

# pressinformation

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## 90'000 joules in the space of a minute – the new broncolor flash tube

Existing physical limits had to be overcome during the development of the flash tube for the new broncolor power pack. What's the use of having a super fast Scoropower power pack, firing every 0,4 seconds, or producing up to 100 flashes per minute with 1600 joules each, if the flash tube cannot transform the energy into light?



The set-target given to the development team was to design a flash tube which not only produces up to 50 flashes per second, but also covers the enormous range of 10 f-stops i.e. from 3,1 to 3200 joules, and which continuously delivers light with constant colour temperature to the user. Additionally, it is essential that a consistent light quantity is generated from flash to flash over this power output range at each level.

The new flash tube is the result of a close cooperation with the tube supplier and Bron Elektronik AG. Electrodes and metal alloys were newly adapted, new glass was selected, the gas mixture and pressure were altered and the electronics were optimized. This new development can not only flash more often and guarantee more true colour, but it is also characterized by a high light output and a longer service life.

For comparison: the competitors' state-of-the-art today, is just around 20'000 joules per minute. The broncolor flash tube is 90'000 joules, giving it the benefit of being more robust and, with the factor 90000 to 20000, therefore an approximate 5 times longer service life.

The new flash tube is identifiable with a star \* on the socket. Actually it deserves at least 5 stars:

- \* shortest flash sequences, up to 50 flashes per second
- \* extremely short flash duration, up to  $1/12\ 000$  s at  $t_{0.5}$
- \* immense control range of 10 f-stops
- \* constant colour temperature and light quantity over the entire 10 f-stops and
- \* long service life