Data Acquisition Unit
Main Program

Key:

- Run Subroutine (circle)
- Decision (diamond)
- State Change (rectangle)
- Communication (rounded rectangle)

Main → Experiment Running

Experiment Running — Yes → End Experiment — Yes → Timer: off / Running: Clear

End Experiment — No → (to New Command path)

Experiment Running — No → New Command — Yes → Parse New Command → Success

New Command (Yes) → Parse New Command → Success

Success — Yes → Valid Request

Success — No → Send Abort

Valid Request — No → Send Abort

Valid Request → Break "_ _ _ _"

Break "_ _ _ _" → Acknowledge Active

Break → Command: "A"

Command: "A" → Acknowledge Active

Command: "A" — No → Command: "0Pn"

Command: "0Pn" → Set Period

Command: "0Pn" — No → Command: "aRn"

Command: "aRn" → Continuous Measurmenrt

Command: "aRn" — No → Command: "aMn"

Command: "aMn" → Start Experiment

Command: "aMn" — No → Command: "aDn"

Command: "aDn" → Send Data

Command: "aDn" — No → Send Abort

Send Abort → (back to Experiment Running)

New Command: Clear