

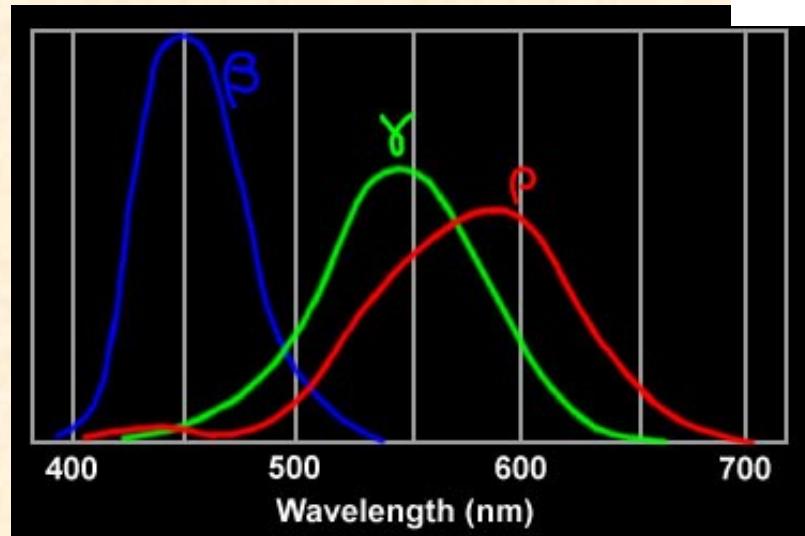
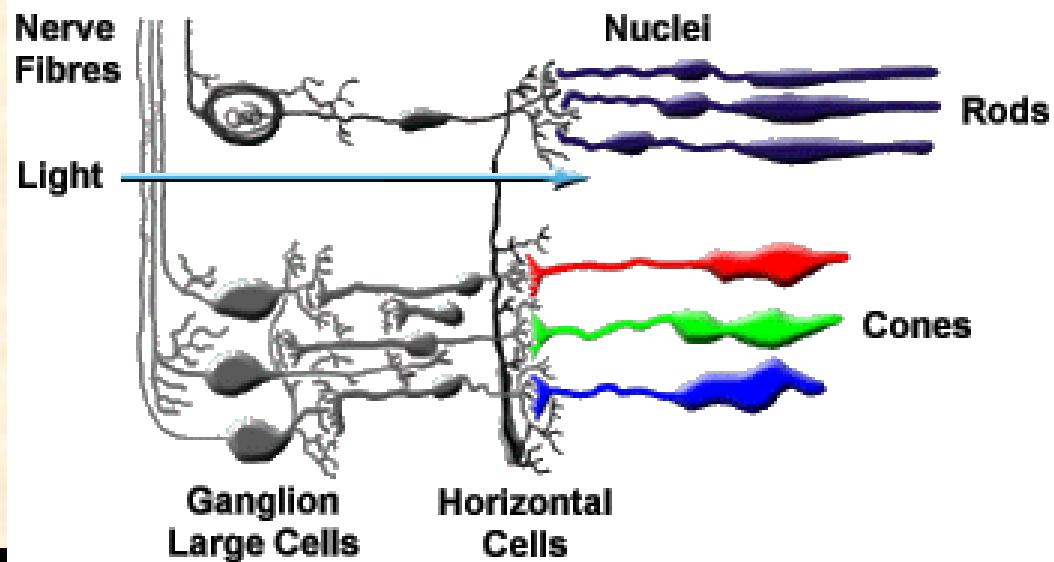
Monitory

