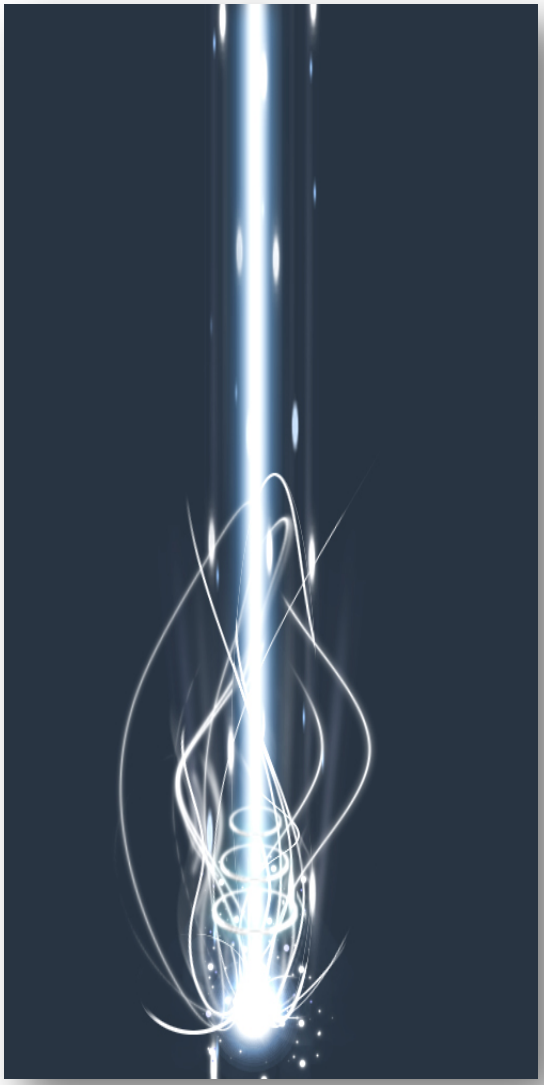
Electric Vehicle Power Connect



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"At Altai Hu, we create renewable and innovative energy connections."
-Chief Cable Engineer

Altai Hu Group was founded in 1976 and has strengthened its market share to become one of the global manufacturers in various fields of wire and cable products.

We have reinvented the term Global Product Management (GPM) with our own manufacturing facilities combined with affiliated strategic partner's to serve our customers. Through our comprehensive offerings and over 30 years of experience, we're able to supply a wide range of cables to optimize your industrial operation and strengthen your competitiveness.

1. The complexity of managing wire and cable solution today requires our expertise and experience in Global Product Management (GPM).
2. Our Direct Global Supply Chain (DGSC) empowers us to provide the most cost-efficiency from initial phase of product development to later phase of shipment delivery.

Unlike other vendors who offer only part of the solution, we help customers at every stage of their product management lifecycle: from development of a new part to technology that conducts testing for all related regulations, we will develop solutions for our clients every step of the way.

- **Our Wire and Cable**

Altai Hu Group's wire and cable roots extend to late 1960s. Through the years, we have expanded our product range from wire and cable for industrial applications to hook-up wires, lead wire, data cable, telecommunication cable and magnet wire for electronic applications.

Today, Altai Hu Group and its associated company ShenZhen Baohing Electric Wire & Cable (a subsidiary of Jiangxi Copper Corporation and is also a joint venture established by ShenZhen JiangTong Southern Corporation) have together formed a team of talented engineers and dedicated employees that continues to provide the best quality products and services in the cable industry. We have been able grow and expand our manufacturing sites in China, Korea, and Malaysia. So, whether you need a cable that has a long-standing market presence, a modified cable design, or a completely new design, we will make sure that your requirements are met with our most competitive pricing terms.

