

For Projection Read Pani

After leading the way in scenic projection, Ludwig Pani of Austria are now moving strongly into the area of outdoor projection, with improved techniques and enhanced projector power offering amazing creative opportunities in both commercial and cultural fields. John Offord talked to Hermann Sorger in Vienna.

An intellectual cross-roads, like an eastern Paris, Vienna has attracted, assimilated and nourished many great minds in Eastern Europe - Haydn, Mozart, Beethoven, Freud, Bruckner, Schönberg and Kafka to name but a few. In the thirties, where our story has its roots, Max Reinhardt was directing in the theatre, Alban Berg was composing, and Richard Strauss was conducting at the Opera.

After the trauma of the Second World War and its legacy, with Vienna one of the poorest city's of Europe, the re-establishment of the Opera - one of the most democratically organised in the world, and residing temporarily in the Theater an der Wien while American money rebuilt the devastated State Opera House - was one of the principal elements in the revival of the City.

Of particular interest to us, and a part of the great fifties and sixties revival, is the name and company of Ludwig Pani - words synonymous in the world of technical theatre with 'Opera' and 'Vienna'. There can be few opera houses that haven't some Pani projection equipment in their inventory.

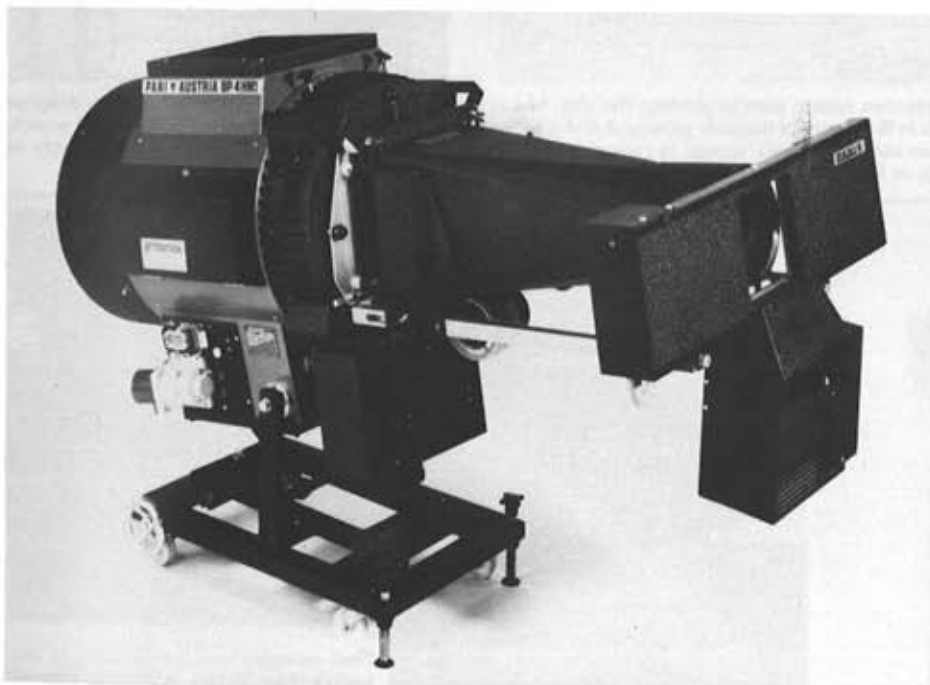
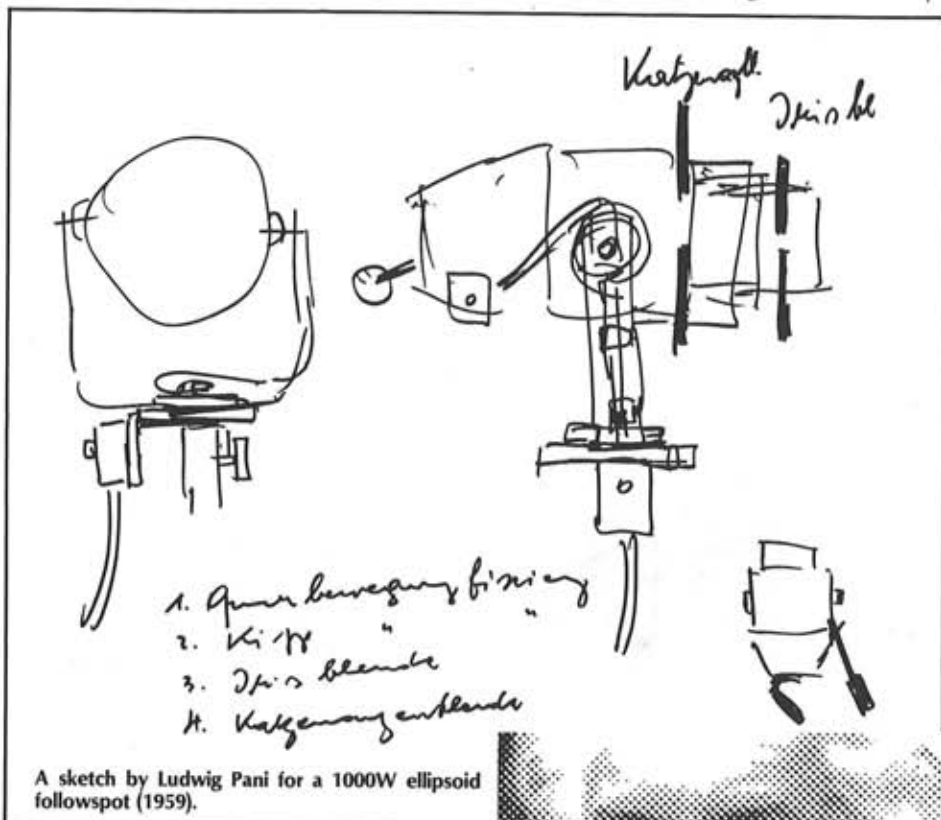
More recently, of course, the name is ever more closely linked to major outdoor projection effects where city skylines become traffic-stopping street shows, and buildings of all sorts are backdrops for artistically-devised advertising sequences.

