



cleverdis

SPECIAL REPORT

INSTALLATION INNOVATION

by Panasonic



Panasonic
ideas for life

INSTALLATION PROJECTION

...BY PANASONIC

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ABOUT PANASONIC & CONCLUSION

RICHARD BARNES - *Editor-in-Chief*



..."it can be a very difficult when it comes to obtaining information when working on a new installation project"...

Richard Barnes has been working as a journalist and presenter since 1980, winning, in 1984, the Pater Award for Radio Journalism in Australia and working as news editor for major networks. He moved to Europe in 1986, where he hosted and produced radio and TV programs for a number of years and has also had feature articles published in prestigious magazines worldwide. His TV reports are still regularly featured on CNN. In 1999, he joined Cleverdis as Editor-in-Chief. Today, his work is extended to running the business unit and broad implication in other communication projects. His expertise in the field means he's now often called upon to counsel leading companies in the field worldwide.

The market for "Installation" projectors is highly specialised, with only a few major manufacturers able to cater for client's demands. Evolving market conditions, new players in the field and a vast difference between work practices of integrators and architects from one country to another in Europe means that selecting projection equipment for fixed installation can be highly complex. The goal being to give the maximum value-add to the end user in their particular application. While Panasonic are a renowned brand in consumer and corporate fields, as well as in the professional video sector, they are occasionally overlooked in the field of installation projection. This is doubtless an error on the part of the architects, designers or integrators working on specs for new projects.

In this Special Report, we highlight the value-added of Panasonic in this sector. Panasonic, having its roots in Japan, nevertheless is firmly

established in Europe, and unlike some others, has a highly organised European management system, with HQ based in the UK, and marketing operations based in Germany. Panasonic has a very complete range of LCD Projectors – not only portable devices, but also for installation, rental and public space utilisation. Their choice of LCD in their entry-range and mid-range products is born from a desire to deliver a homogeneous product line in technical terms and create a high value for money offering through the streamlining of their production processes. However, with a philosophy of providing the broadest range available, DLP™ technology is not only used in the top-of-the-line models, but it has been honed and re-designed by the engineers at Panasonic, resulting, in the case of the PT-D7500 and PT-D7600, in the most compact three-chip (ultra high quality) DLP™ projector on the world market today. In the following pages, we will be looking more closely at Panasonic's projector range and specific value-add in various installations. We will also be giving some background as to the company itself, as well as a brief analysis of the projector market itself, in order to allow you to better understand the positioning of Panasonic.

While we realise that many of those reading this document are already quite sophisticated in their comprehension of the projector business, we aim to underline key points that are indispensable to highlight when looking at Panasonic products, and that may, in turn, add value to your offering when presenting project outlines to your clients.

THE FUTURE IS “BRIGHT” ...

Selecting projection equipment for fixed installation can be highly complex, with the goal being to give the maximum value-add to the end user in their particular application.

Staying abreast of the latest developments in technologies and brand progression is essential. Panasonic's range of projectors is very broad, and while the brand is well known in consumer circles and for portable models for business presentations, it is also widely renowned in the broadcast and professional field. Within this product range, there are a number of projectors that are ideally suited to fixed installation use.

Whether for pre-production, entertainment, stage effects, convention halls, museums, stadiums, sports arenas, public spaces, universities, conference rooms or rental applications, it's possible to find the right machine, with specific features to make your client's job easier. Projectors destined for these applications include spectacular large venue 3-Chip DLP™-based projector machines like the PT-D9610 (SXGA) and 9510 (XGA) (10,000 – 12,000 ANSI Lumens) or the unique PT-D7600 (SXGA) and 7500 (XGA).

For conference facilities, rental or public spaces, there's the “Conference” series, including the PT- L6600 and 6600L

(SXGA), the 6510 and 6510L (XGA) – (ranging from 3,600 – 4,200 ANSI).

For universities, schools, meeting rooms and rental services, the PT-L780NT and 780 are ideal (the NT model offers wireless networking capabilities). The ultra-portable range includes the PT-L735NT and 735 (XGA - 2,600 ANSI) and L520 (SVGA, 2000 ANSI). The PT-L735NT is equipped for dual operation - wireless presentation or PC-Free presentation with an SD memory card.