- **Photovoltaic Connect Business**

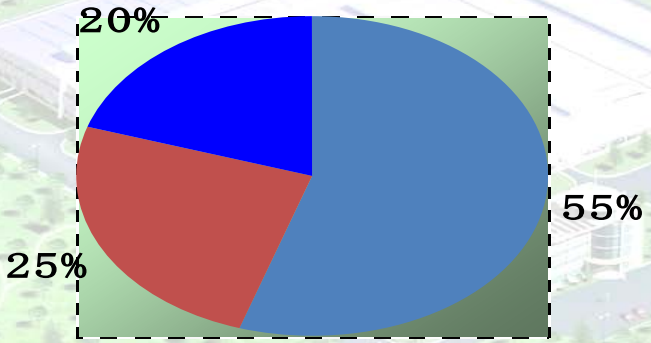
Over the years, Altai Hu has been aggressively expanding into the green industry. We've been one of the leading cable manufacturers in PV cable and PV cable harnesses and have earned the businesses from the leaders in the solar industry. Our cables are both UL and TUV certified. We are also one of the very few cable manufacturers in the world with a Dual Rated (UL and TUV approval) Photovoltaic cable. The vision for Altai Hu Group for 2011 and beyond is extremely positive, as it continues to grow and refine its product line, provide leadership in the Solar PV category in US, Europe and Asia Pacific, to gradually increase its market shares.

- **EV Power Cable**

An industry leader in power cables, Altai Hu offers high performance EV Cables built for electric vehicles, hybrid vehicles, and other equipment. We will be one of the first cable manufacturers in the EV industry to obtain a UL62 approval for our cables. Altai Hu is capable of customizing EV Cables for any specific application requested by the customer. Our EV cables are put through rigorous environmental tests, including exposure to oil, chemicals, abrasion, crushing and many more to exceed our customer's cabling requirements and EV standards. We make sure the quality and durability of our EV Cables are unmatched.

Shenzhen Baohing Wire & Cable Co., Ltd.

Our affiliated partner, Shenzhen Baohing Wire & Cable Co., Ltd. is a subsidiary of Jiangxi Copper Group, which is part of a tripartite joint venture partnership: Jiangxi Southern Copper Corporation (55%), COFCO Property (Group) Co., Ltd. (25%) and Hong Kong China High Properties Limited (20%). The registered capital of $16,415,000 USD, the plant covers 10 million square meters and has 7.6 billion RMB in assets. Shenzhen Baohing Wire & Cable Co., Ltd. recently opened a new manufacturing facility in SuZhou, China, giving Baohing a combined manpower of 2,000 employees.



Jiangxi Southern Copper

COFCO Property (Group) Co., Ltd.

Hong Kong China High Properties Limited

Our Manufacturing Facilities

Shenzhen Plant

Location: Shenzhen, China

Facility size: 100,000 m^2

Number of employees: 1100

SuZhou Plant

Location: SuZhou, China

Facility size: 30,000 m^2

Number of employees: 500

BaoAn Office

(In charge of domestic sales)

Location: BaoAn, China

Certificates:

TÜV Certificate

ISO Certificate

Sony Green Partner Certificate

UL Certificate

BSI Certificates:

ISO9000 certificate issued by **BSI**

TS16949 certificates issued for the automotive industry.

Environmental Friendly Dedication


Certificate
of
Green Partner

CDE PQ-0140

Presented To:

深圳宝兴电线电缆制造有限公司

Shenzhen Baohing Electric Wire&Cable Manufacture Co., Ltd.

This is to certify that you have successfully established
an environmental management system
that has met the requirements of the Sony Green Partner Program

