

THE BRONCOLOR

Special Edition for Anniversary 2008



broncolor



Editorial

Dear reader

50 years have passed since brothers Pierre and Joseph Bron founded Bron Elektronik AG as a family business. The company has developed in a remarkable way, thanks to an uncompromising business policy based on the quality and reliability of its products. From the very beginning, research has been generously funded to provide users with revolutionary solutions that improve the quality of their work while at the same time enabling them to leverage their investments through innovation.

In the early days, the company specialised in lighting systems, initially for reproduction and studio photography. Parallel to the VISATEC product line, it also moved into portrait and wedding photography. The advent of digital photography increased the demand for high quality lighting, and the advantages of broncolor products (light quality, constant colour temperature, repetitive precision, etc.) are now more important than ever. broncolor also turned its attention to areas outside its previous focus, to lighting for fashion and beauty photography. Over the past decade, Bron Elektronik's kobold products have represented an additional specialisation in continuous light for TV, cinema, and event applications.

This year, we have the opportunity to celebrate 50 successful years in the sector light and lighting, with our customers, sales partners, suppliers and employees. A series of promotional events is planned over the next months, and we would like to encourage you to visit our website www.bron.ch on a regular basis.

You are looking at a special issue of our magazine, which retraces the history of our business and introduces the most important products that have characterised it. A poster enables you to visualise the various power packs and monolights developed and produced in the company's headquarters in Allschwil, Switzerland. Many of these products, even those that are 20 and 30 years old, are used daily by their owners. For the photographer, they are a guarantee of quality.

All that remains for me to do is to thank you, our loyal customers, for the trust you continue to place in us, and for the expectations you have of our products. This has been our motivation to pursue a question for excellence and offer you innovations in light and lighting year after year.

Jacques Bron





Always in the right light: Bron Elektronik AG turns 50

Bron Elektronik AG has been making lighting and flash systems for photographers since 1958. The company's anniversary slogan – “50 light years ahead” – reflects the fact that its market leadership is based on 50 years of light, so to speak. Its success is no coincidence: Bron is specialised in a narrow but deep range of products, pursues intensive research, develops superior equipment, and is always accessible to customers. A family atmosphere reigns at the Allschwil headquarters, and the company's 90 employees are highly motivated.

The success story really began in 1948 when brothers Pierre and Joseph Bron established Bron & Co. in Basel. They coated lenses, sold X-ray systems, and imported and distributed photographic equipment. A year later, they were appointed Dimitri Rebikoff's distributor of flash units for studio photographers. Rebikoff discontinued production in 1952, but Bron & Co. hired his two employees and began to manufacture the flash units under the broncolor label. A great brand was born. In 1958, the brothers founded Bron Elektronik AG to develop, manufacture, and globally market professional studio flash units. In 1962, they parted ways: Joseph purchased all shares of Bron & Co., and Pierre acquired Bron Elektronik AG.



Management: Claude Bron, Jacques Bron, Marcel Griessmann

The second generation takes the helm

In the 1970s and 1980s, Bron expanded its distribution network and opened subsidiaries in all major markets. Concurrently, Bron planned and built new production and office premises. In 1990, Pierre Bron transferred the leadership of the company to his son Jacques who has been running it in his father's spirit ever since. Jacques is responsible for management, finance, and administration. Claude Bron, the founder's nephew, joined the company in 1970 and is in charge of marketing and sales. Marcel Griessmann heads up the research and development department. Each of the three senior executives has a clearly defined scope of competence and the upbeat in-house climate reflects the fact that they are good friends. The management does a lot to make sure the roughly 90 employees in development, assembly, and administration enjoy their work. Claude Bron summarises the company philosophy this way: "Since all of us spend a large portion of the day here, everyone should feel at ease on the job. Only people who like their work do a good job." The staff members appreciate flexible working hours, spacious workstations with plenty of light, and a personnel restaurant with a sun terrace. No wonder the turnover rate is so low.

