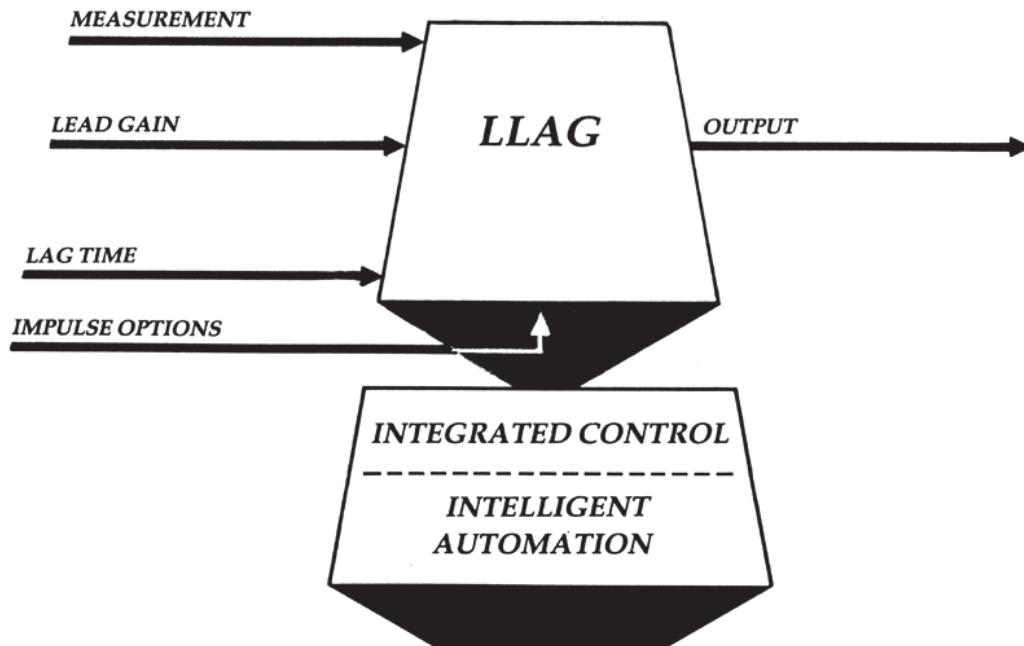


## **Lead-Lag (LLAG) Block**



The Lead-Lag (LLAG) block is a computational dynamic compensator containing one lead-lag element and optional impulse functions for process dynamic compensation in feedforward and feedback control strategies.

### **OVERVIEW**

The LLAG block permits rapid (lead) or gradual (lag) control action to be introduced into a process loop in response to a step change of the Measurement input to the LLAG block. The amount of lead action is configured through the use of the Lead Gain parameter and the amount of lag is configured through the use of the Lag Time parameter. The Lead Gain parameter determines the ratio of the lead-to-lag response.

In the impulse mode (a selectable option), three types of impulse responses are available:

- ▶ Normal impulse option-output responds to all input changes
- ▶ Positive impulse option-output responds only to input changes which are increasing with respect to time
- ▶ Negative impulse mode-output responds only to input changes which are decreasing with respect to time.

Only one of the above impulse characteristics may be selected at a time.

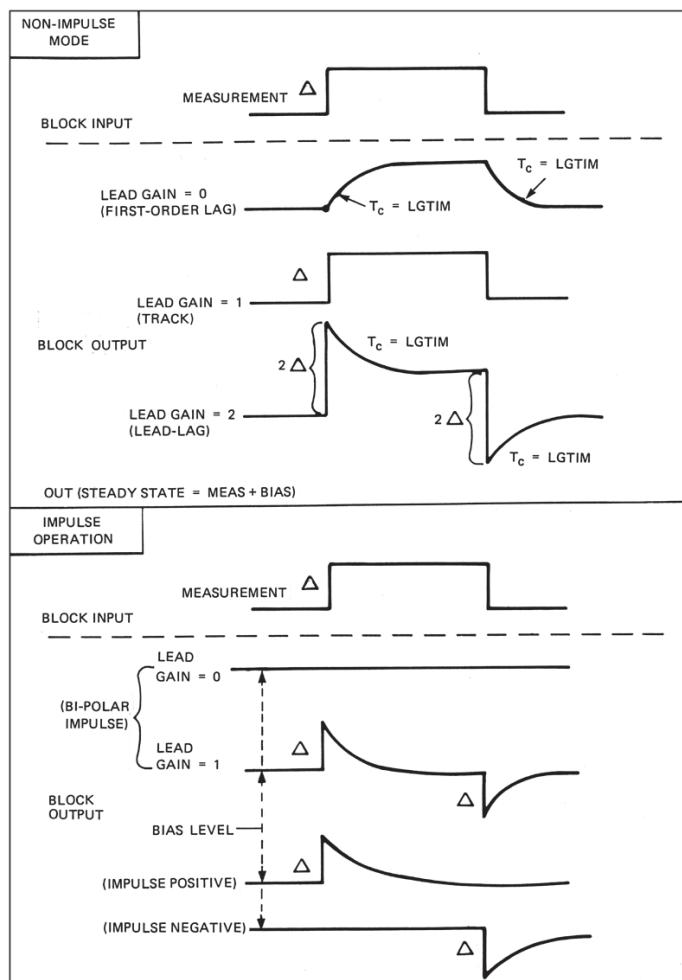
For start-up of feedforward schemes, the output, when Follow is specified, follows the Measurement input. A Bias term adjusts the steady-state value over the output range.

## STANDARD FEATURES

- ▶ Manual/Auto control of the output
- ▶ Adjustable lead-lag ratio
- ▶ Adjustable lag time constant.

## Options

- ▶ Output biasing
- ▶ Lead-lag (default)
- ▶ Bipolar impulse
- ▶ Positive-only impulse
- ▶ Negative-only impulse.





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