**AGF Dome Controller Command Summary for Firmware v2.0**

Command Function Response (terminated with CR)

:I# Initialize AGF Dome Controller. Init. Done v2.0 3-DEC-2019

:V# Get Firmware version and Input Interface. AGF Dome Control v1.4 3-DEC-2019 Using USB interface

AGF Dome Control v2.0 3-DEC-2019 Using Network interface

:E1# Enable emulator mode, dome will not move. Emulator On (Motion command responses are appended with “ Emulator”.

:E0# Disable emulator mode, normal operation. Emulator Off

:Qe# Stop CW movement. Stop east

:Qw# Stop CCW movement. Stop west

:Q# Stop movement any. Stop all

:Me# Start moving dome CW. Guide east

:Mw# Start moving dome CCW. Guide west

:Tennnnn# Move dome CW for nnnnn milliseconds. Guide east n ms

:Twnnnnn# Move dome CCW for nnnnn milliseconds. Guide west n ms

*Uses dome motor wheel pulse detection sensor.*

:Rennn# Move dome CW for nnn degrees. Rotate east n deg

:Rwnnn# Move dome CCW for nnn degrees. Rotate west n deg

*Requires programming cable to be connected.*

:D1# Enable debug mode, additional output sent to controller’s debug/programming port.

Debug On

:D0# Disable debug mode. Debug Off

Notes:

Toggle switch on side of control box selects USB or XPort Network interface.

All responses are sent with a termination character of CR (decimal 13).

Serial port is set at 9600 baud 8 bit no parity one stop bit and no handshake.

The TCP port for the XPort is 7777.

**AGF Dome Controller Command Summary for Firmware v3.0 (Arduino UNO)**

Command Function Response (terminated with CR)

:I# Initialize AGF Dome Controller. Init. Done v3.0 4-Oct-2022

:V# Get Firmware version and Input Interface. (A) AGF Dome Control – Arduino 4-Oct-2022 v3.0 [USB]

(A) AGF Dome Control – Arduino 4-Oct-2022 v3.0 [XPort]

:E1# Enable emulator mode, dome will not move. Emulator On (Motion command responses are appended with “ EMULATOR” and motor does not move.

:E0# Disable emulator mode, normal operation. Emulator Off

:Qe# Stop CW movement. Stop east

:Qw# Stop CCW movement. Stop west

:Q# Stop movement any. Stop all

:Me# Start moving dome CW. Guide east

:Mw# Start moving dome CCW. Guide west

:Tennnnn# Move dome CW for nnnnn milliseconds. Timed east n ms

:Twnnnnn# Move dome CCW for nnnnn milliseconds. Timed west n ms

*Uses dome motor wheel pulse detection sensor.*

:Rennn# Move dome CW for nnn degrees. Rotate east n deg

:Rwnnn# Move dome CCW for nnn degrees. Rotate west n deg

*Must use the XPort interface for this to work correctly.*

:D1# Enable debug mode, additional output sent to controller’s USB port.

Debug On

:D0# Disable debug mode. Debug Off

:Bnnn# Set pulse dome bias. Dome pulse bias set to n deg

:A# Get pulse dome bias. Dome pulse bias is n deg

:X# Get extended status Internal data and status

:G# Get dome position, pulse moves only. Dome position is n deg

:Snnn# Set dome position, pulse move reference only. Dome position set to n deg

Notes:

All responses are sent with a termination character of CR (decimal 13).

Serial port is set at 9600 baud 8 bit no parity one stop bit and no handshake.

The TCP port for the XPort is 7777.