

APPENDIX B - MOUNT SPECIFIC DATA

For AVL Mounts with high speed pulses

Date: 19 Sept. 2011

Software: 1.60

This appendix describes RC3000 operations unique for several AVL mounts. Differences between these versions and the operation described in the "baseline" RC3000 manual are noted on a paragraph by paragraph basis.

1.1 Manual Organization

This appendix is provided as a supplement to the baseline RC3000 manual.

1.2 Mount Models

DESIGNATION	AVL MODEL
G1	1.5 Global with high speed pulses (1512K)
G2	1.2 Global with high speed pulses (1212K)
G3	1600
G5	1278
G9	1.8 USA / 400 deg.
GL	2.0 USA / 400 deg.
UG	1842

1.3.2 System Interface Requirements

These mounts in the AVL family follow the standard RC3000 interface requirements.

2.1.4 Inclinometer Orientation

The inclinometer should be rigged with the face of the reflector vertical.

2.3.2 Elevation Reference Position

MODEL	VOLTAGE	OFFSET ANGLE
G1	1.69	18.9
G2	1.69	17.35
G3	1.69	17.35
G5	1.69	17.35
G9	1.69	22.3
GL	1.69	22.3
UG	1.69	22.3

3.3.1.2 Reset Defaults

The following table supplies the default configuration item values for each model of mount.

Space has also been provided to record installation specific changes to the configuration items.

Note: recording of installation specific changes to defaults may prove valuable when trying to restore system configuration.

NOTE: the default polarization limits for the G2 and G5 have been set to +/- 50 degrees to account for a "wideband" feed. To use the G2 or G5 with a narrow band feed, set the limits to +/- 90 degrees.

CONFIGURATION ITEM	G1	G2	G3	G5	G9	GL	UG	INSTALL VALUE
AZIMUTH POT DRIVE								
Fast/Slow Threshold	2.5							
Maximum Position Error	0.20							
Coast Threshold	0.1							
Maximum Retry Count	3							
AZIMUTH PULSE DRIVE								
Pulse Scale Factor	4092		761	4092		1197	1197	
CW Pulse Limit	64000							
CCW Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	1							
Coast Threshold	1							
Maximum Retry Count	3							
AZIM DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							
ELEV POT DRIVE								
Fast/Slow Threshold	3.0							
Maximum Position Error	0.2							
Coast Threshold	0.4							
Maximum Retry Count	3							
ELEV PULSE DRIVE								
Pulse Scale Factor	1197		1118	1197		2079	2079	
UP Pulse Limit	64000							
Down Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	0							
Coast Threshold	3							
Maximum Retry Count	3							
ELEV DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							
POL POT DRIVE								
Fast/Slow Threshold	2.0							
Maximum Position Error	0.5							
Coast Threshold	0.3							
Maximum Retry Count	3							
POL DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							

