

Minutes
Control Protocols Working Group
Thursday, 19 October 2000
Harrah's Las Vegas
Las Vegas, NV

Chairs: Steve Carlson; High Speed Design, Inc.; Principal; Producer
Steve Terry; Fourth Phase New Jersey (PRG); Principal; User

Recording secretary: Karl G. Ruling, ESTA

Members attending: John Sellers; AIM Northwest; Principal; General interest
Sierk Janszen; Avenger Showcontrol; Observer; Producer
Tim Bachman; Barbizon Light (Barbizon Companies); Principal; User
David George; Spectrum Manufacturing Inc. (previously named Christie Lites Manufacturing Ltd.); Principal; Producer
Ed Jones; Edwin Jones Co., Inc.; Principal; Producer
Greg Heinzle; Electronic Theatre Controls, Inc.; Alternate; Producer
Tracy Underhill; Electronics Diversified Inc.; Principal; Producer
Philip Nye; Engineering Arts; Principal; General interest
Gerald Jones; Gerald Jones; Observer; User (joined at this meeting)
Robert Goddard; Goddard Design Co.; Principal; Producer
Trevor Forrest; Helvar Lighting Control; Principal; Producer
Scott Blair; High End Systems Inc.; Principal; Producer
John Huntington; IATSE Local 1; Alternate; User
Rick Leinen; NSI Corporation (Leviton Manufacturing Co., Inc.); Principal; Producer
J. P. Steiner; Lutron Electronics; Observer; Producer
Michael (Sandy) Twose; Pathway Connectivity Inc.; Alternate; Producer
Tim Cox; PLASA; Principal; General interest
George Kindler; Thoughtful Designs (PRG); Alternate; User
Robert Barbagallo; Proximo Inc.; Principal; User
Paul F. Mardon; Pulsar Ltd.; Principal; Producer
Steve Unwin; Pulsar Ltd.; Alternate; Producer
Jon R. Farley; Rosco/Entertainment Technology (Rosco Laboratories); Principal; Producer
Mitch Hefter; Rosco/Entertainment Technology (USITT); Principal; User
Kenneth Mockler; Sceno Plus; Observer; User (joined at this meeting)
Richard Lawrence; Strand Lighting Ltd.; Principal; Producer
Jerry Gorrell; Theatre Safety Programs; Principal; General interest
Brian Dowd; TMB Associates; Principal; User
Charles Reese; Vari-Lite, Inc.; Principal; Producer

Visitors: Bill Groener; Fourth Phase New Jersey (PRG)
David Saltiel; Bell, Boyd & Lloyd LLC
Bob Neagle; Woodhead Connectivity

1 Opening Remarks

Steve Terry called the meeting to order at 09:06

2 Attendance and membership

2.1 Introductions of those present

Terry asked those present to introduce themselves, which they did, proceeding in a counter-clockwise direction around the large, open-square table.

2.2 Determination of quorum (11 needed)

Terry announced that a quorum was present.

2.3 Recognition of alternate voting members

Alternate voting members were recognized. Voting members were reminded that only one vote per company or organization represented is permitted. Alternates and principals may not both vote on a motion if both are present.

2.4 Requirements for membership

Terry reminded the group that voting members or their alternates must attend. Members and their alternates who miss three meetings in a row will be moved to observer status.

Terry noted that the representatives for Wybron, Andera, and Bloch Design Group were not present, and that they had now missed three meetings in a row. Thus, their voting status was now changed to observer.

2.5 Processing of new membership requests

Terry read the following applications and asked for a show of approval for all of them as a group. There was unanimous support shown by raised hands.

Paul Edwards, Production Resource Group, alternate, user
Ole Pedersen, Martin Professional A/S, principal, producer
John Mitchell, Sterling Technical Services, observer, user
Kenneth Mockler, Sceno Plus, observer, user
Gerald Jones, Gerald Jones, observer, user

Thus, the voting membership for the meeting was:

Name	Company	Parent company or organization represented	Voting status	Interest category
John Sellers	AIM Northwest	AIM Northwest	Principal	Gen. interest
Tony de Rijk	Amazing Controls! Inc.	Amazing Controls! Inc.	Principal	Producer
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	Principal	Producer
Tim Bachman	Barbizon Light	Barbizon Companies	Principal	User
Tobin Neis	Barbizon Companies	Barbizon Companies	Alternate	User
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	Principal	Producer
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co.	Principal	Producer
Ed Prasser	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	Principal	Producer
Dennis Varian	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	Alternate	Producer
Jon Ide	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	Alternate	Producer
Greg Heinzle	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	Alternate	Producer
Tracy Underhill	Electronics Diversified Inc.	Electronics Diversified Inc.	Principal	Producer
Scott Rempel	Electronics Diversified Inc.	Electronics Diversified Inc.	Alternate	Producer
Philip Nye	Engineering Arts	Engineering Arts	Principal	Gen. interest
Robert Goddard	Goddard Design Co.	Goddard Design Co.	Principal	Producer
Dexter McNeil	Goddard Design Co.	Goddard Design Co.	Alternate	Producer
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	Principal	Producer
Scott Blair	High End Systems Inc.	High End Systems Inc.	Principal	Producer
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	Principal	Producer
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	Principal	User
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	Alternate	User
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	Principal	Gen. interest
Rick Leinen	NSI Corporation	Leviton Manufacturing Co., Inc.	Principal	Producer
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	Alternate	Producer
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	Principal	Producer
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	Principal	Producer
Michael (Sandy) Twose	Pathway Connectivity Inc.	Pathway Connectivity Inc.	Alternate	Producer
Tim Cox	PLASA	PLASA	Principal	Gen. interest
Tony Douglas-Beveridge	PLASA	PLASA	Alternate	Gen. interest

Steve Terry	Fourth Phase New Jersey	PRG	Principal	User
George Sabbi	PRG Lighting and Audio Group	PRG	Alternate	User
George Kindler	Thoughtful Designs	PRG	Alternate	User
Paul Edwards	Fourth Phase New Jersey	PRG	Alternate	User
Robert Barbagallo	Proximo Inc.	Proximo Inc.	Principal	User
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	Principal	Producer
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	Alternate	Producer
Jon R. Farley	Rosco/Entertainment Technology	Rosco Laboratories	Principal	Producer
David George	Spectrum Manufacturing Inc.	Spectrum Manufacturing Inc.	Principal	Producer
Richard Lawrence	Strand Lighting Ltd.	Strand Lighting Ltd.	Principal	Producer
Milton Davis	Strand Lighting	Strand Lighting Ltd.	Alternate	Producer
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	Principal	Gen. interest
Brian Dowd	TMB Associates (NJ)	TMB Associates	Principal	User
Mitch Hefter	Rosco/Entertainment Technology	USITT	Principal	User
Charles Reese	Vari-Lite, Inc.	Vari-Lite	Principal	Producer
Eckart Steffens	SOUNDLIGHT	VPLT	Principal	Gen. interest
Richard Thornton Brown	Zero 88 Ltd.	Zero 88 Ltd.	Principal	Producer
Peter Brooks	Zero 88 Ltd.	Zero 88 Ltd.	Alternate	Producer
			31 votes	19 Prod. 6 Users 6 Gen. int.

- 3 Approval of the minutes from the previous meeting (CP/2000-1014, CPmin07-2000.pdf)**
 Mitch Hefter moved that the minutes be approved as written. The motion was seconded. The motion was accepted unanimously by a show of hands.

4 Call for patents

The call for patents was read by Steve Carlson:

"ESTA intends to publish no standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent disclosure to implement this intent. ESTA does not conduct patent searches and does not warrant that its standards contain no protected intellectual property.

"In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent or copyright that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright in order to notify the working group of its existence."

There was a discussion of the NSI/Colortran/Leviton patent (US patent #6,020,825), which was mentioned by Ken Vannice at the last meeting in response to the call for patents, and what affect it might have, if any, on the ACN project. No conclusions were drawn and no motions were offered.

and Anti-Trust Statement

The anti-trust statement was also read by Steve Carlson:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that any member of this working group may be found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee."

5 Approval of agenda

Mitch Hefter moved that the draft agenda be approved. Scott Blair seconded the motion. The motion was accepted unanimously by show of hands.

Steve Terry announced that he would change the order of the items in the agenda to allow Bill Groener to discuss the problems regarding publishing the CAT5 executive report and general following of the TSP's Policies and Procedures before other business was conducted.

