# **TECH BULLETIN**



Subject: GroundControl Followspot System - GC Universal Configuration Guide

Manufacturer: PRG

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## Introduction

#### **Summary**

This guide will describe the process of using non-PRG lighting fixtures with the GroundControl Followspot System.

Controlling compatible non-PRG fixtures being used with a PRG GroundControl system from a lighting console requires extra set-up, both at the console and the GroundControl Controller. A "virtual fixture" known as GC Universal needs to be patched at the console, which provides the controller mechanism selection and camera control typically found within the fixture profile of PRG-manufactured GroundControl fixtures. If using a stand-alone GroundControl system, no extra steps are required and the fixtures can be controlled as any PRG fixture would. This tech notice explains the additional steps required to control these fixtures from a console and how the Ground Control Universal fixture functions.

#### **Console Set-up**

Two fixtures must be patched at the console.

- + First the standard profile for the fixture being used.
  - This standard fixture should be patched as per the chart of control modes included at the end of this section
- + Second the GC Universal virtual fixture.
  - It can either be patched sequentially after the fixture or anywhere there is space within the same DMX universe as the standard fixture.

Once both fixtures are patched, the physical fixture is controlled the same way as any PRG GroundControl fixture. Non-GroundControl mechanisms (color, gobo, animation, prisms, and framing) can be controlled from the standard fixture channel without any changes being made to the GC Universal channel. In order to control any GroundControl mechanisms (intensity, iris, edge, zoom, frost), the Controller Mechanism Selection attribute of the GC Universal channel must be adjusted per the chart in the DMX sheet. By changing this attribute's values, the console gives control of the specified functions to the local operator at the GC Controller. For example, if the programmer wants the operator only to have control of intensity, iris, and frost, they would set the Controller Mechanism attribute of the GC Universal channel to a DMX value between 26-30 (as per the chart in the DMX sheet).

Please note that changes are made immediately as the Controller receives changing values, so changing mechanism selection should be done with zero-second timing. Once a value is reached, you can either hold it or set it back to DMX 0, which is the idle state.



### **Fixture Set-up**

Below are the control mode and any other specific fixture setting that need to be configured for use with GroundControl.

Fixture	Control Mode (Ch)	Other Settings/Notes
Ayrton Domino TC	Extended (66)	Minimum software version 2.2.2 Pan/Tilt Speed - FS Mode
Ayrton Domino LT	Extended (70)	Minimum software version 2.1.0 Pan/Tilt Speed - FS Mode
Martin MAC Ultra Performance	Basic (48)	Limit Pan/Tilt On – Tilt Min -30000, Tilt Max - +30000 Pan/Tilt Speed - Fast
Robe BMFL Spot	Mode 1 (41)	
Robe T1 Profile	Mode 3 (53)	
Vari-Lite VL1600 Profile	16-Bit (40)	Dimmer Snap – On
Vari-Lite VL2600 Profile	16-Bit Enhanced (47)	Dimmer Snap - On
Vari-Lite VL3600 Profile	16-Bit Enhanced (54)	Dimming Curve - Linear

## **Controller Set-up**

There are two addresses that need to be configured at the controller.

- + FIXTURE DMX ADDR corresponds to the address of the standard fixture patched at the console.
- + CAM CTRL DMX ADDR corresponds to the GC Universal fixture address.
  - This must be set to match the starting address of the GC universal fixture patched at the console.
  - o If console control isn't being used, the CAM CTRL DMX ADDR field can be ignored.