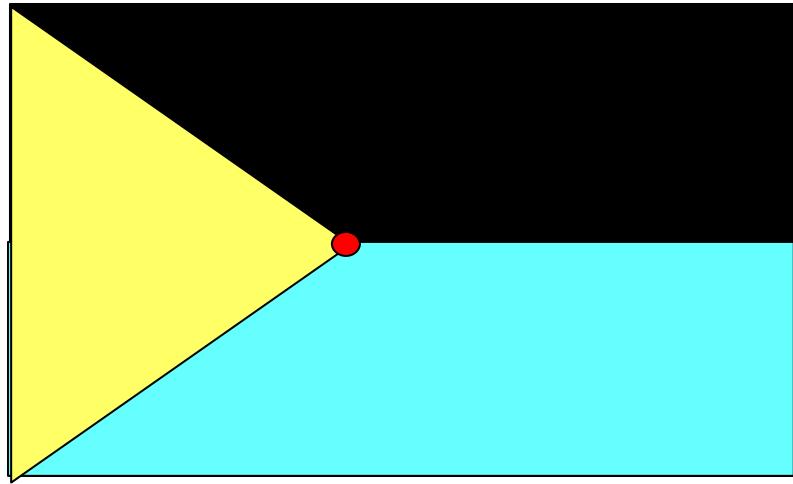
využívají dvou vlastností lidského oka

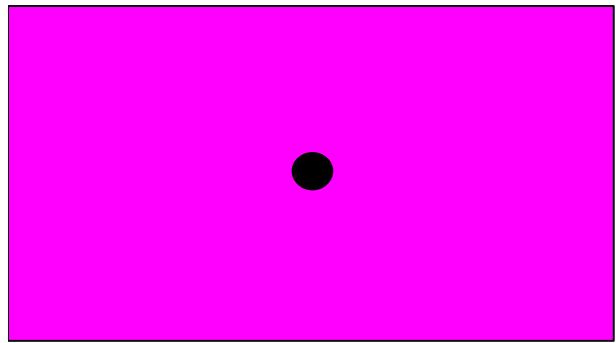
a) setrvačnost oka

b) mechanismus barevného vidění

The Retina



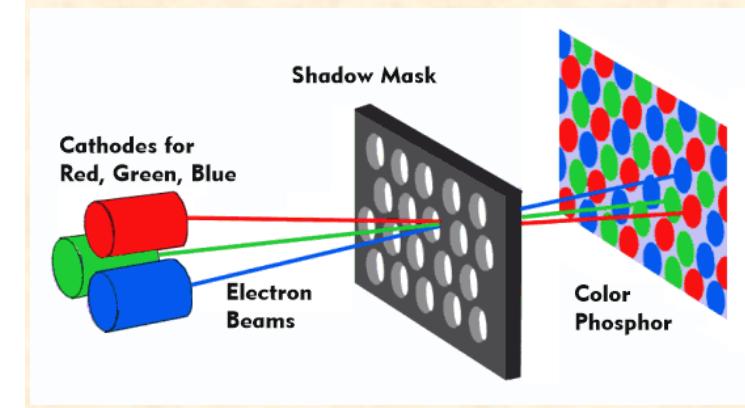
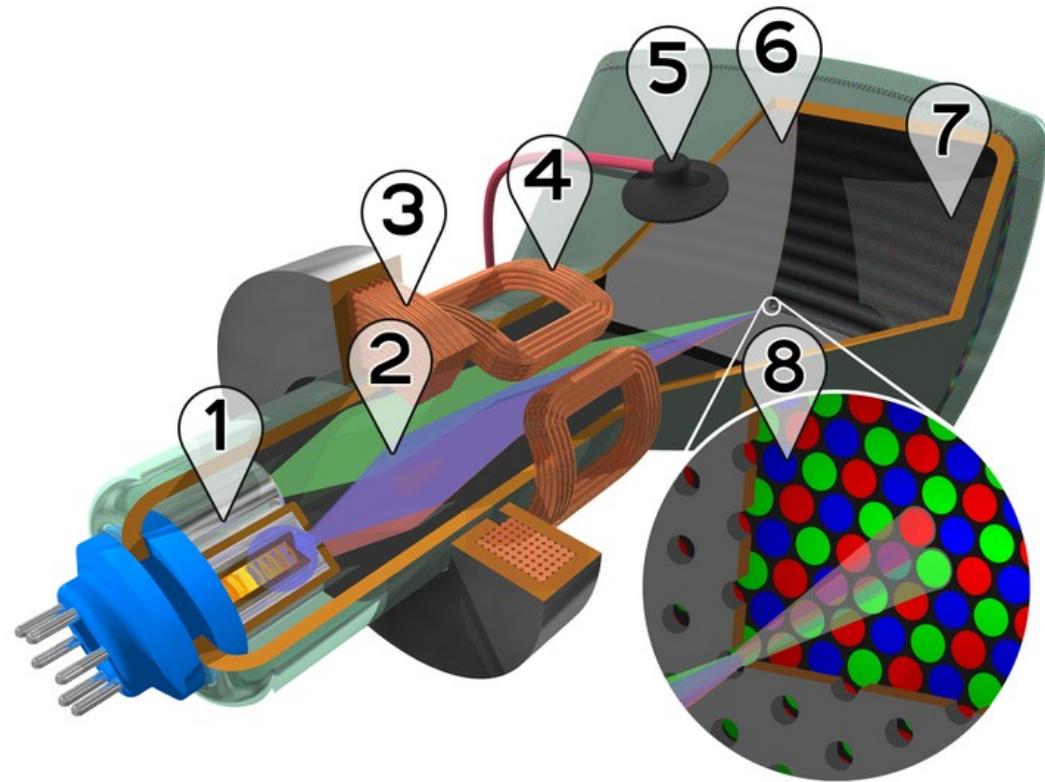




