

APPENDIX A - MOUNT SPECIFIC DATA
For
AVL TECHNOLOGIES

Mount Variations

The following table lists the different mounts supported by the RC3050 and the required software model number required to support that mount.

MODEL #	MOUNT DESCRIPTION
A1	1.2 m. ERA
A2	1.5 m. ERA
A3	1.2 m. USA
A4	1.8 m. USA
A6	1.8 m. USA with pol stow switch
A7	1.2 m. USA with 400 degree azimuth travel
A8	1.5 m. ERA without polarization axis
A9	1.5 m. ERA with special polarization axis
AA	2.4 m. with 400 degree azimuth travel
AB	1.2 m. ERA with 400 degree azimuth travel
AC	1.2 m. ERA with unique polarization
AD	1.2 m. USA with 400 degree azimuth and unique polarization
AL	2.0 m. 1220/2010C Fly-Away
AM	1.2 m. MVSAT with delayed stow
AN	1.2 m. MVSAT with regular stow
AS	1.2 m. Smart MVSAT - * this mount has its own appendix A
AZ	1.2 m. ERA, 400 degree azimuth, rotating feed vs. rotating antenna

All AVL mobile mounts supported by the RC3050 use 36 VDC motors thus requiring the RC3050A hardware configuration.

System Interfaces

All AVL mounts provide the basic RC3050 interface requirements. Azimuth stow and elevation UP, DOWN and STOW limit switches are provided. **NOTE: no elevation stow limit switch on mount AL**

Sensor Rigging and Calibration

To calibrate all Vertex models, the front of the dish should be placed in the vertical position.

MODEL #	RF Boresite Angle	Target Inclinometer Voltage
A1	20.0	1.69
A2	20.0	1.69
A3	17.3	1.69
A4	22.3	1.69
A6	20.0	1.69
A7	17.3	1.69
A8	20.0	1.69
A9	20.0	1.69
AA	22.3	1.69
AB	20.0	1.69
AC	20.0	1.69
AD	17.3	1.69
AL	17.3	1.69
AM	17.3	1.69
AN	17.3	1.69
AZ	20.0	1.69

Stow and Deploy Positions

MODEL #	STOW			DEPLOY		
	AZ	EL	POL	AZ	EL	POL
A1	0.0	Stow(1)(2)	0.0	0.0	20.0	0.0
A2	0.0	Stow(1)(2)	0.0	0.0	20.0	0.0
A3	0.0	Stow(1)	0.0	0.0	17.3	0.0
A4	0.0	Stow(1)	0.0	0.0	22.3	0.0
A6	0.0	Stow(1)(2)	0.0	0.0	20.0	0.0
A7	0.0	Stow(1)	0.0	0.0	17.3	0.0
A8	0.0	Stow(1)	0.0	0.0	20.0	0.0
A9	0.0	Stow(1)	0.0	0.0	20.0	0.0
AA	0.0	Stow(1)	0.0	0.0	22.3	0.0
AB	0.0	Stow(1)(2)	0.0	0.0	20.0	0.0
AC	0.0	Stow(1)(2)	0.0	0.0	20.0	0.0
AD	0.0	Stow(1)	0.0	0.0	17.3	0.0
AL	0.0	95.0 (4)	0.0	0.0	17.3	0.0
AM	0.0	Stow(1)(3)	0.0	0.0	17.3	0.0
AN	0.0	Stow(1)	0.0	0.0	17.3	0.0
AZ	0.0	Stow(1)	0.0	0.0	20.0	0.0

- (1) The elevation stow position does not correspond to an indicated angle since the stow position is outside the effective range of the electronic clinometer. The RC3050 will drive down until it reaches the elevation stow switch.
- (2) The Polarization stow switch must be activated on these mounts in order to proceed below the DOWN limit.
- (3) When the elevation axis encounters the STOW limit, there will be a 4 second delay as the elevation axis seats itself
- (4) The AL mount will stow to the UP limit which will be encountered before an indicated 95.0 degrees