Antenna Genius Quick Start Guide

Current app version: 3.1.5

Power
AG requires anywhere from 12 to 14 VDC and at least 300 mA of power.
Connect AG to your shack 13.8 VDC power supply paying attention to proper polarity

Center positive

Antenna Ports
Antenna Ports are numbered from 1 to 8. Outer (top and bottom) antenna ports are best suited for highest frequencies and the middle antenna ports for lowest frequencies.

Radio Ports
Radio Ports have the same isolation and can be used interchangeably.

PTT Ports
PTT Ports are a new feature designed to prevent hotswitching while transmitting.

DIP Switch Configuration
DIP Switches are used to configure how AG is controlled / gets its band data.

Port A configuration:

DIP 1	DIP 2	CONTROL
OFF	OFF	LAN – FlexRadio or Manual
OFF	ON	BCD Control
ON	OFF	Pin-to-Port Control
ON	ON	GSD control

Port B Configuration:

DIP 3	DIP 4	CONTROL
OFF	OFF	LAN – FlexRadio or Manual
OFF	ON	BCD Control
ON	OFF	Pin-to-Port Control
ON	ON	GSD control

LAN Control is used for obtaining **band data from a FlexRadio**. Use the AG Windows app to find your FlexRadio on the network and connect it to it.
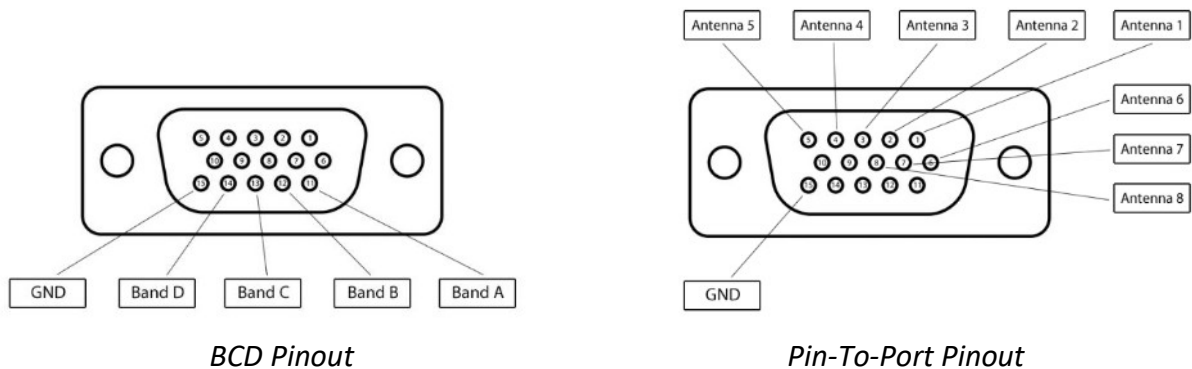This mode is also used for selecting antennas **manually** by mouse clicks. If you wish to use this functionality configure your antenna port band as *None*.

BCD protocol is used by **traditional** radios. Connector pinout is found at the end of the chapter.

Band	160M	80M	40M	30M	20M	17M	15M	12M	10M	6M	None
Frequency	1.8	3.5	7	10	14	18	21	24	10	50	
Band A	H	L	H	L	H	L	H	L	H	L	L
Band B	L	H	H	L	L	H	H	L	L	H	L
Band C	L	L	L	H	H	H	H	L	L	L	L
Band D	L	L	L	L	L	L	L	H	H	H	L
HEX Code	1	2	3	4	5	6	7	8	9	A	0

Pin-to-Port is used by 4O3A manual controllers. Expected control signal is +12VDC. The pinout table is found below.

GSD protocol stands for Genius Series Device and is used for connecting the 4O3A Interface or 4O3A Station Genius to supply band data.

BCD Pinout   *Pin-To-Port Pinout*

Network Settings
AG expects a DHCP server on the network in order to obtain an IP address.
A static address can be set using the Windows app.
If no DHCP server is found on the network AG will assign itself a fallback address: 192.168.1.140

Windows App / Firmware Update
Download the latest version of the AG Windows App from our support page under Antenna Genius:

https://4o3a.com/support/downloads

The latest firmware file is included in the app. Use the Firmware Upgrade option from the configuration menu to upgrade your AG to the latest firmware.

> **WARNING:** Never use a wireless or remote connection to upgrade firmware on any 4O3A device due to risks of bricking.
> Please use a wired local ethernet connection instead.

Help and Support
You can reset the IP and Configuration settings at any time by setting the DIP7 to ON while powering up. After the power up set DIP7 to OFF and power cycle again.
Read the complete AG User Guide on our support page under Antenna Genius:

https://4o3a.com/support/downloads/

Join our discussion board and meet our community on our forums:

https://4o3a.com/forum

Write to us directly to our support email: support@4o3a.com