STOP PRESS

LAUNCH OF NEW DLP™ PROJECTOR THIS AUTUMN

Panasonic plans to launch, around autumn 2004 (date to be announced) a new DLP™-based projector for the installation market. The catch words will be quality, reliability and price, compared to LCD competitors. The unit will have a good output and durability for installation application, and will complete Panasonic's range, offering a solution for a market sub-sector that was previously ill catered for. It will be able to be used for conference rooms, right up to e-cinema applications.



..”WE ARE VERY STRONG IN THE BROADCAST AND PROFESSIONAL AV MARKET, AND THIS EXPERIENCE IS PASSED-ON TO PRODUCT DEVELOPMENT”...

CHRISTIAN SOKCEVIC - *Panasonic Marketing Europe GmbH*



Christian Sokcevic has joined Panasonic since 1999 as projector specialist. He is responsible for marketing of system and installation projectors at Panasonic Marketing Europe.

Cleverdis: How is Panasonic situated in the installation market?

CS: We are a major player in home cinema, portable and high light output (over 5,000ANSI) areas. We target the installation market - such as 3000-5000 ANSI area in 2004, setting the trend with our product. Our objective is to grow in this segment, primarily targeting the installation market, to get a good network working and to gain market share.

Cleverdis: What is different about your projector line-up and what's different about what you do in the installation sector?

CS: At Panasonic, we can offer a variety of solutions for this market - both LCD and DLP™. Panasonic's policy is to offer the

right products for different customer needs. We develop both LCD and DLP™ technologies in-house, meaning we can help our clients deliver the right product for their customers' needs. Thanks to our product range, we are able to fit all applications - across the board. When you consider the background and savoir-faire of Matsushita and Panasonic, we are very strong in the broadcast and professional markets, and this experience is passed-on to product development, as well as being able to advise customers on the most professional way to use their equipment.

Cleverdis: How does Panasonic work to help AV designers, integrators and architects in building their projects?

CS: We have created a new organisation which is taking care of the European market, in which I'll be responsible for the systems segment. We are now able to offer integrators and architects and others involved in system planning a CD-ROM with all the information they need about the design of the projectors, their specifications, pictures, calculators and so on, so that it is as easy as possible for them to use our products in their projects. We're also planning to establish a web-based network which makes it possible for those customers to get on-line information and support.

Cleverdis: What types of inquiries do you generally receive from architects and integrators?

CS: Very often they have questions about the installations themselves. The questions generally revolve around exactly how to realise the system using our projectors, in order to achieve the result their clients are looking for. For example, with our DLP™ projectors, we have the unique "edge-blending" function. This makes it quite easy and very useful for the customers to create multi-projector installations for a spectacular effect. Not only do they use the projector as an image-making product, it's a marketing tool. They earn money with it, so it's vital integrators, designers and architects have the informational tools they need to be able to relate our value-added, and therefore their own value-added to their own clients.

Cleverdis: Cleverdis: Features like built-in edge blending may not be the first thing that comes to mind when planning an installation. How does this add value?

CS: A designer may have a request for a projection system with four, five or six inputs and the client may wish to do picture-in-picture, split the image into various segments, or to make a unique projection format rather than 4:3 or 16:9. In cases like this, Panasonic has been working to help them understand the essential factors. Namely, what products would be the most useful for this, what kinds of sources are needed, how difficult it is to set-up, and how to obtain the best result in the most cost-effective way. The

goal is to make installations easier.

Cleverdis: Can you give an example of how your solutions can make a difference in this sense?

CS: Yes. In January 2003, for example, an installation was made at the Siemens HQ in Germany with 16 projectors. 8 of

them were 3-Chip DLP™-based projectors – the 7500 – 7600 series – using built-in edge-blending. The client also needed picture-in-picture, projecting the image from an LCD projector into another image from a DLP™ projector. Most of the companies they spoke to tried to solve this problem through the play-out server, which was very expensive, but because the 7600

had built-in picture-in-picture function, it was easy to find a solution without heavy investment in external equipment. We want our clients to understand all the resources behind the products and how best to use their features. I think in the case just mentioned, they saved hundreds of thousands of Euros, just by using this solution.