600 companies supply about 8,000 parts

Bron develops the components on advanced CAD/CAM systems. The detailed data sets generated by these computers are the input for suppliers from all over the world. Some 600 companies deliver approximately 8,000 parts to Allschwil, where they are inspected, warehoused, and administered. Delivery, storage, development, and production are optimally co-ordinated.

An entire floor is dedicated to the assembly of circuit boards and the polymer shells of the flash units. Because of differences in line voltage, frequency, and safety codes, certain flash units have to be produced in as many as 13 versions. In a separate room, a robotic system places surface-mounted devices (SMDs) on the circuit boards. These components, mostly resistors and capacitors, are much smaller than their conventional counterparts and have flat terminals rather than legs, so they are soldered directly on the boards. The circuit board does not have to be drilled, thus simplifying and expediting automatic circuit assembly processes. This is the technology that Bron uses most often now.

Extra usefulness, extra added value

Bron Elektronik AG develops and produces its products in-house. This is one of the key reasons for the company's success. At the Allschwil facility which spans about 5,000 m², employees design circuitry and mechanical components for lamp bases, power packs, and ballast units. New products are only developed if they are truly useful for the photographer and provide genuine added value. The ideas originate from discussions with users around the world, from feedback given by the two resident photographers who work in the professional environment of our in-house studios, and from the in-depth technical know-how of the developers. "We want to know as early as possible what our customers need, so we're already working on the lighting solutions that will be the benchmark tomorrow and beyond," says Jacques Bron, explaining the ambitions of the developers.

As soon as a project has been green-lighted, all specifications for the future product are defined and listed, including realistic manufacturing costs and budgets for marketing measures. Then, the designers begin to visualise it in keeping with the corporate identity, because all products have to be recognisable as Bron originals; that is decisive for their success. But the designers are at liberty to choose the materials and technologies they feel are best suited. Because of Bron's deliberate policy of low vertical integration, they do not have to consider the capacity utilisation of a machine, so they can choose the ideal material or the most appropriate surface finishing technology for each product.



50 years of history in a time capsule

- 1958** Pierre and Joseph Bron establish Bron Elektronik AG.
- 1962** Pierre Bron acquires all shares of the company.
- 1970** Bron Elektronik establishes a distributorship in Germany.
- 1977** Bron Elektronik establishes a distributorship in France.
- 1980** Bron Elektronik establishes a distributorship in the USA.
- 1982** Bron Elektronik moves to its new production centre in the Allschwil industrial zone.
- 1990** Pierre Bron hands the helm over to his son Jacques.
- 1990** The second construction phase ends with an office wing adjacent to the production centre.
- 1993** Bron Elektronik introduces VISATEC, the second product line after broncolor.
- 1999** Bron Elektronik acquires all assets of Kobold Licht GmbH, now named Bron Kobold GmbH; the company continues to manufacture Kobold products in Wolfratshausen (Germany).
- 2002** Bron Elektronik establishes Bron Kobold USA as the US distributor of all Kobold and VISATEC products.
- 2005** Bron Elektronik develops the new Kobold Event line for the trade fair market.
- 2008** Bron Elektronik celebrates its 50th anniversary.

Milestones in technical evolution

- 1962** Bron uses electrolytic capacitors for the first time to reduce the weight of flash units.
- 1965** Bron begins to use printed circuits in flash units, making them easier to manufacture and service.
- 1968** Bron launches the world's first monolight at Photokina.
- 1968** Bron produces the first flash unit with symmetric and asymmetric power distribution.
- 1971** Bron introduces the Hazylight area lamp.
- 1976** Bron introduces infrared flash synchronisation (power pack 404).
- 1980** Bron introduces infrared remote control for power packs und large-area lamps (Servor).
- 1982** Bron introduces the Impact flash unit with polymer shells.
- 1984** Bron launches the first microprocessor-controlled power pack (Pulso).
- 1996** Bron introduces the first power pack with selectable flash duration and stabilised colour temperature (Grafit A).
- 1996** Bron launches the first power pack that can be controlled with a PC or a Mac (Grafit A).
- 1998** Bron introduces the first weather resistant HMI continuous light for cinema and television (bron 400).
- 2002** Bron uses RFS for the first time to remotely control power packs with a PC or Mac using radio frequencies.
- 2006** Bron introduces the Verso power pack with a revolutionary battery concept featuring short recharging times.
- 2008** Bron showcases its latest developments at Photokina.