Terry outlined possible courses of action with the CAT5 executive report:

1. Revise it to be a technical report
2. Make it a new standards project
3. Leave the suggested pinouts as part of E1.11 project and do not publish the executive report

By consensus the discussion of the CAT 5 report was tabled until after the E1.11 discussion.

Bill Groener, chairman of the Technical Standards Committee, spoke to the problem of the ACN project and the P&P. He stated that the TSC lacks information on the intention of this long-running study group. He asked if the study group's intention for this to be an ESTA or ANSI standard? If ACN is not going to be either of these, it can not be a project that is being carried out as part of the Technical Standards Program any longer, said Groener.

Steve Carlson said that the ACN project groups would like to take the protocol part of the project out of the Technical Standards Program and conduct it under the procedures used by the Internet Engineering Task Force. He stated that this was a faster process, and that it would put project into the company of a group of people that know protocols. The ACN group would then bring it back to the ESTA process for the development of the hardware interface and writing of annexes, et cetera. There was a long discussion of how this might work.

Karl Ruling read the motion regarding the ACN project from the October 18th TSC meeting:

"Colin Waters moved that the CPWG must officially initiate the ACN project as an American National Standard and follow the P&P, or show cause for why this cannot be done. If cause is to be shown, there needs to be a written response distributed to the TSC at least two weeks before the next TSC meeting. A member of the ACN task group is requested to attend the next TSC meeting. Seconded by Mike Wood. The motion was unanimously accepted by a show of hands."

Karl Ruling stated that he could not find any reason why a standards task group cannot seek input from the Internet Engineering Task Force. There is no mention of keeping task group documents secret or confidential in the P&P, and there is the statement that "The Working Group should seek input from all possible sources." He pointed out that the Internet Engineering Task Force, while a valuable source of informed opinion, could not be treated as the consensus body, however. The CPWG would have to remain the consensus body for developing any standard under ESTA's Policies and Procedures.

Steve Terry said that the working group will be in a position by the end of the afternoon to respond to the TSC's request.

6 Old Business

6.1 E1.3

6.1.1 Summary of comments received

Ruling presented the comments that were received during the fourth public review of BSR E1.3. They were all from one individual and were all editorial. He noted that the version of the draft E1.3 standard (CP/1997-1003r10) distributed for this meeting incorporated the editorial corrections.

6.1.2 Resolution of comments

Philip Nye moved that the comments be accepted. The motion was seconded. The motion was approved unanimously by a show of hands. With more than half the voting body present, the motion was accepted with the required supermajority.

Mitch Hefter moved that we approve E1.3 as an ANSI standard. The motion was seconded. The motion was decided by roll call ballot:

Name	Company	Parent company/ representing	Voting status	Int. Cat.	Accept	Accept in principle	Accept in part	Reject	Abstain
John Sellers	AIM Northwest	AIM Northwest	P	G	X				
Tony de Rijk	Amazing Controls! Inc.	Amazing Controls! Inc.	P	P					
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	P	P					
Tim Bachman	Barbizon Light	Barbizon Companies	P	U	X				
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	P					
Ed Jones	Edwin Jones Co.	Edwin Jones Co.	P	P	X				
Greg Heinzle	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	A	P	X				
Tracy Underhill	Electronics Diversified Inc.	Electronics Diversified Inc.	P	P	X				
Philip Nye	Engineering Arts	Engineering Arts	P	G	X				
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	P	X				
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	P	P	X				
Scott Blair	High End Systems Inc.	High End Systems Inc.	P	P	X				
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	P	P	X				
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	A	U	X				
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G					
Rick Leinen	NSI Corporation	Leviton Manufacturing Co.	P	P	X				
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	P	P	X				
Michael (Sandy) Twose	Pathway Connectivity	Pathway Connectivity	A	P	X				
Tim Cox	PLASA	PLASA	P	G	X				
Steve Terry	Fourth Phase	PRG	P	U	X				
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	U	X				
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	P	P	X				
Jon R. Farley	Rosco/Entertain- ment Technology	Rosco Laboratories	P	P	X				
David George	Spectrum Manufacturing	Spectrum Manufacturing Inc.	P	P					Absent during vote
Richard Lawrence	Strand Lighting	Strand Lighting Ltd.	P	P	X				
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G	X				
Brian Dowd	TMB Associates	TMB Associates	P	U	X				
Mitch Hefter	Rosco/Entertain- ment Technology	USITT	P	U	X				
Charles Reese	Vari-Lite, Inc.	Vari-Lite, Inc.	P	P	X				
Eckart Steffens	SOUNDLIGHT	VPLT	P	G					
Richard Thornton Brown	Zero 88 Ltd.	Zero 88 Ltd.	P	P					
Peter Brooks	Zero 88 Ltd.	Zero 88 Ltd.	A	P					
Totals					24	0	0	0	0

The motion carried with the required supermajority

6.2 E1.11

6.2.1 Task Group progress report

Mitch Hefter asked the working group for guidance on some issues in the draft document.