For the real start of the story we need to travel back to Vienna before the War. Ludwig Pani had set up in business in 1930 to begin the production of optical scientific instruments, projectors and reading devices. Soon after, research work in the field of stage projection started, and right from the outset promising results were achieved.

However, the War intervened, and development only re-commenced during the re-birth

of the State Opera House and the Burgtheater. The first stage projectors were developed in close co-operation with the artistic directors, designers and technicians of the re-emerging producing houses, and this activity signalled the way forward for Ludwig Pani, with priority given for the use of wide angled lenses.

My personal Berlitz Guide to Ludwig Pani and Vienna was Hermann Sorger - 'Prokurist' - who looks after sales and production for the owner of the company, Sieglinde Staub. Hermann Sorger started working for Ludwig Pani in 1955. "He was my professor; my teacher. I often worked late into the night with him! We worked long hours on develop-



The first BP4 HMI Turbo, with 60cm lens and dimming shutter, was introduced in September 1986.



Ludwig Pani.

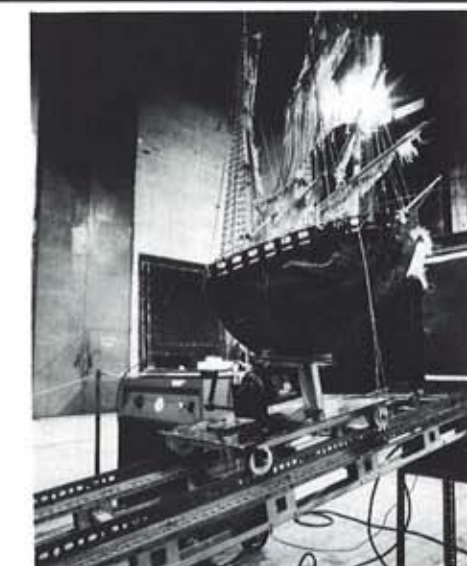
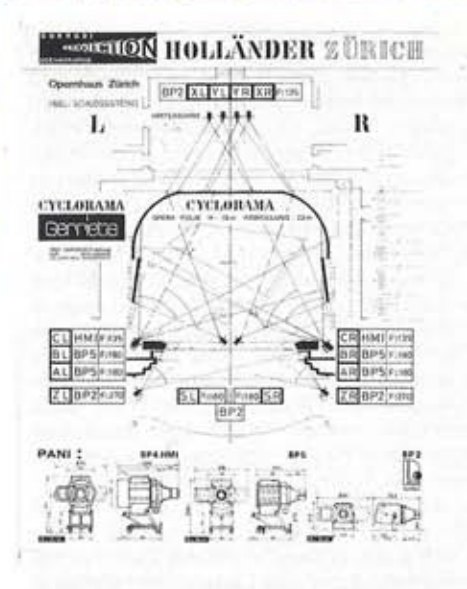
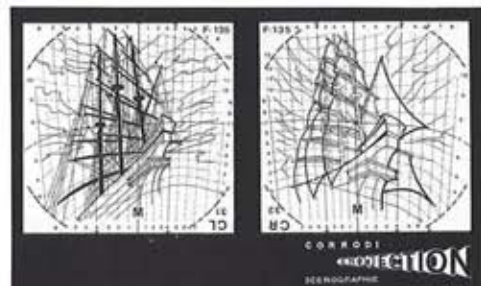


The first BP5 projector - 1954.

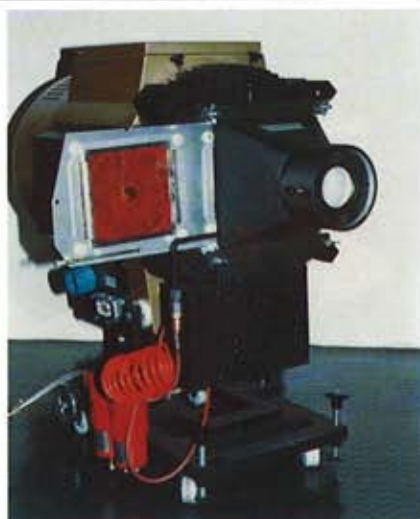


A projection sequence from a recent production of *The Flying Dutchman* at the Zurich State Opera - designer **Annelies Corrodi**. In the first frame the skull is introduced, and by repeated superimposition, the ship becomes a negative skeletal hulk (frame 2). In frame 3 red clouds are added, and in frame 4 an additional projector sets red sails. In frame 5 the Dutchman's ship has disappeared, leaving a brooding and cloudy atmosphere.

In the drawing far right the paths of the individual projector beams are shown, and it can be seen how difficult it was to produce the correction grids, two of which are shown right.



Backstage at the Staatsoper, Vienna, and the shadow projection system used to produce the 'ship' in a seventies production of *The Flying Dutchman* - designer **Günther Schneider-Siemssen**. The ballast unit is on wheels in the centre of the main picture. A 6½k Xenon unit had specially built shutters to fade the light source, and an old Pani 5k (left) with a double drive effect unit was used to produce 'waves'. In case of emergency an old Pani 10k tungsten halogen projector awaits its call (extreme right). The smaller picture shows a close-up of the track system for the model ship.



Final assembly and test of BP4's at the Ludwig Pani factory in Vienna (above) and (left) Pani's latest, the BP6 Gold.

The famous Pani BP4 HMI 4kW scenic projector.



Sieglinde Staub, the owner of Ludwig Pani.

ment. In the beginning we manufactured small projectors for home use, and step by step we went into the production of stage projectors," he enthusiastically recalled.

"Mr Pani was always at rehearsals at the Staatsoper with Herbert von Karajan, who was always asking for more light! Then it would be back to the drawing board working from his sketches and ideas. In those days all products were made by hand.