barevný monitor



CRT – cathode ray tube



LCD – liquid crystal display

tekuté krystaly

dlouhé molekuly, které se
mohou různě uspořádat

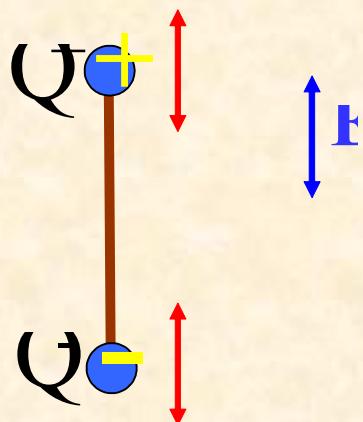


Polarizace absorpcí – polarizační filtry

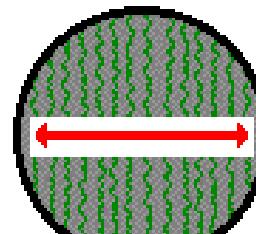
elektrický dipól



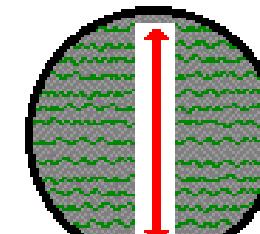
dipól v elektrickém poli - absorpcie



Relationship Between Long-Chain Molecule Orientation and the Orientation of the Polarization Axis

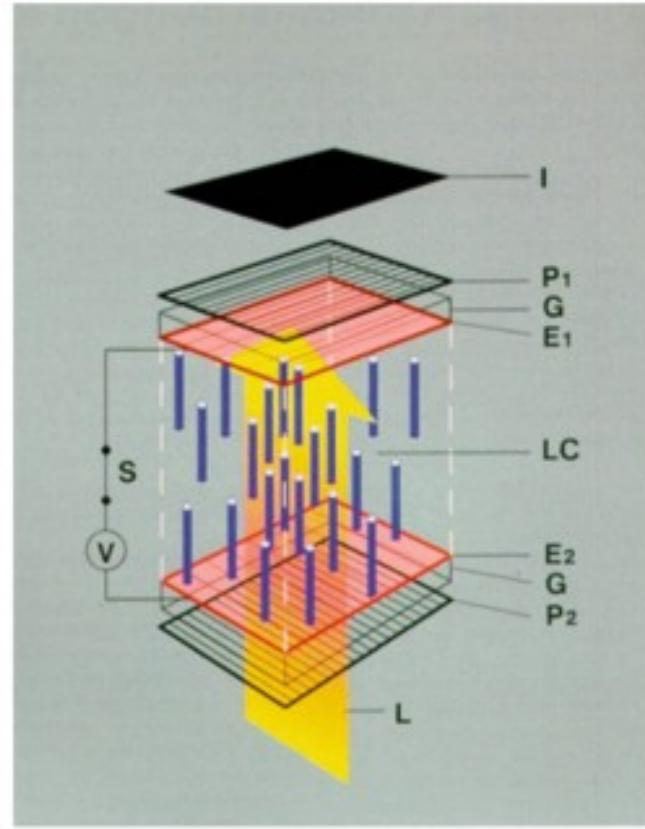
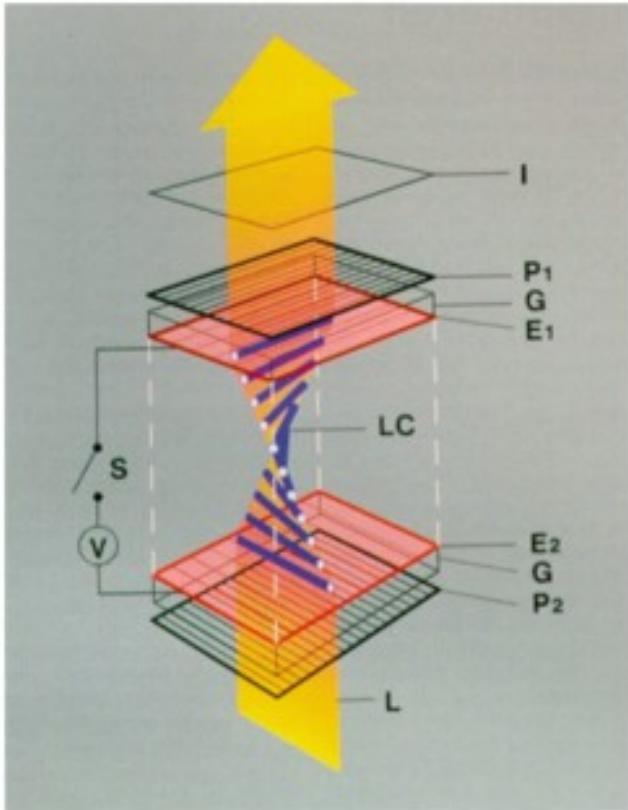