Product Highlights

The predecessor of Bron Elektronik AG in Allschwil near Basel was Bron & Co., a company domiciled in Basel that was founded by brothers Pierre and Joseph Bron in 1948. One year later, in 1949, they started to market the products of Dimitri Rebikoff, an engineer born in Paris in 1921. As a photojournalist, he began to gain experience with flash devices after the war. Their shortcomings prompted him to develop his own flash unit and later, he appointed the Bron brothers as distributors for Switzerland. After Rebikoff withdrew from the business in 1953, Bron & Co. continued to manufacture his studio units. The growing popularity of colour photography in advertising and fashion inspired the still young company to adopt “brnecolor” as its brand.

The following descriptions will acquaint you with some particularly successful studio flash power packs and monolights that will always be associated with the brnecolor brand and contributed significantly to the success of Bron Elektronik AG:

Studio power packs



BC 1
[1958 - 1961]

The first power packs manufactured under the “brnecolor” brand still clearly bore Rebikoff’s signature: high-voltage metallised paper capacitors, an operating voltage of 2500 volts, a General Electric plug-in flash tube, 40 watt incandescent lamp as a modelling lamp and a photocell that was a direct descendant of Edgerton’s Kodatron. These packs were rated 400, 600, or 900 joules. The first brnecolor BC 1 units were still built by Bron & Co., but manufacturing was handled by Bron Elektronik AG soon thereafter.



700 R
[1968 - 1971]



750/1500 RT
[1971 - 1978]

The Series 700 R and 1400 R units were the world’s first flash power packs with a choice of symmetric or asymmetric power distribution for all four lamp base outlets. In this generation, 50% of the power output was routed to one lamp base and the other 50% to the two or three other connected lamps. This scheme made it possible to reduce the entire output of the power pack to one half or one fourth. The charging time was 2.8 seconds at full output (1400 joules), 1.5 seconds at 50%, and 0.9 seconds at 25% output. The brightness of the 650 watt halogen modelling light was controlled in steps, following the same ratios as the flash output. In 1971, the outlets were changed and the power packs were designated 750/1500 RT. The current generation of brnecolor power packs still has these outlets, which means that today’s lamp bases are largely compatible with power packs manufactured as far back as 1971. A good example of longevity.

Power pack 404 rated 1600 joules was premièred at Photokina 1978. The unit featured asymmetric and symmetric power distribution. Its output was selectable across 3 f-stops in ½ stop increments. Two of its special characteristics were the rotating prism of the deactivatable photocell and of the infrared receiver for amplifying the incident light signal as well as the safety bracket, which electrically secured the four lamp base outlets with a microswitch. It was followed in 1980 by the 404 Servor, the first power pack equipped with infrared remote control.



404
(1978 - 1984)

The Pulso product family included the Pulso A2 and Pulso A4 series that were launched in 1988. These units have a function that is still unique, allowing the photographer to select the flash duration in the range from 1/250 to 1/6000 seconds at 1600 joules (A2) and 3200 joules (A4). It is well known that a shorter flash duration causes a shift in the colour temperature of the flash toward the blue portion of the spectrum, a fact often observed in close-ups using computer flash units. Thanks to automatic flash duration and flash energy control, the broncolor Pulso Type A optimises the colour temperature. For special effects, these power packs also provide a selectable trigger delay and they can also generate flash sequences. The safety cover for the lamp base outlets was a special feature of these units.