"The designer Günther Schneider-Siemssen was very closely involved, and he was very valuable to us for development on projection techniques - his work was very important. I remember the sixties in particular as very exciting times - in some ways almost crazy!"

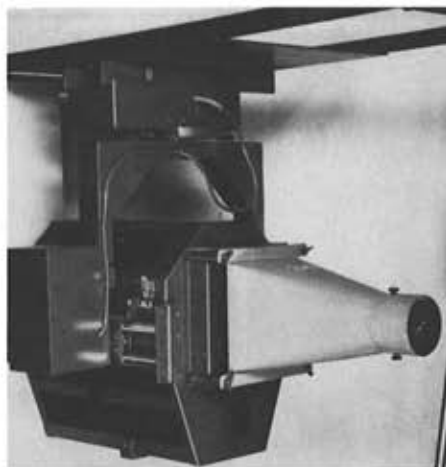
Sieglinde Staub had invested money into the company in 1954 to aid development work, and she looked after the financial side of the business while Pani devoted his energy to the design of projectors. "He spent a lot of time at the Opera House," commented Hermann Sorger. "He was a very popular man, and quite a character."

The Ludwig Pani range of equipment grew alongside the expertise of designers - particularly those working in the major opera houses in Europe - who were thoroughly exploring the use of projectors for scenery and images. In due course various different lantern ranges were added, and the Pani catalogue now offers an extensive amount of stage lighting equipment including beam lights, PC spotlights, halogen followspots, daylight HMI followspots, CID followspots, cyc lights, HMI fresnels, dimmers, and of course the world renowned complement of stage projectors coupled with many accessories to expand their use.

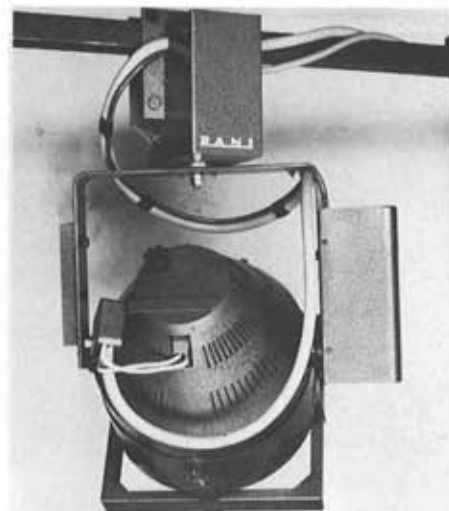
The latest developments on projectors will be highlighted later, but there is another area where Pani have come into their own



Hermann Sorger pictured with a BP10 10k scenic projector in for service from the Vienna Staatsoper. This unit was specially designed for bridge work, with a special front end mirror system.



First remote control motorised units: above, a BP5 (1965) and right, a parabolic 1000W (1963).



- remote control spotlights. And they've been at it since the early sixties.

Remote Control Spotlights

One of Pani's first remote control units - circa 1963 - is pictured with this article, and since 1980 their PEF-M electronically controlled spotlight system has been installed in theatres and opera houses in Vienna (3 installations), Prague (2), Moscow (2), Finland (3), Kiev (1) and Singapore (2). A total of over

1200 units with precision drive pan and tilt have now been delivered world-wide. (The system can be either manually controlled or supplied with an electronically controlled memory system.)

Fine engineering has to play its role in all Pani products, bearing in mind their eventual usage. "Everything we make, from colour changers to slide mechanisms and remote controlled units, has to be very quiet in operation," explained Hermann Sorger.



