

Abstract

A receiver includes a kinescope (22), a driver amplifier (24) and an integrated automatic kinescope bias (AKB) circuit (42). A soft start circuit (72) includes a timing capacitor (84), external to the integrated circuit, and a control circuit (46) within the integrated circuit which limits the AKB current adjustment range during turn-on to a time determined by the external capacitor. The capacitor (84) is effectively isolated from the integrated circuit to prevent discharge thereof by protection diodes of the IC whereby the time constant of the overall AKB circuit is substantially the same for both hot start conditions and cold start conditions thereby avoiding undesirable visual start-up artifacts such as black level and contrast shifts during warm-up of the kinescope for either a cold start condition or a hot start condition.

This Sheet Has Been Replaced