Pulso A2
(1988 - 1997)



Pulso A4
(1988 - 1997)

The Grafit A with selectable flash duration and stabilised colour temperature, etc. was introduced at Photokina in 1996. This power pack with ratings of 1600 joules and 3200 joules was broncolor's flagship for an entire decade and can be found in photo studios around the world. In 1998, broncolor also marketed a version that could be connected to a PC or Macintosh via a cable. It was superseded in 2004 by a RFS radio frequency controlled model.



Grafit A2
(1996 - today)



Grafit A4
(1996 - today)

The Verso A power pack with 1200 or 2400 joules and an innovative battery concept had its debut in 2006. The basic unit is a power pack with extremely short charging times and flash durations. If necessary, a so-called "Power Dock" – consisting of a rechargeable battery module and a charger – can be attached to the pack for working without access to an AC power outlet.



Verso A2
(2006 - today)



Verso A4
(2006 - today)

Monolights



C 171
(1975 – 1986)

Since 1975, Bron Elektronik AG has been regularly manufacturing monolights. The first one was the C 171 with the following data: Output 375 joules, controllable in ½ f-stops to 1/8 of the rated output, halogen modelling light, focussable light source, weight 3.8 kg.



Impact 41
(1982 – 1995)

Introduced in 1982, the concept and design of the “Impact” monolights with 150 or 300 joules were avant-garde, allowing larger series to be manufactured for the first time. They became vastly popular among portrait photographers. The convincing features included the engineered polymer housing with integrated handle and integrated umbrella holder, protected, laterally positioned operating elements, the L bracket and a special bayonet flange for accessories. It was a milestone in the history of Bron Elektronik AG. Many of these units remained in operation for decades.



Minipuls 80
(1991 – 1996)

1991 saw the introduction of the Minipuls types 40 and 80 with 300 and 600 joules, respectively. They differed from the identically designed Impact S40 and S80 only by virtue of the bayonet mount for existing broncolor accessories and a more powerful modelling light. The highly popular Minipuls monolight can be found in numerous portrait and wedding studios as well as in advertising studios.



Minicom 80
(2003 – today)

The Minicom 40 and 80 monolights with 300 and 600 joules were launched in 2003. They provide exceptionally high repetitive precision for digital photography and have a control range of 4 f-stops (expandable to 5 f-stops) in whole-stop and 1/10 increments. Other characteristic features include automatic flash monitoring and a serial flash function. These automatically adjust to the available mains voltage, and the RFS models can also be remotely controlled by radio frequency.



Zero tolerance in quality

Because absolute precision is decisive for the legendary quality of all Bron products, the company's engineers deploy laser-guided pick-and-place systems. Subsequently, they test each flash unit, each power pack, and each monolight under real-world conditions. After all, broncolor offers a two-year warranty for each product. "Our production tolerances are extremely tight," says technical director Marcel Griessmann, "so the service lives and resale value of our products are much higher than average. When it comes to quality, we tolerate no compromise."

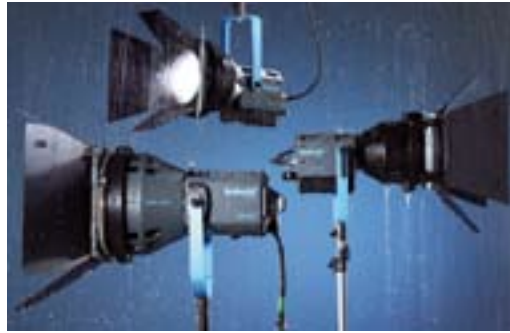
The benefits of these tight tolerances go beyond quality and longevity. They are manifest in the extremely neutral colour spectrum of all studio flash units, whose UV constituents are almost totally eliminated. Another advantage is the constant colour temperature of 5,500 K across the entire control range based on the Colour Temperature Control (CTC) feature of all Grafit A power packs. This allows the photographer to repeat a shot in the studio with precisely the same parameters.