Term of Validity : 2006/01/01 ~ 2007/12/31

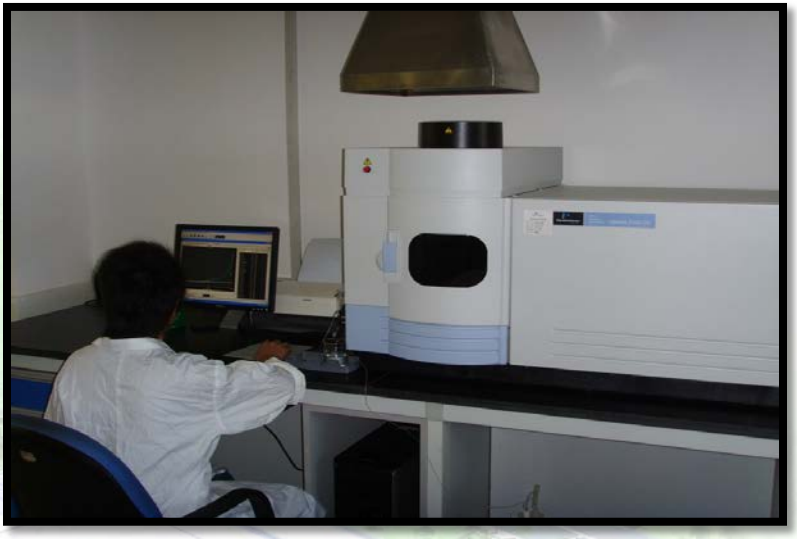
Issued on : 2006/01/05

Approved and Issued by : Procurement Center, Sony Corporation

Toshiyuki Kikuchi
Senior General Manager, Procurement Center, Sony Corporation

Jun Yamazaki
President, China Design & Engineering Group, Sony(China) Ltd.

SONY



Altai Hu has maintained a commitment with our clients to promote GREEN initiatives and play an active role in protecting the earth's resources and natural surroundings. In 2005, we've became a certified Sony Green Partner.

Our Second Phase Facility

Electric Vehicle Introduction

Modern electric vehicles are generally divided into three categories: pure electric vehicles (BEV), hybrid electric vehicle (HEV), and plug-in hybrid vehicles (PHEV). Their prospective vehicles that represent these categories are: BYD E6, Toyota Prius, Chevrolet Volt (or BYD F3DM), Nissan Leaf, Tesla, and many more. The mass production of fuel efficient vehicles began with the Toyota Prius hybrid electric vehicle (HEV), but Toyota's 14-year flagship hybrid only had a global sales of only 190 thousand units per year (40% of the sales are mainly from its homeland country, Japan). The sluggish sales of Hybrid vehicles are mainly due to its high cost and its mediocre efficiency level, which mainly caused other manufacturers to be optimistic about launching a similar model.
HEV vehicles just aren't working in the new energy era that we're living in today. Countries are currently pouring funds into the automotive market to develop energy efficient vehicles. Automotive manufacturers are now deeply involved in a new energy vehicle development of pure electric vehicles (BEV) and plug-in hybrid electric vehicle (PHEV). These alternative energy sources can make a vehicle a lot more energy efficient than an HEV and lower the overall costs of owning a vehicle. PHEVs can run at an estimated one hundred kilometers per 15KW, and electricity is only a quarter of the price of fuel.

World Wide EV Launch Plans

Make	Model	All Electric Range (mi)	Battery Size (kWh)	U.S. Target Intro. Date
Plug In Hybrid Electric Vehicles				
Audi	A1 Sportback	31-62		2011
BYD Auto	F3DM	60		2010
Fisker	Karma	50		2010
Ford	Escape	40	10	2012
General Motors	Chevrolet Volt	40	16	2010
Hyundai	Blue-Will	38		2012
Toyota	Prius Plug-in	12.4-18.6		2012
Volvo	V70	31		2012
Battery Electric Vehicles				
BMW	ActiveE	100		2011
BYD Auto	e6	205		2010
Chrysler/Fiat	Fiat 500	100		2012
Coda Automotive	Coda Sedan	90-120		2010
Daimler	Smart ED	72-90		2012
	Mercedes Benz BlueZero	120	35	2010 low volume
Ford	Focus	100		2011
	Transit Connect	100		2010
	Tourneo Connect	100	21	2011
Hyundai	i10 Electric	100	16	2012
Mitsubishi	iMiEV	100	16	2010
Nissan	LEAF	100	24	2010
Rolls Royce	Electric Phantom			2010
SAIC	Roewe 750	125		2012
Tesla Motors	Roadster	220	56	For sale now
	Model S	160, 230, 300		2011
Th!nk	City	113		2010

EV Cable Contruction (UL Standards)

Electric vehicle cable consists of two or more insulated conductors, with or without grounding conductors, with an overall jacket. The cable is used to supply power, signal, and control to electric vehicles during the EV's charging process. The cable's temperature rating is 60 to 105°C (140 to 221°F).