When molecules in the filter are aligned vertically, the polarization axis is horizontal.

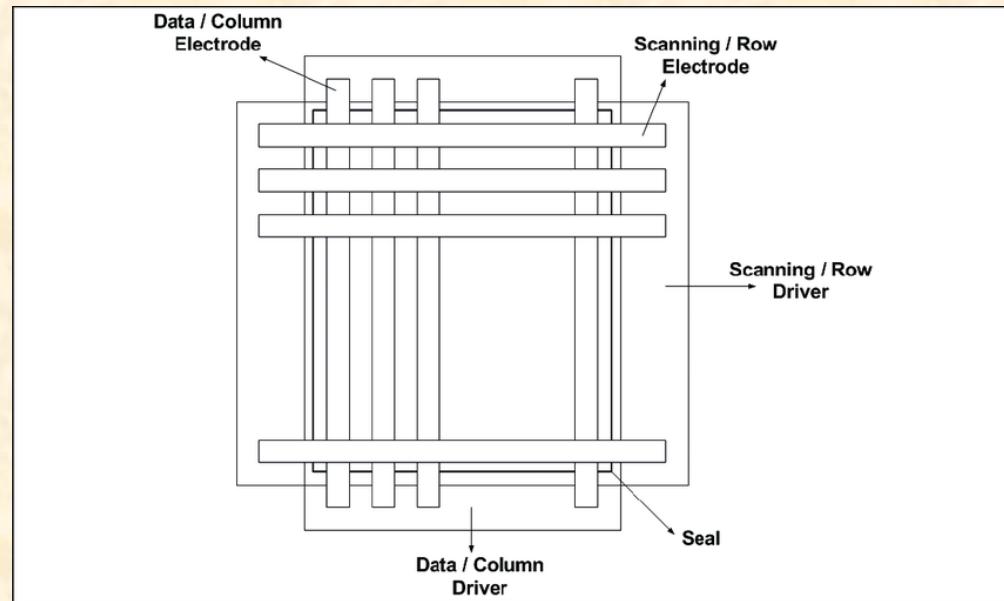


When molecules in the filter are aligned horizontally, the polarization axis is vertical.