Domiciled in Allschwil, at home in the world

Twenty staff members are responsible for marketing and distribution. They author operating instructions, brochures, and sales folders, keep the www.bron.ch website updated, organise seminars and workshops for photographers, and prepare trade fair exhibits. The marketing and distribution functions are centralised at Bron's headquarters.

About 96 percent of all products are exported to more than 60 countries. The principal markets are Europe, North America, and – with growing importance – the Far East. In Germany, France, and the USA, Bron operates its own or co-owned dealerships. In other countries, Bron works with specialised partners. The company's main customers are advertising and fashion photographers around the world, as well as large corporations or museums with in-house photo studios. These highly discerning customers rely on broncolor for studio lighting that offers high-fidelity colour reproduction and gives the photographer full colour temperature and light control.





kobold



VISATEC

 Fran Collins, USA

kobold by bron, the perfect match

About 15 years ago, Bron resolved to develop HMI continuous light sources for photographers. The objective was to harness the power of metal halide for as many reflectors of broncolor studio flash systems as possible. The target group consisted of photographers who use digital cameras with micro-scanner backs. In 1998, this development effort resulted in the first lamp bases for the broadcast market which became vastly popular not least because they were splashwater-proof.

A year later, Bron acquired ownership of Kobold Licht GmbH in the Bavarian town of Wolfratshausen. Thanks to this move, Bron was able to offer its customers a complete range of continuous-light products: halogen, fluorescent, and HMI. Today, Bron Kobold GmbH in Wolfratshausen still manufactures all kobold lighting units as well as metal components for certain items of equipment in the Bron Elektronik AG product line. The world's leading TV broadcasters use kobold equipment, especially in electronic news gathering (ENG) and mostly for reports or interviews. Armed with this know-how, Bron was able to develop daylight systems for large trade fairs, fulfilling even the loftiest expectations of light designers and stand builders. These systems allow exhibitors to present their automobiles, fabrics, or garments in the very best light.



VISATEC by bron, the second product line

broncolor studio flash systems for professional photographers are still Bron's best-selling flagship products. But the VISATEC line introduced in 1993 is evolving briskly as well and constitutes a growing part of the business. VISATEC allows Bron to give portrait and wedding photographers, photojournalists, and ambitious hobby photographers access to the know-how of professional photography. The flash units feature superb craftsmanship, are easy to operate, and offer ample performance.







Workshop in Allschwil

A unique service: Worldlight

Worldlight is the name of the global rental system that Bron launched with more than 200 partners. Photographers whose turf is the entire planet no longer have to carry along their entire equipment when travelling, because they can rent a professional flash configuration on location. This gives them the right resources anywhere and at any time, and the voltage rating is matched to the local grid. Moreover, these modern nomads can always rely on a knowledgeable local contact for advice and hands-on assistance.

Self-evident: Training and counsel

Bron converted its former factory rooms in the centre of Allschwil into seminar rooms with a professional photo studio. This is where sales engineers and photographers alike receive basic and advanced training. By conducting lighting seminars, the two resident photographers regularly bring their colleagues up to date, both at home and abroad. For many years, Bron has also been collaborating with photo academies in all major markets. It supports meanwhile over 200 such schools in specific class projects and with privileged terms.



 MARKUS KLINKO

Outlook: Light has a bright future

“Our value-oriented product policy will strengthen our position as a competent partner in the domain of lighting,” Jacques Bron affirms. “Digital photography has changed the photo market and helped us leverage our product advantages. Light is the signature of every photographer, camera operator, and light designer. Thanks to ongoing dialogues with users at trade fairs, exhibitions, seminars, and customer visits around the globe, we’re in touch with the market and can better anticipate trends. The demand for images, both still and moving, is growing. That’s why we keep seeking new solutions. Bron believes in the future of light.”


THE LIGHT

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