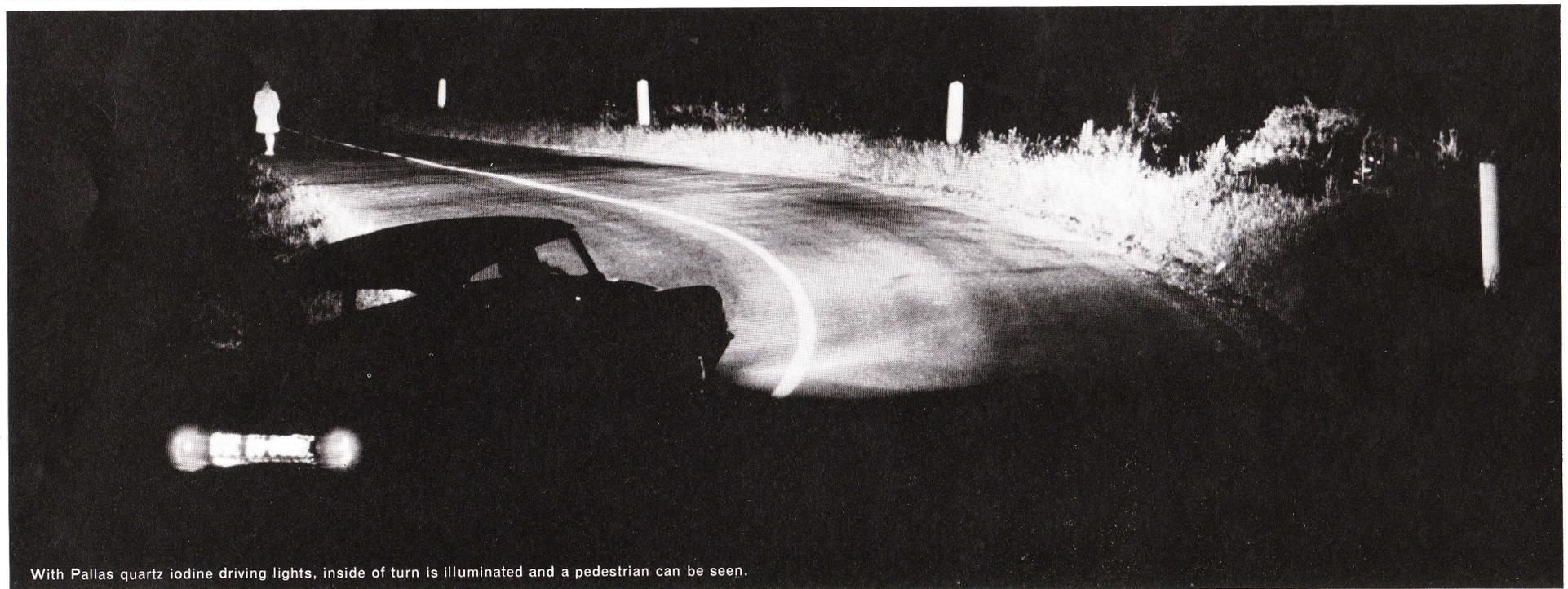


**NIGHT DRIVING SAFETY**



# Pallas headlamps: perfect visibility for night driving safety

The headlamps of a car travelling at high speed at night have hitherto failed to provide sufficient visibility when cornering even though — thanks to long range quartz iodine headlamps for example — they might be perfectly satisfactory on a straight road. Because they illuminated only a field of vision directly in line with the axis of the car, the driver of a fast car like the DS was unable to enjoy its full performance. Up until now, taking a corner at night meant plunging into darkness with the possibility of suddenly coming across an obstacle, a pedestrian or a badly lighted bicycle...

The Citroen Patent used in the new lighting system of the PALLAS models overcomes these disadvantages. It revolutionizes night driving conditions. The increase in speed which it provides on winding roads is remarkable and represents an increase of 20 to 30% in preventive safety as compared to a car with conventional headlamps.

The new PALLAS lighting system is the most advanced in the world today. It provides the driver with the same degree of

illumination when cornering as in a straight line thanks to the combined action of four headlamps, two main beams and two auxiliary beams.

The main headlamps (8" dia) are self levelling, which means that the beam height is automatically adjusted according to the attitude of the car.

The auxiliary headlamps (6.5" dia) are long range quartz iodine driving lights giving better illumination over a greater distance. They are directionally controlled. That is to say that they pivot automatically according to the direction of the front wheels in such a way as to enable the beams to illuminate the inside of turns. They have been humourously but aptly called, by the press: "Headlamps which can see around corners". A system of rods, levers and return springs controls their rotation in relation to the steering. Their movement is so designed as to direct the beams exactly where the driver needs to see, not only without delay but even with a certain degree of anticipation: before the car really begins to turn. There is a slight delay in a car's res-

ponse to the movement of the steering wheel owing to a factor of elasticity: tyre resistance to turning (a factor in the dynamic theory of a vehicle). However, the auxiliary headlamps respond instantly and they illuminate the inside of a turn a little before the car has in fact begun to turn.

Even greater effectiveness is obtained by the fact that each headlamp does not pivot to the same extent. Their movement is so designed that the rotation of the inner is greater than that of the outer headlamp, and furthermore this rotation becomes proportionately greater as the lock of the front wheels is increased. With full lock, the inner headlamp pivots through almost 80°. Thus, when turning into a garage in darkness, the inside of the garage will be illuminated whilst the car is still in the road and before it has even begun to turn. With the switch control in the sidelight or dipped beam position, only the outer lamps are on. When switched to main beams, all four headlamps function together. The auxiliary

headlamps can be switched off independently. The combination of directional and conventional fixed headlamps gives an excellent field of illumination both in front of the vehicle and towards the inside of turns. Even on a straight road this combination is useful: light touches on the steering

wheel sweep the long range beams from side to side; the interplay of light and shadow thus created increases long range visibility by throwing the slightest obstacle into relief.

This most advanced system which Citroën, once again, is the first to use,

is a standard fitting on all Pallas models. Both the main and auxiliary headlamps have special bulb holders which facilitate bulb changing, even in darkness, by faultlessly guiding the bulb into its correct position. Headlamp settings are adjusted by means of easily accessible knurled screws inside the wings.

Model	Self-levelling headlights	Directionally controlled quartz iodine driving lights
DS 21 Pallas	standard	standard
DS 19 Pallas	standard	standard
DS 21	standard	not available
DS 19, ID 19 and Safari models	not available	not available