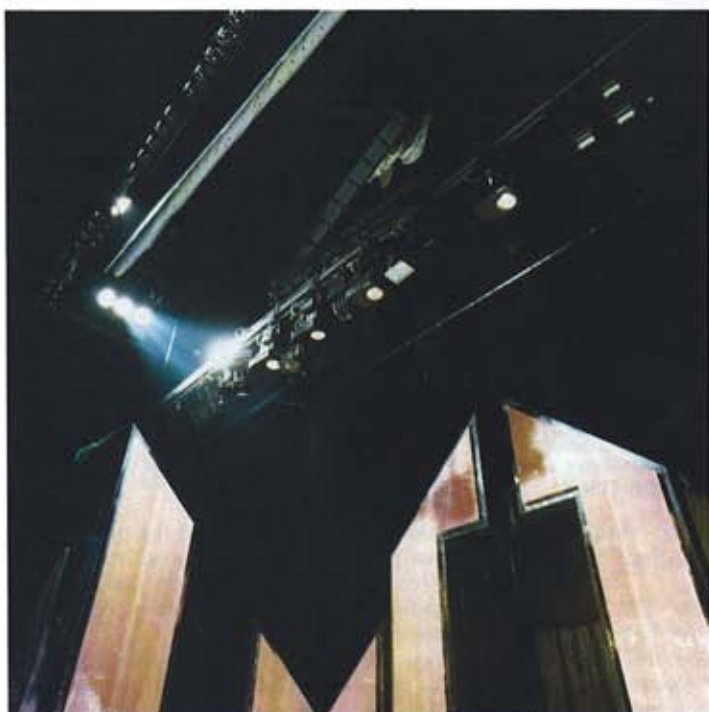
Engineering skills are in abundance in the Pani workshops.



Herta Wasserburger is in charge of Ludwig Pani's finance and administration.



Strand Lighting in Vienna - installed by Ludwig Pani. Above: the Galaxy system at the Vienna State Opera (also in view, extreme left, is the Pani PEF-M remote control for motorised spotlights). Right (top): A Galaxy at the Theater in der Josefstadt. Right (lower): A Light Palette at the Volkstheater.



12 PEF-M motorised lighting units were installed at the Volkstheater, Vienna by Ludwig Pani in 1980.



The majestic Schönbrunner Schlosstheater at the Schönbrunn Palace, Vienna. Ludwig Pani installed motorised shutters for the front of house lighting so that the units are hidden when the theatre is not used for a performance.



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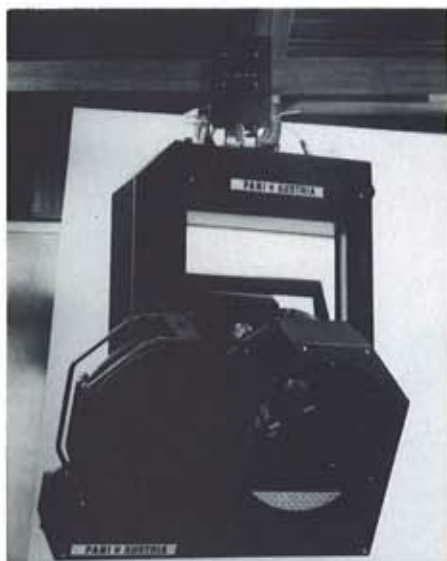
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A parabolic 1001 low voltage beamlight in a motorised PEF-M unit and with a colour change mechanism - Theater an der Wien. Below: control unit for the PEF-M system.



Introduction of the BP4 HMI

A major landmark for Ludwig Pani, and for the entertainment industry in general when they introduced in 1974 the now famous BP4 HMI projector, just three years before the death of Pani in 1977. It had been developed with the aid of Kurt Winter, former lighting director of the Bayreuth Festival Opera, when a 4000W HMI lamp was tested in the



Lighting Vienna at dusk: demonstrating projectors from the workshops of Ludwig Pani has the effect of changing the City's skyline - and all for the visit of L+SI.

Pani 5kW scenic projector. The HMI lamp is the German equivalent of the CSI (compact source iodide) and it emits something like four to five times the halogen equivalent. The result was that scenery could now be projected at a strong enough level that would also enable the acting to be lit without any practical problems.

