Relay Feedback Method under Nonlinearity and Static Disturbance Conditions

성수환*, 이지태

경북대학교

(suwhansung@hanmail.net*)

We proposed a new relay feedback method to manipulate output nonlinearities and static disturbances. It guarantees the symmetry of the relay output by setting the time length of the lower value of the relay to the half of the previous period. And, it rejects the effects of static disturbances and output nonlinearity by changing the input reference value for the relay on-off. We demonstrate with a simple example that the proposed method can be successfully applied to identify the Wiener-type nonlinear process with a static disturbance.