Struktura LCD buňky



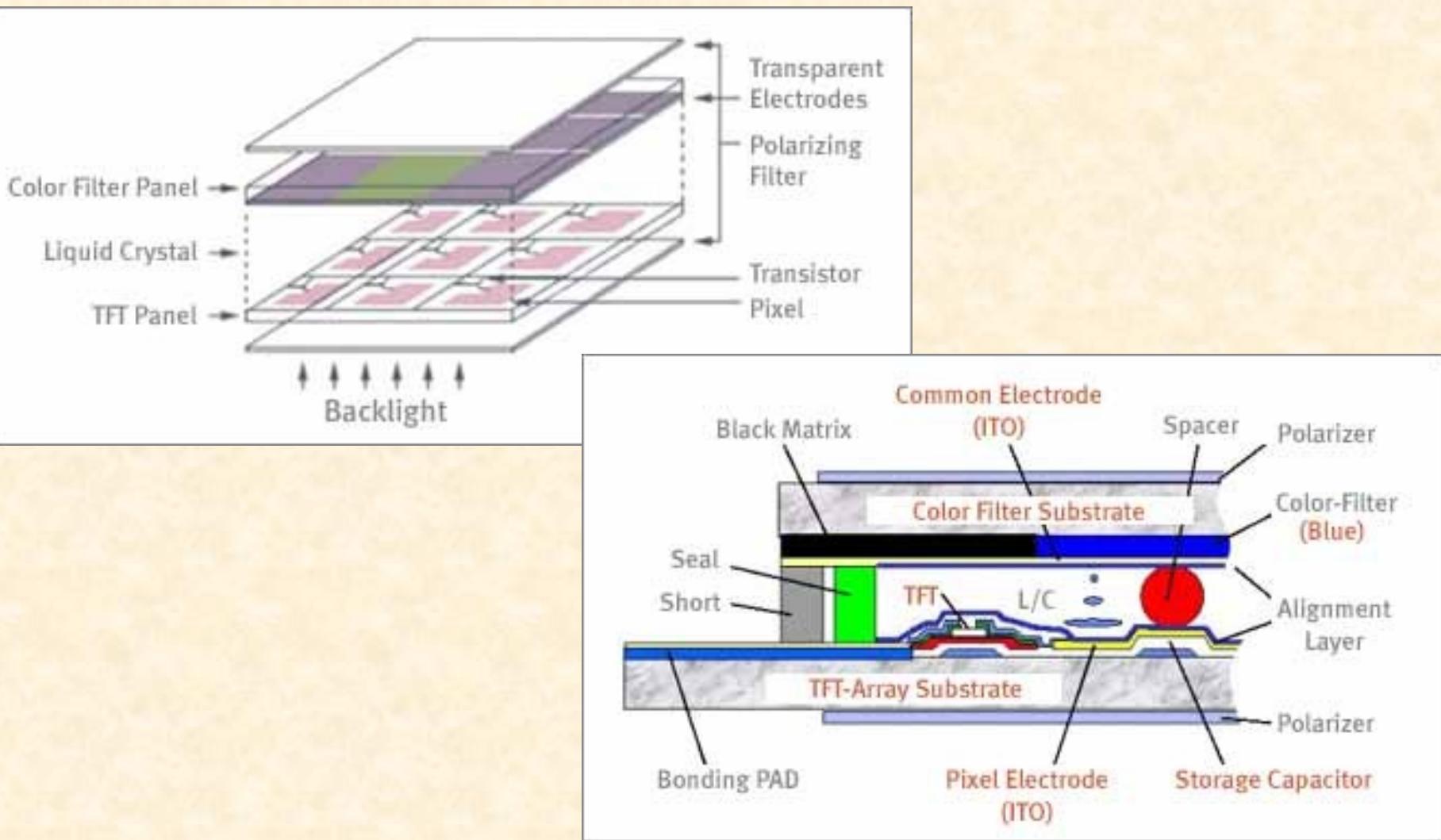
pasivní display



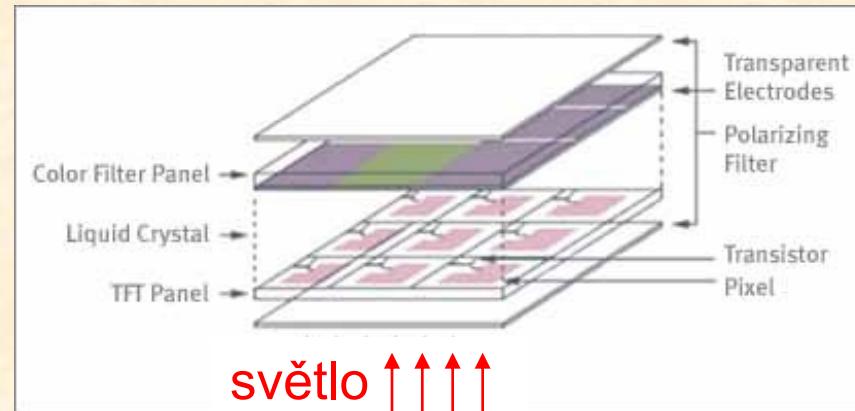
adresování pixelu

aktivní display

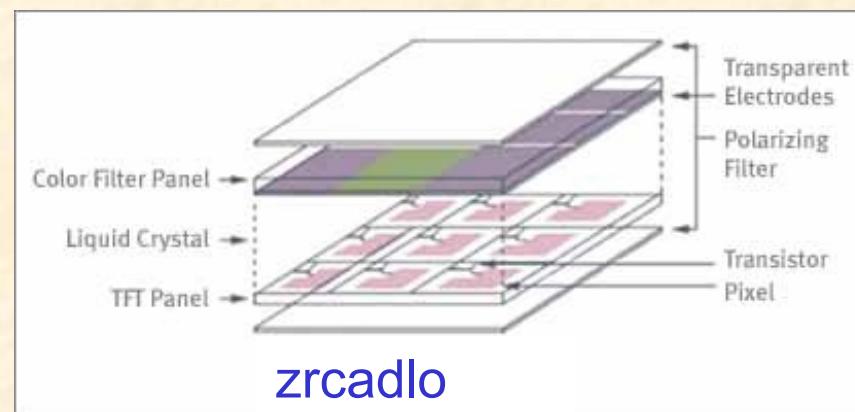
TFT - Thin Film Transistor



na průchod



