Yokogawa AAM50

01 Trace the current loop and receiver burden

1. Trace the complete current loop from the module nest through cable, receiver and any series test equipment. List the resistance contributions and compare their total with the permissible external load. Preserve the software range and controller-to-receiver engineering-unit relationship before opening the process loop.

2. Do not use the current-source output resistance as an allowance for external burden; these specifications describe different properties.

Acceptance observation	Loop burden and configured range describe the actual installed circuit.
Evidence to retain	Connection map and approved baseline
Release boundary	Use the applicable Yokogawa analog I/O instructions and the approved application acceptance criteria.

AAM50

02 Preserve nest location and software range

1. Confirm the analog I/O nest position and the supported system baseline before replacing the module. Keep the process in a state that tolerates interruption of the output command. Identify polarity and the receiver power arrangement, then prepare a suitable series current measurement without leaving an uncontrolled open loop.

2. If system support or nest identity is uncertain, resolve that boundary before attempting to cure the problem by changing output scaling.

Acceptance observation	The replacement remains in its assigned nest and the receiver cannot respond unexpectedly during work.
Evidence to retain	Isolation and supply assessment
Release boundary	Use the applicable Yokogawa analog I/O instructions and the approved application acceptance criteria.

AAM50

03 Reconnect polarity without opening live control

1. Reconnect the loop using the retained polarity and terminal assignment. Inspect the complete path for open connections and unintended parallel paths. Reintroduce the command under the approved test conditions, comparing measured loop current with the controller demand and receiver indication rather than checking a display alone.

2. A correct demand with no measured current points toward loop continuity or output delivery; a wrong receiver indication requires a separate scaling check.

Acceptance observation	The electrical signal reaches the intended receiver through a continuous loop.
Evidence to retain	Restored interface and configuration
Release boundary	Use the applicable Yokogawa analog I/O instructions and the approved application acceptance criteria.

04 Measure settling and final element response

1. Select controlled points across the normal working span and allow the analog stage and receiver to settle before recording results. Keep loop burden and ambient conditions stable during comparison. Where a change of range is authorized, test the new engineering-unit limits and final-element direction as a coordinated change.

2. Clipping near one end of the range requires burden and receiver-limit checks before a calibration adjustment is considered.

Acceptance observation	Settled electrical values and process indication agree across the working span.
Evidence to retain	Measured response and diagnostic state
Release boundary	Use the applicable Yokogawa analog I/O instructions and the approved application acceptance criteria.

AAM50

05 Reconcile electrical and process acceptance

1. Restore the production demand and confirm the final element follows it in the correct direction. Remove temporary series instruments through the approved method, recheck continuity and observe the normal process response. Retain the chosen range, load assessment and measured acceptance points with the station configuration.

2. Acceptance is incomplete if only the laboratory connection works or if the receiver has not been returned to its intended scaling.

Technical basis: Yokogawa GS 33G06K40-01E, September 2009.

Related product navigation

Yokogawa AAI143-H03 S1

Yokogawa AAI143-H00 S1

Yokogawa AAI143-S00 S1

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.