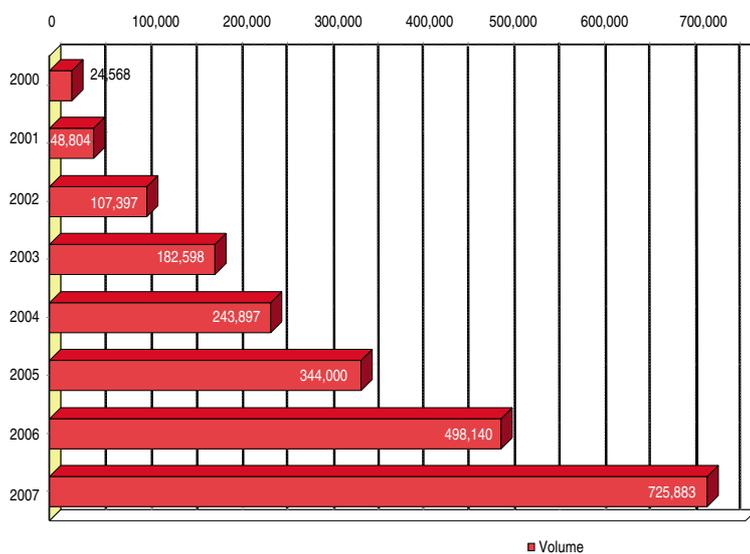
PROJECTOR MARKET OVERVIEW

The biggest issue at the moment is the increasing convergence between the CE, IT, OA and AV markets. When the projector first came into the market, it was completely product based, and we saw the AV business thrive. Then we saw the introduction of the IT/Broad-line channel which has been making considerable inroads. In 2005, we will start to see the market take a more “solution-based” route, which includes more and more Meeting Room, Classroom and Home Entertainment solutions. In the corporate and education environments, these mean increased possibilities for interactivity, multiple input sources for content, audio systems, links to high bandwidth network, media servers, content management systems and AV control systems.

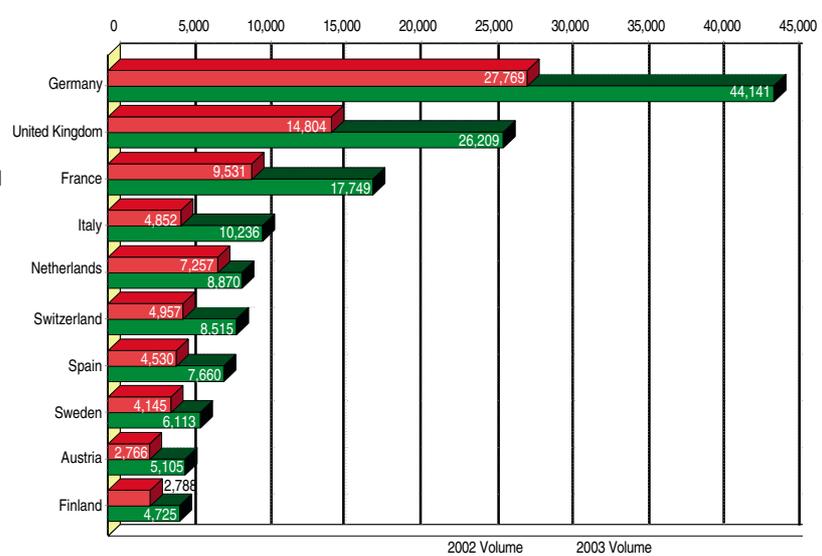
While looking at mainstream fixed installation market figures, as provided by DTC, it is evident that two prime trends are evolving: The fixed install market has been experiencing very rapid growth, and will continue to do so over the next years (see chart). The “hottest” market in Europe is Germany, however growth rates in the UK and France are phenomenal, and the rest of Europe leaves little to be desired on a volume basis.

It is therefore evident... the market is there and is waiting to be tapped. However, only those who deliver true value-added will shine.