na odraz



na odraz i
na průchod



Plazmové monitory

plazma – ionizovaný plyn

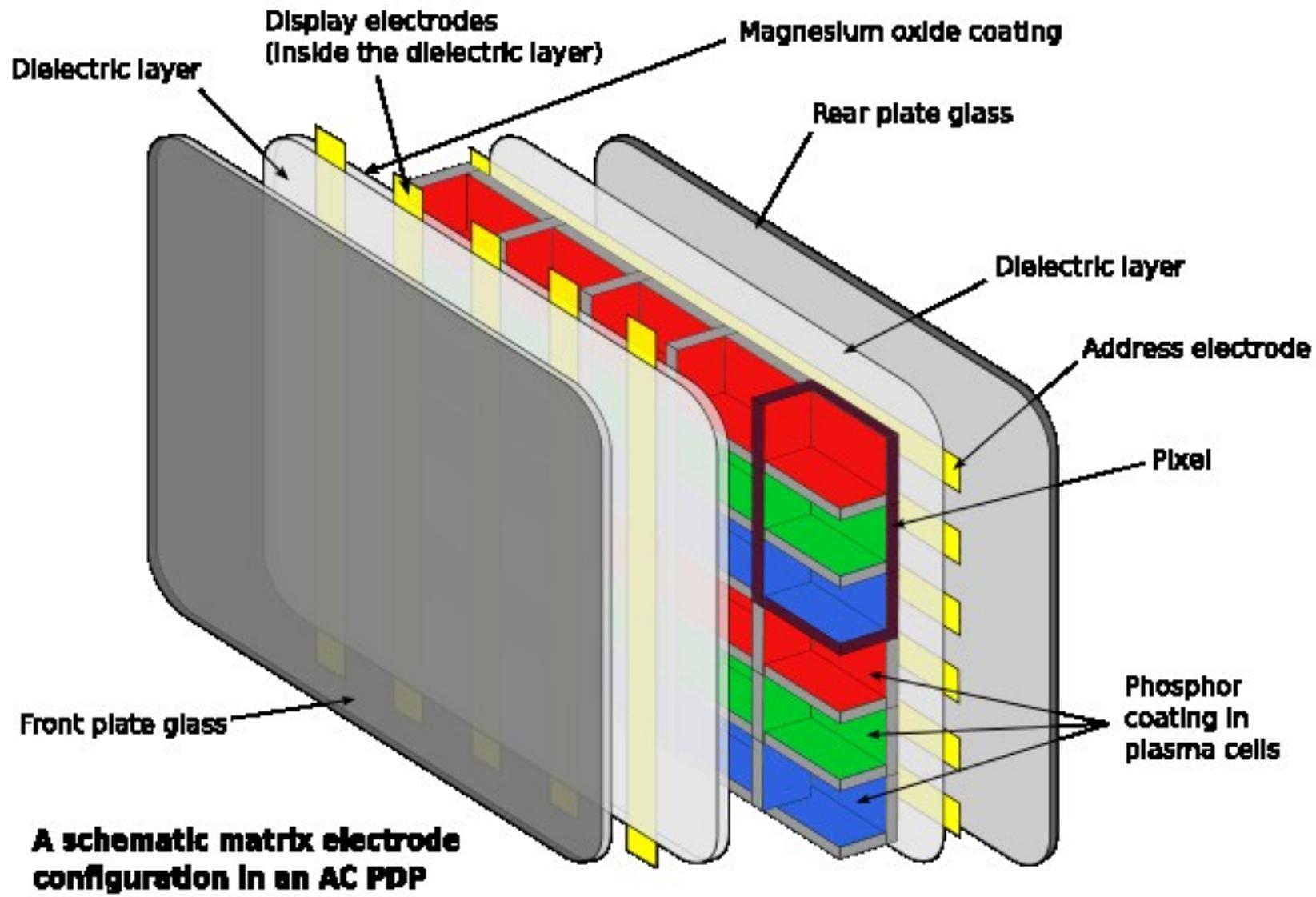
ionizace nárazem v elektrickém poli

elektrický výboj

emise elektromagnetického záření

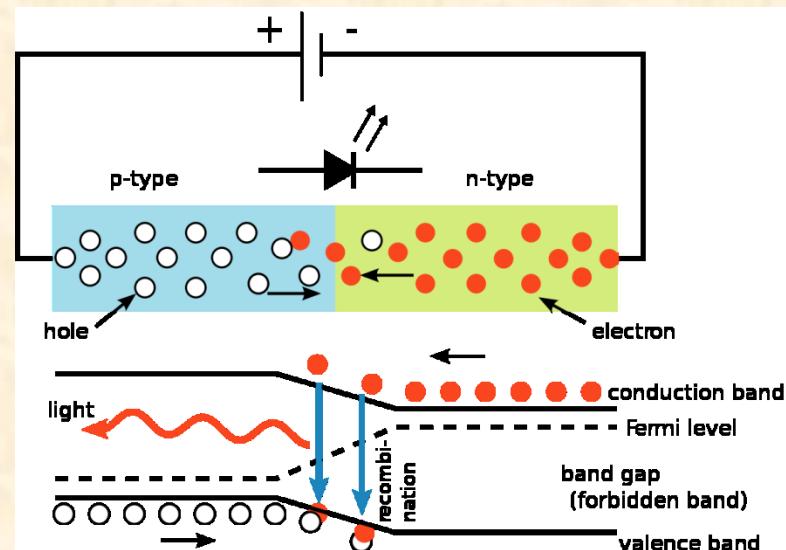