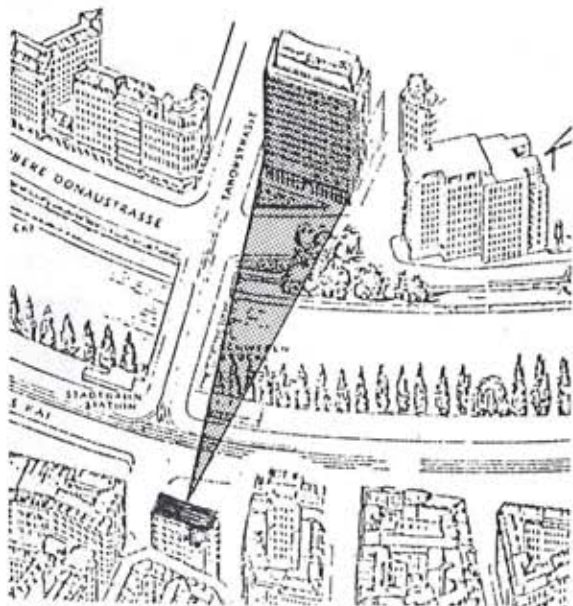
The BP4 is a massive piece of engineering, weighing in at 72kg, and is mounted on a four-wheel platform for easy movement. It can then be set in position for accurate and steady projection. The double slide carrier takes 18 x 18cm slides, it has built-in fans for both the housing and slide gate cooling, and an interchangeable front lens system. It has a separate ballast, and can be dimmed by an opti-mechanical device for either local or remote control of the shutters.

Three electrical supply points enable the BP4 and its derivatives to be either 110V (Japan), 120V (USA) or standard 220V. The ballast unit is provided with a voltage selector switch for remote or manual ignition, and economy switching allows the power to be reduced from 24A to 20A, saving on both projection slide and lamp life (average lamp life is 500 hours).

In 1983 Pani introduced the most powerful stage projector in the world - the BP6 HMI, with a 24 x 24cm slide carrier. "By enlarging the slide area we were able to get the temperature under control," explained Hermann Sorger, "and both hand-painted and film slides can be used on BP6. Using the 13.5cm wide-angle lens, with a projection of almost 80°, backstage projection is also possible on smaller back-stages."

For Advertising and Entertainment

In Vienna last year, a sequence of six slides, designed by Gloria Berg, was used to create an advertising sequence for the weekly magazine 'Wochenpresse'. Three Pani BP4 HMI Specials were sited across the Donau Kanal in a room on the second floor of a hotel, and projections were beamed across to the Bundesländer-Versicherung building on the opposite bank - a distance of 205 metres. Each projector carried two slides, each being shown for five seconds. The sequence was rotated for a 3 hour period every evening for a week in March and November 1987. The projection area was 60 metres wide, and the result dramatic.



Now used with great expertise for scenic projection and effects, creative lighting designers, most particularly in France, Italy and Holland, began to use both the BP4 and BP6's for outdoor projection projects. The Fiat Uno was launched with the aid of three HMI projectors and laser guns. In Paris the Eiffel Tower has been projected on, and the Statue of Liberty in New York has also had the beams of Pani projectors on its surface.

A highlight in 1986 was the lighting up of Houston, Texas by 14 Pani BP4 and BP6 projectors amongst other equipment for the sound and light concert by Jean Michel Jarre, when an estimated 1.3 million people stopped the City to see the show.

BP4 HMI Special

In September 1986 Ludwig Pani were closely involved in a project in their home City that saw the launch of the BP4 HMI 'Special'. They were approached to provide a series of advertising projections with a size of 50m x 60m on the facade of the Bundeslander-Versicherung building for the weekly magazine 'Wochenpresse'.

For this project Pani developed a special version of the BP4, which delivers twice the light intensity of the standard stage projector. The temperature at the gate increased by 50% to 120°, and for this a special type of slide was required. Heat-resisting glass plates were printed by a screen process and coloured with heat-resisting Reprolux slide colours.

Three projectors were installed to run the sequence across the Danube Kanal in the Hotel Capricorno and the projection distance with a 60cm objective lens was 200 metres. (Maximum projection distance across the range of lenses is 260 metres.)