B2B FIXED INSTALL MARKET EMEA (+2000 LUMENS, XGA AND ABOVE)



B2B FIXED INSTALLATION VOLUME (+2000 LUMENS, XGA AND ABOVE)



Charts courtesy of DTC

3-CHIP DLP™ WITH A DIFFERENCE



THE WORLD'S LIGHTEST 3-CHIP DLP™-BASED PROJECTORS

When we think about 3-Chip DLP™-based projector, a few things come to mind: image excellence, robustness, high light output, and ... heavy! The 7600/7500 series by Panasonic fills a market segment for which no-one had a product before. The concept of the 7600 or 7500 is that of having maximum image quality, by using three-chip DLP™ technology, combined with the cost effectiveness of an LCD-style projector. However, through in-house development, Panasonic have greatly reduced the size and weight of the product. Indeed, weighing-in at less than 20 kg., the 7600 and 7500 are "one-man carry projectors", while the average 3-Chip DLP™-based projector still weighs 60-80 kg. In the installation market, for rentals and staging etc., this generally means sending at least three or four technicians to set the projector up. Using this solution, a team of one or two can be sent in to obtain the same result. Major economies are also made through the fact that these are the first 3-Chip DLP™-based projectors to use proprietary UHM lamps, while normally, 3-Chip DLP™-based projectors use very expensive Xenon lamps. Behind this technical evolution, Panasonic have their own lamp factory, and the engineers from the projector factory work directly with those of the lamp factory in product development.

This change in technological tack reduces Total Cost of Ownership dramatically, with this solution reportedly being up to one tenth of the cost of Xenon. This different lamp technology also has a flow-on effect. With Xenon lamps, very high voltage is required to realise high brightness... For example, one needs about 1200 watts to achieve 7000-8000 ANSI Lumens brightness. Panasonic however use two bulbs with UHM technology, each drawing 300 watts. This automatically reduces temperature problems, meaning a reduced need for air flow, and a resulting reduction in fan noise. It thus affects the whole size and concept of the projector. In addition, the BriteOptic™ dual lamp system improves the reliability of the units. In the case one lamp breaks, there's always another one to get you through the rest of your presentation.

THINK BIG – THINK LARGE VENUE DLP™ PROJECTION

Panasonic's large venue machines – the 9610 and the 9510, are more directly in competition with some of the other 3-Chip DLP™-based projectors on the market. So what are their main differentiating factors? Again, size and weight. At first glance, they may seem bulky, but in fact in this class they're quite compact. Another important factor is the efficiency of the lamp, which is 1600 watts instead of 3000 in other 3-chip DLP™ machines. Then there's the edge-blending technology, which is integrated. Another point is the universal format converter, which was developed by Panasonic and also comes from the experience in the professional broadcast market. Panasonic is the first manufacturer to have developed a machine that can handle all high definition signals, starting at 720, up to 1080, at any frame rate, and the user can even edge-blend with it. With the optional slots they have the possibility of having four different inputs, depending on their usage. Again, with this projector, the user has the possibility to link it to their network, to control it, and monitor it from anywhere they want.

PANASONIC – A VERTICALLY INTEGRATED MANUFACTURER

Panasonic is in a unique position in the market for DLP™ installation projectors, in that they manufacture all the main elements, from the from the optical system to the electronic circuits - from the 7600 series down to the new DLP™ machine. They are thus non-dependent on other component manufacturers and are not at the mercy of the latter in terms of supply shortages. This "vertical integration" within the company also gives Panasonic the chance to totally control the quality of their production right from the ground up.

TOTAL COST OF OWNERSHIP: A VITAL ISSUE IN HEAVY DUTY SITUATIONS

Fixed installations require high pixel count and high quality machines. Durability and Total Cost of Ownership are thus more than important. While there are many LCD projectors in this market, this technology has some disadvantages, such as TCO in situations where the projector is used intensively. The LCD panel may have to be changed as often as every 2000 hours. This is not a problem if you only use the projector a few times a week or for short periods, but if usage is more intensive, it changes the whole TCO scenario. If the projector is being used, for example, in a subway station where it's working 20 hours a day, LCD is not an economical solution. The installation market often calls for machines that are better suited to heavy-duty use. We have two engineering departments – for LCD development and for DLP™ development, and this means we can supply the best devices for each application category.