elektrický výboj v inertním plynu (Ar, Ne, Xe)



LED monitory, displeje

Struktura LED

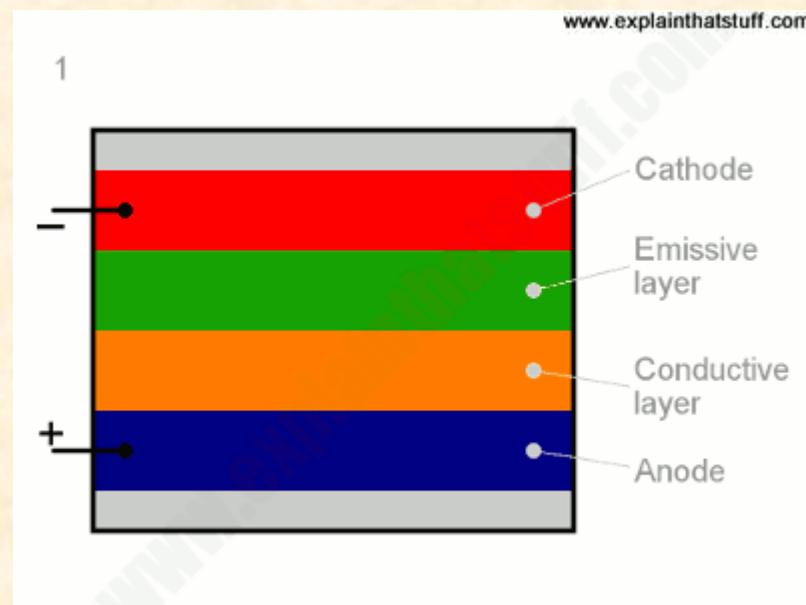


Velkoplošné LED displeje



OLED – Organic LED

Samsung TV (2013), mobil Galaxy (2014)