There was a discussion of the timing diagram on page 22, line 9. There issues dealt with typical values of break time, the minimum update time for 512 slots, and the maximum update rate. There were questions of whether "typical" values should be given at all, and what levels of precision are needed. Advice was given to the task group.

There was a further discussion of the use of the words "frame" and "packet" as found on page 4, line 30 and Page 5, line 13. These words are used with different meanings from the meanings used in IEC documents, reported Mitch. Terry proposed that we leave the definitions as they are.

Mitch Hefter announced that the E1.11's goal is to further refine the document in a task group meeting during the afternoon break-out period, and then to bring it back to the working group for a motion to send it to public review.

6.2.2 IEC update

Hefter said that if the current draft E1.11 document is approved for public review, that it might become the input document for the IEC project. No motion was offered and no action taken.

6.3 Publishing DMX on Cat 5 report

The problem with the executive summary presented to the CPWG in preparation for the meeting was that it recommended specific pinouts and wire assignments. Thus, it was a recommended practice and needed to go through the normal procedure for recommended practices and standards before it could be published. However, a simple factual statement of the results of the transmission and emission tests done by Gray Interfaces would not need to be handled as an RP or standard.

Further discussion of how to proceed was tabled until after the afternoon breakout session.

6.4 ACN Task Group report

ACN matters had been fairly thoroughly discussed earlier in the meeting, and were not revisited at this time.

6.5 IEEE 802.3 DTE Power via MDI

Carlson reviewed the methods being considered for sensing if there is a load that requires power. He said the standard might be published a year from now. About 14W can be delivered with the schemes being considered.

7 New Business

7.1 Cable ESD Hazards with CAT-5e and Higher Cabling

Carlson said the document (CP/2000-1018, esd_cable_alert.pdf) is self-explanatory.

7.2 Discussion of improved-performance Ethernet connectors

Conventional RJ-45 connectors have reliability problems in the field, reported Terry. However, better, more rugged connectors are becoming available. Bob Neagle from Woodhead Connectivity presented his product, described its benefits, and solicited comments. Brian Dowd of TMB said his company was looking for an indication of interest from the market before it makes the commitment to manufacture thousands of meters of cable with this connector on it.

8 Other business

None.

9 Schedule for future meetings

Carlson reported that the next working group meeting would be in Irving, Texas on January 20 of 2001. He asked task groups to schedule their own meeting times.

10 Recess

Steve Terry announced that the working group would recess for lunch and task group meetings, and would then reconvene at 16:00.

11 Reconvention

The working group reconvened at 16:00 with a quorum still present.

Carlson reported that the ACN task group had discussed the comments of the TSC chair and ESTA counsel during the recess. The TSC chair and ESTA counsel have indicated that the TG members are free to capitalize on their work whenever they feel it is in their commercial interests to do so, and they have also indicated that a task group is free to seek advice and comment as it wishes. With these issues officially clarified, the task group feels it can move forward. Carlson noted that the ACN task group has tried to be very sensitive to these issues during the course of the ACN project.

Steve Terry asked that the minutes show that the CPWG and ACN task group will comply with the TSC's directive (which is noted in the discussion under "agenda" above).

Mitch Hefter presented the revised draft E1.11 standard (CP/1998-1031r3). Tim Bachman moved that it be sent to public review. Bob Barbagallo seconded the motion. The motion must be decided by letter ballot, per the P&P.

A revised version of the Cat5 Executive Summary was presented, one that simply states the results of the testing done by Gray interfaces and that makes no recommendations other than noting that the emission and transmission characteristics of Cat5 cable compare favorably with those of conventional DMX512 cable. Jon Farley moved that this new version of the Cat5 report be published. Bob Goddard seconded the motion. The motion was accepted unanimously with a show of hands.