PT - D7600/D7500



- 6000/5000 ANSI Lumen
- SXGA-/XGA- Native Resolution
- BriteOptic™ Dual Lamp System
- Multi-Screen Function
- Light weight 19.8kg & compact size

PT - D9610/D9510



- 12000/10000 ANSI Lumen
- SXGA-/XGA- Native Resolution
- High Contrast Ratio 1000:1
- UFC for faithful moving pictures
- Multi-Screen Function

INSTALLATION FLEXIBILITY

The PT-D7600E and PT-D7500E end the trade-off between image quality and portability— they give your customers both. You can thus now install a high-performance projector with DLP™ technology in places where in the past it was too difficult. Two types of optional ceiling mount brackets are available with the PT-D7600E and D7500E. The dual stacking mount bracket lets you double the brightness—12,000 ANSI lumens for the PT-D7600E and 10,000 ANSI lumens for the D7500E.

DIGITAL CINEMA REALITY™

The Digital Cinema Reality™ circuit provides progressive processing optimised for 24 frames. Moving source, helping to reduce the image with quality faithful to the original cinema image.

NETWORK FUNCTION

The optional interface board ET-MD75NT for 10Base-T and 100Base-TX makes the PT-D7600E / D7500E and PT D9610 / D9510 network-ready. With this board mounted, all functions can be controlled from a personal computer on a local area network (LAN) via a standard Web browser without any additional software. By assigning a TCP/IP address to the projectors, you can monitor their operation over LAN or the Internet.

CINEMA-QUALITY PROJECTORS

- Ultra-high contrast ratio of 1,000:1
- Built-in multi-screen edge blending technology
- Network functions including remote control and status monitoring
- Abundant options for versatile system configurations
- Low-noise design

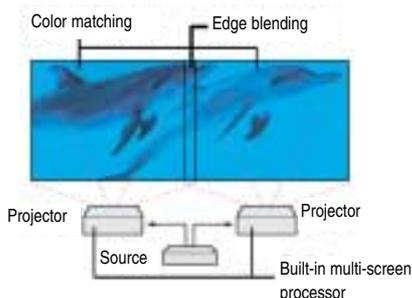
COLOUR MATCHING

When several units are used together, this function corrects for slight variations in the colour reproduction range of individual projectors. The PC software assures easy, accurate control. To simplify the set-up process, you can adjust the projectors before delivery to the presentation site. The colour matching function accommodates up to nine units, for multi-screen or single screen presentation.



MULTI-SCREEN SUPPORT SYSTEM

Incorporates the color matching and edge blending features featured on projectors such as the PT-D9610. Adjusts multiple-screen projection to produce an optimized image, resulting in a remarkable improvement in the extent to which multiple screens are integrated into a single image and enabling sophisticated image staging.



LCD PROJECTORS

While DLP™ has some clear advantages in heavy duty situations, LCD is still be far the market leader in areas where utilisation is not quite so intensive, or where initial cost is an important factor. In these cases, Panasonic has some “clever” solutions, through the adding of value to their offering thanks to feature sets and a clear understanding of the needs of professionals in the field. Again, this harks back to Panasonic and Matsushita’s background in the professional domain including broadcast solutions, meaning they have a firm grip on such things as video presentation and HD scaling, which are vital nowadays when planning installations, whether they’re for corporate boardrooms, schools or universities, or for the fast-growing rental market.

The PT-L6600E/EL and the PT-L6510E/EL projectors incorporate Panasonic’s highly acclaimed BriteOptic™ Dual Lamp system, which delivers high definition images with exceptional brightness. Panasonic have been reacting to extensive user input, they began by making key improvements to the system engine, then devised a symmetrical design that places the lens directly in the unit’s centre, for easier positioning.

They have also incorporated the latest DSP technology to ensure precise, consistent performance. The result is greatly improved set-up and maintenance in projectors that deliver ultra-bright, clear images.

PRODUCT FEATURES

Many features are available on Panasonic’s LCD projector line-up for installations – too numerous to list in this brief overview of their range. Following are some of the prime features that



truly differentiate this range from others, and in turn assist the AV designer or integrator in adding value to his customer’s offering.

INTERCHANGEABLE LENSES

On the PT-6600L, 6510L, 780NT and 780, another important factor is that lenses can be changed, depending on the kind of room they’re being used in. This allows for much more flexible installations. Short throw lenses allow throw distances right down to 0.55 m, while long-throw lenses give ratios right up to 6:1, meaning you can distance a LCD projector up to 35 metres from the screen!