AMOLED Active Matrix OLED

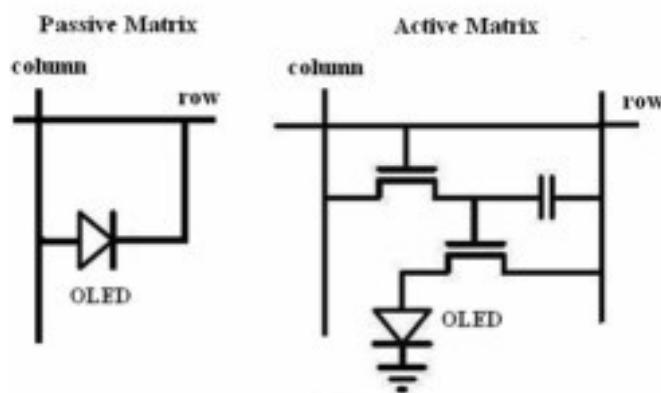
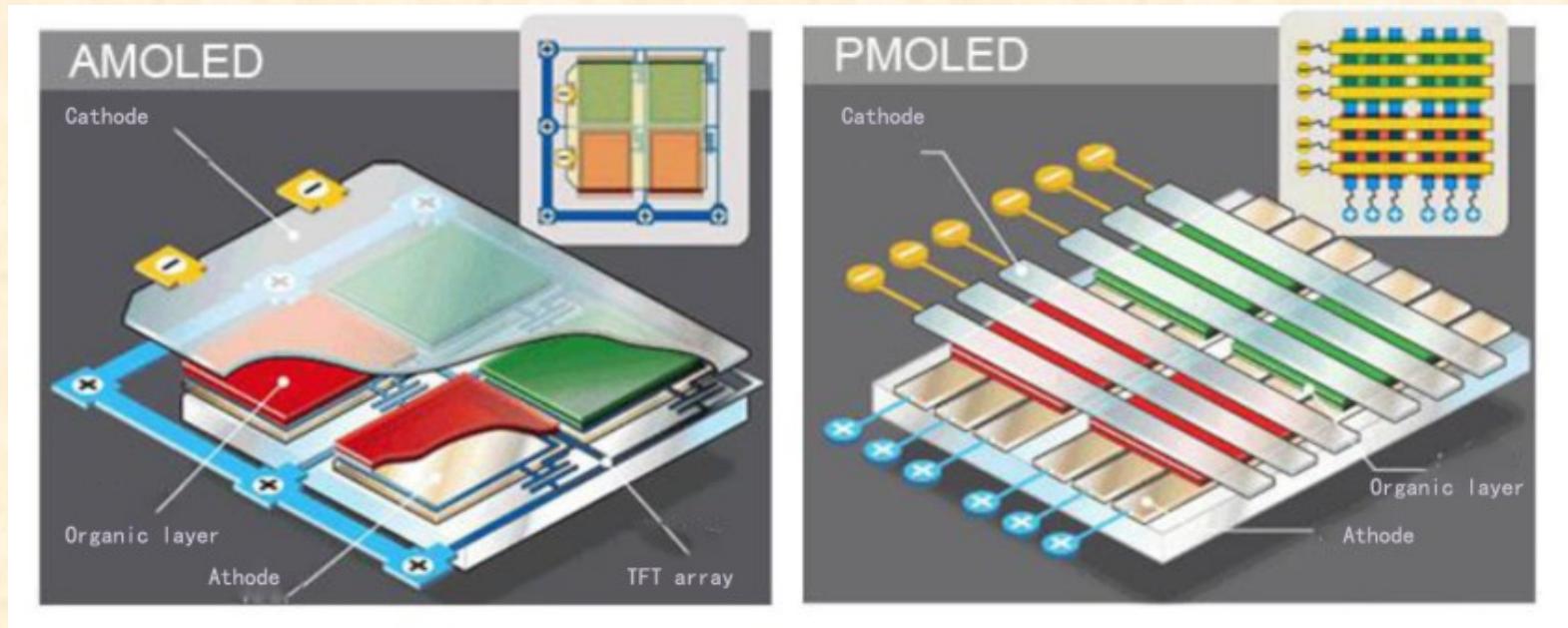


Fig. 1. Schematic of PMOLED (PM) and AMOLED (AM)