12 Adjournment

Tim Bachman moved that the meeting adjourn. The motion was seconded. The motion was approved by acclamation. Terry declared the meeting adjourned at 16:50.

Control Protocols Working Group Membership after the 19 October 2000 Meeting

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
John Sellers	AIM Northwest	AIM Northwest	P	G
Tony de Rijk	Amazing Controls! Inc.	Amazing Controls! Inc.	P	P
Peter Willis	Andera Ltd.	Andera Ltd.	O	P
Wayne David Howell	Artistic Licence (UK) Ltd.	Artistic Licence (UK) Ltd.	P	P
Steve Friedlander	Auerbach & Associates, Inc.	Auerbach & Associates, Inc.	O	U
Sierk Janszen	Avenger Showcontrol	Avenger Showcontrol	O	P
J. B. Toby	Avolites Ltd.	Avolites Ltd.	O	P
Shahid Anwar	Avolites Ltd.	Avolites Ltd.	O	P
Richard Salzedo	Avolites Ltd.	Avolites Ltd.	O	P
Barbara Wohlsen	Barbara Wohlsen	Barbara Wohlsen	O	U
Tim Bachman	Barbizon Light	Barbizon Companies	P	U
Tobin Neis	Barbizon Companies	Barbizon Companies	A	U
Bernardo Benito Rico	Ben-Ri Electronica S.A.	Ben-Ri Electronica S.A.	O	P
Lee J. Bloch	Bloch Design Group Inc.	Bloch Design Group Inc.	O	G
Soo-Myong Chung	Bloch Design Group Inc.	Bloch Design Group Inc.	O	G
Bradley Klinkrad	Bradley Klinkrad	Bradley Klinkrad	O	G
Ted Fregon	Bytecraft Pty. Ltd.	Bytecraft Pty. Ltd.	O	P
Murray Mason	Bytecraft Pty. Ltd.	Bytecraft Pty. Ltd.	O	P
Bill Ellis	Candela Controls, Inc.	Candela Controls, Inc.	O	U
Marty Lazarus	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	G
Tal Miron	Compulite R & D	Compulite R & D	O	P

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
Jason Friedman	Creative Realities, Inc.	Creative Realities, Inc.	O	G
Mikael Fahl	Dataton AB	Dataton AB	O	P
David Bertenshaw	David Bertenshaw	David Bertenshaw	O	P
Doug Fleenor	Doug Fleenor Design, Inc.	Doug Fleenor Design, Inc.	P	P
Gary Dove	Dove Systems	Dove Systems	O	P
Jussi Kallioinen	Eastway Sound & Lighting	Eastway Sound & Lighting	O	U
Ed Jones	Edwin Jones Co., Inc.	Edwin Jones Co., Inc.	P	P
Bill Fehrmann	Electrol Engineering, Inc.	Electrol Engineering, Inc.	O	P
Bruce Lehnus	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	O	P
Ed Prasser	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	P
Adam Bennette	Electronic Theatre Controls Ltd.	Electronic Theatre Controls, Inc.	O	P
Bill Florac	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	O	P
Dennis Varian	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	P
Jon Ide	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	P
Greg Heinzle	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	P
Paul Bennett	Electronics Diversified Inc.	Electronics Diversified Inc.	O	P
Scott Rempel	Electronics Diversified Inc.	Electronics Diversified Inc.	A	P
Tracy Underhill	Electronics Diversified Inc. (Colorado)	Electronics Diversified Inc.	P	P
Philip Nye	Engineering Arts	Engineering Arts	P	G
Paul K. Ericson	Ericson Lighting Design	Ericson Lighting Design	O	U
Gerald Jones	Gerald Jones	Gerald Jones	O	U

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
Robert Goddard	Goddard Design Co.	Goddard Design Co.	P	P
Dexter McNeil	Goddard Design Co.	Goddard Design Co.	A	P
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	P	P
Scott Blair	High End Systems Inc.	High End Systems Inc.	P	P
Steve Carlson	High Speed Design, Inc.	High Speed Design, Inc.	P	P
John Huntington	IATSE Local 1	I.A.T.S.E. Local 1	A	U
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	O	U
Rob Johnston	Interactive Technologies, Inc.	Interactive Technologies, Inc.	O	P
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	O	G
David Timmins	Jands Electronics	Jands Electronics	O	P
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G
Merlin Milner	Leax Lighting Controls	Leax Lighting Controls	O	P
John Mehlretter	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	P
Mark T. Kraft	Lehigh Electric Products Co.	Lehigh Electric Products Co.	O	P
Rick Leinen	NSI Corporation	Leviton Manufacturing Co., Inc.	P	P
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	A	P
Andrew Sherar	Lightmoves PLC	Lightmoves PLC	O	P
Gary Pritchard	LSC Lighting Systems PTY Ltd	LSC Lighting Systems PTY Ltd	O	P
J. P. Steiner	Lutron Electronics	Lutron Electronics	O	P