WIRELESS CAPABILITY – A MAJOR BENEFIT

One major selling-point for Panasonic’s top-line LCD Projectors is their networking capability (wireless LAN). With the 735NT, for example, Panasonic was the first to have introduced wireless LAN with a “real-time” function. This real time capability was not possible before. Settings and operation are made very simple thanks to a sophisticated software package delivered with the wireless versions of these projector models. The new “live” mode allows wireless presentations that include animated content from Powerpoint®, web pages and other sources.

SOUND SOLUTIONS

How often have clients complained that their projectors don’t have adequate sound capability, or have none at all? Professional presentations, even coming from Powerpoint®, nowadays often have audio included, and while many larger systems you design or reference will have specific sound capability, those with more limited budgets can be greatly assisted by the fact that Panasonic’s top-end LCD ranges come complete with built-in stereo speakers that produce clear, powerful sound. The PT - 735NT and 735 have 5-watt stereo speakers.

PT - L6600/L6510



- 4200/3600 ANSI Lumen
- SXGA-/XGA- Native Resolution
- BriteOptic™ Dual Lamp System
- Digital Cinema Reality
- Digital Keystone Correction

PT - L780NT/L780



- 3200 ANSI Lumen
- XGA Native Resolution
- 3 optional lenses
- Power Zoom/Focus
- Wireless /Wired LAN Capability (L780NT)

L735NT WIRELESS



- 2600 ANSI Lumen
- XGA Native Resolution
- Quiet Operation 28dB
- 5W Stereo Speaker
- Wireless & SD Capability (L735NT)

BRITEOPTIC™ CONFERENCE LCD PROJECTORS

PT-L6600/6510 employing the lamp units, the revolutionary BriteOptic™ Dual Lamp system provides high brightness, high contrast, and faithful colour reproduction.

Maintenance is easier too, thanks to a design that lets you replace a lamp without moving the projector from bracket in either the ceiling-mounted or dual stacking configuration.

- Ultrabright performance with 4-mode lamp operation
- BriteOptic™ dual lamp system and UHM™ lamps
- True SXGA (1280 x 1024), maximum UXGA (1600 x 1200) resolution

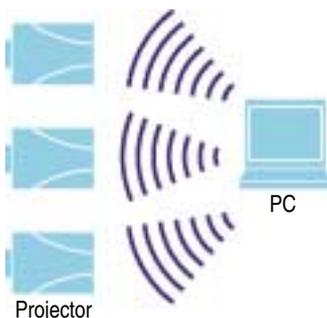


- Digital Cinema Reality for excellent moving images
- Multiple terminals, including digital visual interface (DVI)
- Easy setup and maintenance: Auto setup with digital keystone correction
- Stackable for double brightness

The PT-L6600EL and PT-L6510EL deliver the same superior performance as the PT-L6600E and PT-L6510E, respectively, but come with no lens. They may be combined with an optional lens to create a system that's tailored to your customer's specific presentation needs and usage conditions.

PORTABLE LCD PROJECTORS

- Time-Saving functions (PT-L735). Speed start slashes the time it takes to get your presentation. The image appears less than 10 seconds after you turn on the power. -about 1/4 to 1/6 the time of previous projectors.
- Wireless -The L735NT uses wireless networking technology and SD Memory Card compatibility to deliver a new level of presentation performance
- Easy operation thanks to advanced auto setup; wireless remote control via a Web browser; and SD Memory Card for PC-free presentations
- Powerful performance with 2,600 ANSI brightness
- Quiet – Whisper quiet performance



WIRELESS + SD MEMORY CARD SYNERGY "PC-FREE" PRESENTATIONS WITH SD MEMORY CARD

By first assigning a distinct IP address to each projector, the user can transfer data or adjust settings on a particular projector without affecting the other networked projectors. For example, they may use this advanced feature in a car showroom to present a unique demo on each of 20 or more projectors. The user prepares the demos in advance on their PC, then transfers the appropriate data to each projector. The PC doesn't need to be continually accessed for projector control, and the wireless design eliminates the need to run a host of cables from the projectors to the PC. This saves considerable time, trouble, and labour costs in setting-up and maintaining a presentation system.

ABOUT PANASONIC

OVERVIEW

Panasonic is a brand name of Matsushita Electric Industrial Co Ltd. of Japan (MEI), one of the World's largest manufacturers of consumer electronics and ranked 3rd on the Fortune 500 Electronics & Electrical Equipment Index. As of March 31, 2003, Matsushita Electric Industrial Co. had net sales of over \$61-billion US dollars, with 288,324 employees in 384 Consolidated Companies.

