 as a Broadcast and Postproduction Sales Representative. Robert brought 3.5 years of experience as a project engineer and 10 years of postproduction and animation market sales before joining AEL. He received a Bachelor degree in Electrical Engineering. Robert and his wife, Manon Amesse, have a 12 year daughter, Chloé.



André Filion - 5 Years (January 3, 2006)

Born and raised in Montreal, Andre joined AEL Montreal 5 years ago with computer network training, Crestron training and commercial A/V integration experience. Andre is part of AEL Montreal's A/V Installation crew. Thank you for 5 years of service.



Jean-François Gauthier - 5 Years (January 3, 2006)

Jean-Francois joined AEL in 2005 after graduating from Teacart College in Montreal as a Systems Install Technician. Jean-Francois majored in telecommunications and has become a valuable contributor to AEL Montreal for major broadcast projects. Thank you Jean-Francois for 5 years of loyal service.



Eunice Ratcliffe - Congratulations!

(November 26, 2001 – April 8, 2011)

On April 8th, we said good-bye to Eunice Ratcliffe after 9.5 years of loyal service. Eunice worked as CSR for the A/V division at head office but she was also our un-official morale officer; organizing pot luck lunches, lottery pools and assisting at numerous head office social functions. We thank her for her years of tireless dedication to

Applied and wish her well as she enjoys spending her retirement with friends, family and especially her grandchildren Erin, Sean & Jackson. She will be dearly missed.



Congratulations Alan and Tanya!

Applied is pleased to announce the arrival of Aaron English on May 30th, weighing 7 pounds 9 ounces.

He is the second child for Alan and Tanya English. Francis, who is now 8 and a half, is also very excited to welcome his new brother.



Proud New Parents!

Jody Fitzpatrick and his wife Jamie welcomed their first child, a beautiful baby

girl, on May 26th. Cadence weighed 7 pounds 11 ounces and measured in at 21 inches long. Congratulations on your new bundle of joy!

NEW ADDITIONS TO OUR LINE-UP!



Cliff Cockrall (October 18, 2010)

Cliff joins our Edmonton A/V Technician team with previous experience in many areas pertaining to A/V and post production. He graduated from Trebas Institute in Vancouver, BC and started

working in post-audio for Japanese Anime (you can Google his name for credits), he then moved to Edmonton and began working in film/video and broadcast. Cliff has worked at many interesting events such as the Oilers and Eskimos games, CCMA's, Junos, 2 Grey Cups, documentaries for Discovery Channel, OLN, W-5, BBC, CBC and on film sets as an A2 boom operator/mixer. In his spare time he loves open-wheel racing and remote-controlled aircraft. Welcome to the team Cliff!



Marc De Montigny (January 17, 2011)

With over 15 years of experience as a technician and sales in the broadcast industry, Marc joins AEL Montreal as the newest

Broadcast and Post Production Sales rep. Marc obtained a degree in Electronics at Montmorency college in 1994. In his spare time he coaches his daughter in a competitive soccer league, enjoys family camping and always spends family vacations in several national parks around the country. Marc and his wife, Genevieve St-Yves, have two daughters, Elaine and Daphnée who are 8 and 6. Welcome to Applied Marc!



Alain Tremblay (January 24, 2011)

Alain joins AEL Montreal as the Broadcast Support Technician. He comes to AEL

with over 20 years of experience in the broadcast industry. Alain studied at CEGEP Limoilou, Teccart and has recently graduated from University Laval in computer science. In his spare time, he loves riding his Harley Davidson Ultra Classic (a touring model) and he also enjoys programming. Alain and his wife, Sylvie, have a 22 year old son, Mathieu.