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
Tracy Schwenk	Martin Professional Inc.	Martin Professional A/S	O	P
Gerard Cohen	Martin Professional Inc.	Martin Professional A/S	O	P
Ole Pedersen	Martin Professional A/S	Martin Professional A/S	P	P
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	P
Geoffrey O. Thompson	IEEE 802.3 / Nortel Networks	Nortel Networks	O	G
David A. Boller	Organic Machines LLC	Organic Machines LLC	O	P
William Benner	Pangolin Laser Systems	Pangolin Laser Systems	O	P
Dave Higgins	Pathway Connectivity Inc.	Pathway Connectivity Inc.	P	P
Michael (Sandy) Twose	Pathway Connectivity Inc.	Pathway Connectivity Inc.	A	P
Tony Douglas-Beveridge	PLASA Standards Office	PLASA	A	G
Tim Cox	PLASA	PLASA	P	G
Mac Perkins	PNTA	PNTA Inc.	O	G
Steve Terry	Fourth Phase New Jersey	PRG	P	U
George Sabbi	PRG Lighting and Audio Group	PRG	A	U
George Kindler	Thoughtful Designs	PRG	A	U
Paul Edwards	Fourth Phase New Jersey	PRG	A	U
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	U
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	P	P
Steve Unwin	Pulsar Ltd.	Pulsar Ltd.	A	P
Stephen J. Tyrrell	Quantum Logic	Quantum Logic	O	P
Charlie Richmond	Richmond Sound Design Ltd.	Richmond Sound Design Ltd.	O	P

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
Jon R. Farley	Rosco/Entertainment Technology	Rosco Laboratories	P	P
Mitch Hefter	Rosco/Entertainment Technology	Rosco Laboratories (USITT on CPWG, EPWG)	P	U
Kenneth Mockler	Sceno Plus	Sceno Plus	O	U
Mick Martin	Showcad Control Systems	Showcad Control Systems	O	P
Andre Broucke	ADB - TTV Technologies	Siemens	O	P
David George	Spectrum Manufacturing Inc.	Spectrum Manufacturing Inc.	P	P
Ujall Kar	Standard Robotics & Lighting	Standard Robotics & Lighting	O	G
John Mitchell	Sterling Technical Services	Sterling Technical Services	O	U
Milton Davis	Strand Lighting	Strand Lighting Ltd.	A	P
Richard Lawrence	Strand Lighting Ltd.	Strand Lighting Ltd.	P	P
Tad Trylski	Tad Trylski	Tad Trylski	O	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Thom Weaver	Thom Weaver	Thom Weaver	O	G
Colin Waters	TMB Associates	TMB Associates	O	U
Brian Dowd	TMB Associates (NJ)	TMB Associates	P	U
Hans Leiter	Transtechnik GmbH	Transtechnik GmbH	O	P
Anders Ekvall	Transtechnik GmbH	Transtechnik GmbH	O	P
Charles Reese	Vari-Lite, Inc.	Vari-Lite, Inc.	P	P
Eckart Steffens	SOUNDLIGHT	VPLT	P	G

Name	Company	Parent company/ org. represented	Voting status	Int. cat.
Ken Wagner	Walt Disney Imagineering	Walt Disney	O	U
Keny Whitright	Wybron, Inc.	Wybron, Inc.	O	P
John Sondericker III	Wybron, Inc.	Wybron, Inc.	O	P
Peter Brooks	Zero 88 Ltd.	Zero 88 Ltd.	A	P
Richard Thornton Brown	Zero 88 Ltd.	Zero 88 Ltd.	P	P

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer, non-voting

Interest Categories

- P Producer (manufacturer) of control devices or products
- U User of control devices or products
- G General interest in control devices or products