BP6 Gold

The latest unit from Pani is the BP6 'Gold' - a specially-developed version with compressed air cooling. After the huge success of his show at Houston, Texas, Jean Michel Jarre has plans for even bigger shows in various world capitals using up to 40 of the new projectors.

I'm sworn to secrecy, and can only say that for most readers of this magazine they may well be working on a 'show' much closer than you might suspect. For a major event on the Continent in 1989 there is even talk of well over 40 BP6 Gold's being assembled for a massive celebration.



Stefan Ettmayer, manager of Pani's design office, pictured with an automatic slide changer unit.

By finding a successful formula and staying with it, Ludwig Pani have now made themselves a name in the world of major promotional and concert events. And they are very alive to the possibilities it opens up for them. Their projectors are hard at work at Disneyland and numerous other venues that you wouldn't even guess at. "Auto-projection can turn a city into scenery," said Gert Raffelsberger, the company's sales manager. "It makes theatre on the street and gets people closer together both for pleasure and human communication."

A total of 55 people are employed by Ludwig Pani at their various locations in Vienna, and we shouldn't forget that they are also Strand Lighting agents for Austria. Many of Vienna's theatres have a Strand memory lighting control system installed by Pani, and together with Quartzcolor it makes up around 20% of the annual turnover of just over £4 million.

Vienna had had a snowless winter when I visited it late January, and the thought that I might make some comment on the fact hadn't lost itself on the staff of Ludwig Pani. During demonstrations of equipment I suddenly found myself within a typical Tyrolean scene - complete with falling snow. Courtesy Pani projectors, of course!

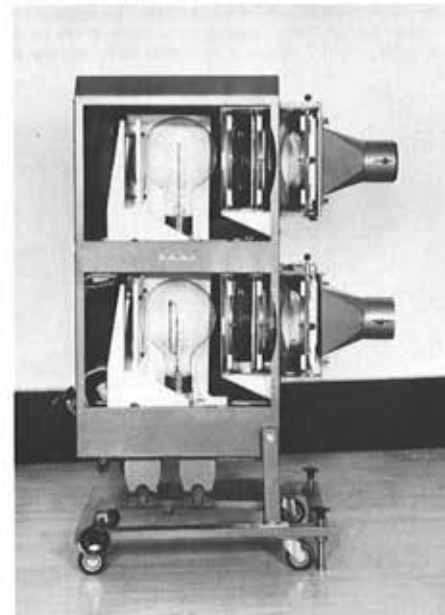
Ludwig Pani at USITT

Ludwig Pani will be launching the latest addition to their projector accessory range at the USITT Exhibition at Anaheim, California in March.

The PMD 2x30 slide changer has been developed to satisfy the ever growing demands for increased choice and flexibility with projection. It will give free access for up to 60 slides in a universal slide holder for either the 18 x 18cm (BP4) or 24 x 24cm (BP6) projectors, and will be able to handle single glass slides, double glass slides, or slide film.

The electronic system necessary for the control is positioned in the 19" housing. The control unit is placed near the magazine slide changer, and with the assistance of a small hand terminal a programme can be determined. Control is also possible from a lighting control desk, and it will also be possible to start projection fully automatically, either with the help of a radio signal or a dimming switch, which can also light the projector. Duration of slide change from slide 1 to 2 is 4 seconds, and from slide 1 to 30, 8 seconds. Terminal functions include programming, synchronising, automatic operation, manually controlled operation, stop, external - control, delete, confirmation of data feed, and signalisation of errors.

Tail Piece



Specially designed to save space - a double 10kW projector ready for shipment to Dusseldorf (1965).



Asking for more light power: Jean Michel Jarre (in background) in discussion with Hermann Sorger during a visit to Ludwig Pani's offices in October last year to look at the new BP4 Turbo and discuss the BP6 Gold.

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Discotheque Round-Up



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ADB Double S28 MkII at La Scala Milan



Jean Michel Jarre at Ludwig Pani, Vienna

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