Porphyrins bearing 2-thienyl substituent were copolymerized with 3-methylthiophene and 3-hexylthiophene by using an electrochemical polymerization method in a tetrabutylammonium hexafluorophosphate/dichloromethane (TBAPF6/DCM) solution. The copolymers were examined with FT-IR, UV-vis spectrometer and cyclic voltammetry analyses. Electrochromic properties of the electrodeposited copolymers were investigated and a rapid and persistent coloration process based on redox reactions of the films was observed. The pale yellow color of thin films switched to gray when anodic potential was applied. Optical contrast at 600 nm was recorded by a spectrophotometer of the solid state devices and their durability was tested by chronoamperometric measurements during 1000 cycles