

## APPENDIX B - MOUNT SPECIFIC DATA

### For AVL Technologies

This appendix describes RC3000 operations unique for several AVL mounts. Differences between this version 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	MODEL
A1	1.2 ERA
A2	1.5 ERA
A3	1.2 USA
A4	1.8 USA
A7	1.2 USA with 400 degree azimuth travel
AN	1.2 MVSAT

#### 1.3.2 System Interface Requirements

All 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
A1	1.69	20.0
A2	1.69	20.0
A3	1.69	17.35
A4	1.30	22.3
A7	1.69	17.35
AN	1.69	17.35

#### 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.

CONFIGURATION ITEM	A1	A2	A3	A4	A7	AN	INSTALL VALUE
<b>SYSTEM DEFINITION</b>							
antenna_size_cm	120	150	120	180	120	120	
<b>AZIMUTH CALIBRATION</b>							
Zero Voltage	2.50						
Azim_offset	0.0						
ccw_azim_limit	160	160	160	135	200	200	
Cw_azim_limit	140	140	140	145	200	200	
Azim_Scale_Factor	65.62	56.25	65.62	56.25	83.33	83.33	
<b>ELEVATION CALIBRATION</b>							
Zero Voltage	1.69	1.69	1.69	1.30	1.69	1.69	
Elev_offset	0.0						
Up_elev_limit	90						
Down_elev_limit	0						
Elevation_Scale_Factor	50.00						
Elevation_look_configuration	1						
<b>POLARIZATION CAL</b>							
Zero Voltage	2.50						
Polarization_Offset	0.0						
CW Polarization Limit	90.0						
CCW Polarization Limit	90.0						
Pol_Scale_Factor	20.83	20.83	38.54	38.54	38.54	39.33	
Polarization_type	2						
H/V_Reference	1						
Default Horizontal Position	-45.0						
Default Vertical Position	45.0						
Pol_Automove_Enable	1						
<b>SIGNAL PARAMETERS</b>							
Channel 1 Polarity	1						
Channel 1 Threshold	100						
Channel 1 Delay	0.1						
Channel 1 Lock Type	0						
Channel 2 Polarity	1						
Channel 2 Threshold	100						
Channel 2 Delay	0.1						
Channel 2 Lock Type	0						
<b>AUTOPEAK</b>							
Autopeak Enabled	0						
Signal Source	1						
RF Band	1						
Spiral Search AZ Limit	5						
Spiral Search EL Limit	5						
Spiral Signal Threshold	200						
Scan Range Limit	10						
Scan Signal Threshold	200						

CONFIGURATION ITEM	A1	A2	A3	A4	A7	AN	INSTALL VALUE
<b>AZIMUTH POT DRIVE</b>							
Fast/Slow Threshold	2.5			1.5			
Maximum Position Error	0.20						
Coast Threshold	0.1						
Maximum Retry Count	3						
<b>AZIMUTH PULSE DRIVE</b>							
Pulse Scale Factor	2406						
CW Pulse Limit	64000						
CCW Pulse Limit	100						
Fast/Slow Threshold	50						
Maximum Position Error	1						
Coast Threshold	1						
Maximum Retry Count	3						
<b>AZIM DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	200			400			
Fast Deadband	1000						
Slow Deadband	500						
<b>ELEV POT DRIVE</b>							
Fast/Slow Threshold	3.0			1.5			
Maximum Position Error	0.2						
Coast Threshold	0.4						
Maximum Retry Count	3						
<b>ELEV PULSE DRIVE</b>							
Pulse Scale Factor	1646						
UP Pulse Limit	64000						
Down Pulse Limit	100						
Fast/Slow Threshold	50						
Maximum Position Error	0						
Coast Threshold	3						
Maximum Retry Count	3						
<b>ELEV DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	200						
Fast Deadband	1000						
Slow Deadband	500						
<b>POL POT DRIVE</b>							
Fast/Slow Threshold	2.0						
Maximum Position Error	0.5						
Coast Threshold	0.3						
Maximum Retry Count	3						
<b>POL DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	200						
Fast Deadband	1000						
Slow Deadband	500						