Type EVJ — Rated 300 V, contains two to six 18-12 AWG thermoset-insulated circuit conductors, and may employ one or more insulated grounding conductors. The cable may contain hybrid data, signal, communications, and/or optical fiber cable in any AWG size.
Type EVJE — Rated 300 V, same as Type EVJ except that the cable employs thermoplastic-elastomer-insulated conductors and jacket.
Type EVJT — Rated 300 V, same as Type EVJ except that the cable employs thermoplastic (PVC) insulated conductors.
Type EV — Rated 600 V, contains two or more 18 AWG to 500 kcmil thermoset-insulated circuit conductors, and may employ one or more insulated grounding conductors. The cable may contain hybrid data, signal, communications, and/or optical fiber cable in any AWG size.
Type EVE — Rated 600 V, same as Type EV except that the cable employs thermoplastic-elastomer-insulated conductors.
Type EVT — Rated 600 V, same as Type EV except that the cable employs thermoplastic (PVC)

3 Level Charging System

Level 1

Level 2

Level 3

Level	Voltage (VAC)	Current (Amps)	Wattage (kVA)	Freq (Hz)	Type	Standard Plug
1	120	12	1.44	60	Single	NEMA 5-15R
2	208/240	32	6.7/7.7	60	Single	SAE J1772/3
3	480	400	192	60	Three	N/A

Our EV Cable

Key Features:

- Weather-Proofing
- SAE J1772 compatible
- Maximum Power Transmission
- RoHS Compliant
- UL Certified

- UL 62 approved
- Compatible with SAE J1772 connectors, UL 2594 and NEC 625 charging systems
- Available in standard cable or custom configurations
- Conductor sizes available from 2 to 18 AWG
- Jacket options include 600V EVE (TPE), 600V EVT (PVC), 300V EVJT (TPE), 300V EVJT (PVC) cables
- Materials are RoHS compliant
- Ideal for electric vehicles (EV), neighborhood electric vehicles (NEV), battery electric vehicles (BEV), hybrid vehicles, low-speed vehicles (LSV), personal electric vehicles (PEV), plug-in hybrid vehicles (PHV) and plug-in electric vehicles (PHEVS)
- Cables are compatible with charging applications at residences, commercial establishments, parking facilities or dedicated charging stations

EV Cable UL Standard

Type of EV Cable	EVJT, EVT	EVJE, EVE	EVJ, EV
Evaluation Standard	**UL 62 and UL 62 CRD 2010-07-01**		
CCN	**FFSO**		
Ratings			
Voltage	EVJT, EVJE, EVJ:		300 V
	EVT, EVE, EV:		600 V
Temperature	60, 75, 90, 105	90, 105	60, 75, 90, 105
Construction			
Conductor Size	EVJT, EVJE, EVJ:		18 – 12 AWG
	EVT, EVE, EV:		18 AWG – 500 kcmil
Conductor Material	Stranded Cu		
Number of Conductors	EVJT, EVJE, EVJ:		2 - 6
	EVT, EVE, EV:		> = 2
Insulation / Jacket Material	PVC	TPE	Thermoset
Construction without Jacket	-	-	-
Construction with Jacket	✔	✔	✔

EV Cable UL Standard

Type of EV Cable	EVJT, EVT	EVJE, EVE	EVJ, EV
Critical Testing Requirements			
Physical Properties	✔	✔	✔
Oil Resistance	✔	✔	✔
Sunlight Resistance (720 hours weatherometer)	✔	✔	✔
Cold Bend (-40 C)	✔	✔	✔
Capacitance and Relative Permittivity, Stability Factor	✔	✔	✔
Dielectric Withstand Test, Insulation Resistance Test	✔	✔	✔
Flame Test	✔	✔	✔

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