HISTORY

The company was founded in 1918 in Osaka, Japan by Konosuke Matsushita and has grown from just 3 employees to over 290,000 people worldwide. Panasonic's standards are still firmly grounded in the philosophy of company founder Konosuke Matsushita. He began in 1918 by inventing a two-socket light bulb. Profound in its importance yet elegantly simple, Konosuke Matsushita's breakthrough led to what is now one of the world's largest electronics companies. As he built Matsushita Electric Industrial Co., Ltd., he never lost sight of the importance of putting the needs of his customers and the public first. The company's operations all over the world are guided by certain key objectives. One of the most important of these was established way back in 1929 by their founder, and is as relevant today as it was then.

"RECOGNIZING OUR RESPONSIBILITIES AS INDUSTRIALISTS, WE WILL DEVOTE OURSELVES TO THE PROGRESS AND DEVELOPMENT OF SOCIETY AND THE WELL-BEING OF PEOPLE THROUGH OUR BUSINESS ACTIVITIES, THEREBY ENHANCING THE QUALITY OF LIFE THROUGHOUT THE WORLD."

OPERATIONS

Panasonic has been operating in Europe since 1962, when it established its first sales office in Hamburg, Germany. The company's presence has increased throughout Europe following major investment programmes in manufacturing and sales operations. Panasonic now employs nearly 15,000 people in manufacturing, sales, R&D and support companies throughout Europe.

ENVIRONMENTAL RESPONSIBILITY

Panasonic is a company that takes its responsibilities as a European and Global Citizen very seriously and foremost amongst these is a duty to protect the environment. Panasonic actively promotes diverse environmental initiatives and harmonious co-existence with the global environment in all its business practices. In

particular Panasonic emphasizes developing eco-friendly products, reducing the environmental impact from manufacturing and establishing recycling systems.

GREEN PRODUCTS

In line with our basic environmental concepts of "elimination, reduction and utilization", we have developed Green Products and added the environmental values of "energy-saving", "clean (reduced use of regulated chemical substances)" and "3Rs (reduce, reuse, and recycle)."

ENVIRONMENTAL FORUM

On December 5 and 6, 2001, Matsushita Electric hosted the Environmental Forum by Panasonic in Freiburg, Germany, renowned as the environmental capital of the world. The aim of the forum was to introduce the vision and technological aspects of "quality life through sustainable development" to experts in both the academic and industrial fields, and to collect their frank criticism and comments. It also marked the 10th anniversary of the company's landmark "Environmental Charter" in which we pledged "the prudent, sustainable use of the earth's resources and the protection of the natural environment."

CONTACTS

Panasonic Business Systems UK

A division of Panasonic UK Ltd
Panasonic House
Witloughby Road
Bracknell Berks
RG12 BFP
United Kingdom
Tel. 44 (0) 1344 853445
Fax. 44 (0) 1344 853744

Belgium

Panasonic Belgium N.V.
Stationstraat 26
1702 Groot-Bijgarden
Tel. 32 (0)2 481 04 93
Fax. 32 (0)2 463 2700

Denmark

Panasonic Danmark A/S
Ejby Industrivej
2600 Glostrup
Tel. 45 43 20 08 00
Fax. 45 43 20 08 99

Germany

Panasonic Deutschland GmbH
Professional AV Media
Hagenauer Str 43
65203 Wiesbaden
Tel. 49 (0) 611 253 401
Fax : 49 (0) 611 235 411

Finland

Kaukomaarkkinat Oy
Kutojantie 4
02630 Espoo
Tel. 358 (9) 521 52 53
Fax. 358 (9) 521 28 10

France

Panasonic France SA
270 Avenue du President Wilson
93218 La Plaine Saint Denis
Tel. 33 (0) 1 49 46 45 89
Fax. 33 (0) 1 49 46 45 26

Greece

Intertech SA
24, Afroditis St
16777 Hellhiko
Tel. 30 210 96 92 300
Fax. 30 210 96 48 588

Italy

Panasonic Italia S.p.A
Via Lucini 19 - 20125 Milan
Tel. 39 02 67 88 556
Fax. 39 02 67 88 263

Netherlands

Haagtechno BV
Europolaan 30
5232 BC's Hertganbosch
Tel. 31 73 66 02 714
Fax. 31 73 66 15 200

Norway

Panasonic Norge
Branch of Panasonic Nordic AB, Skareletta 50
1471 Loerenskog
Tel. 47 67 91 78 00
Fax. 47 67 91 78 90

Austria

Panasonic Austria
Handelsoges m.b.H
Professional AV Media
Laxenburgerstra 252
Vienna 1081
Tel. 43 (0) 1 6 10 80 515
Fax. 43 (0) 1 6 16 04 04

Poland

Panasonic Polska Sp z.o.o
AL Krakowska 4/6
02-284 Warszawa
Tel. 48 (22) 338 1100
Fax. 48 (22) 338 1200

Portugal

Prosonic. Produtos de Imagem
Comunicaçao S.A
Rua Quinta de Pinheiro
Nº16 Edit Tejo
Portela de Carnaxide
2790-149 Carnaxide
Tel. 351 21 425 77 04
Fax. 354 21 425 77 05

Switzerland

John Lay Electronics
Professional Audio Video Systems
Littauerboden
6014 Littau
Tel. 41 (0) 41 259 96 32
Fax. 41 (0) 41 252 03 12

Sweden

Panasonic Nordic AB
Ellipswagen 12
14175 Kungens Kurva
Tel. 46 (8) 680 26 00
Fax. 46 (8) 680 26 26

Spain

Panasonic Espana s.a
Dept AVC professional
Tarradellas 20-30 5pl
0029 Barcelona
Tel. 34 (93) 425 93 00
Fax. 34(93) 425 94 35

Czech Republic

Panasonic Czech Republic s.r.o
Krizikova 237/36A
786 00 Prague
Tel. 420 236 032 552/511
Fax. 420 236 032 450

THE CLEVERDIS VISION



GÉRARD LEFEBVRE

President & CEO

Gérard Lefebvre is President & CEO of Cleverdis, he has held positions of Director and Chairman with a number of companies in the Display and Digital Peripherals Industry. He is recognised world-wide by industry leaders and the management of major end-user organizations for his work in creating true, efficient and sincere communication between consumers and vendors.

Panasonic, the Japanese giant, part of the Matsushita group, is firmly implanted

in Europe, not only in the form of branch offices, but through Matsushita's R&D work carried out on-site at manufacturing facilities, including their European Laboratories in Germany. Who'd have thought, just over a century ago, that such a spark could emanate from a frail, sickly bicycle apprentice who survived unspeakable childhood tragedy, leaving home at the age of 9 to work as an apprentice in the city. Perhaps those early hardships produced hidden strengths which opened Konosuke Matsushita's mind to the collective wisdom of others.

A lifelong thirst for learning fuelled the passion that led this humble, shy 5-foot-5-inch humanitarian idealist to pioneer management practices and advance his philosophy that the mission of a manufacturer is to relieve poverty and create wealth, not only for shareholders, but for society.

This philosophy flows-on to the customers of Panasonic, and in the installation market for projectors, to the end users, who benefit from this philosophy that aims to create a better world for all. Panasonic have proven to be leaders in terms of implementation of

several new technologies, none the least of which include "live" wireless technology and major size and weight reductions for 3-chip DLP™ projectors for the installation market.

In this sense, as Japanese manufacturers, they have taken the strength of the US-based (Texas Instruments) DLP™ chip and turned it to their own purpose, refining the technology and combining it with their own specific know-how, to create machines that truly stand out in the market. Not fearing to venture brazenly into new territories, Panasonic are sometimes ahead of their time, and suffer the consequences of leading and tramping new ground, rather than simply following.

In other words, while investing heavily in R&D, they must also invest in educating their potential customers in order that they understand the potential of the technologies they are developing.

Their mission to educate the market is highly commendable. Initiatives such as this Special Report are proof that the company is taking its role as a market leader seriously.

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116, avenue Eugène Mirabel, 13480 Cabriès - France - Tel: +33 4 42 77 46 00 Fax: +33 4 42 77 46 01

E-mail: info@cleverdis.com - www.cleverdis.com

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