SOFTWARE & FIRMWARE UPDATE

Product: GroundControl™ Followspot System
Manufacturer: PRG
Subject: Software Update 2020.01
Bulletin No: RFS-007
Date: January 24, 2020

OVERVIEW

GroundControl Followspot System Software Update v3.21

New software versions are available for the following GroundControl™ products:

- GroundControl Followspot Controller Main Board (v3.21)
- GroundControl Truss Box (v1.04)
- GC Longthrow (v1.07)
- GC Bad Boy (v1.06)
- GC Besst Boy (v1.01)

Summary of Changes

GC Main Board v3.21 change log:

- Implement ability to disable DMX control of the GC Controller Mechanism/Function Channel
- Improve camera iris encoder function
- Allow Camera Iris/Exposure preset from local control
- Increase control channel timeout to 15 seconds
- Add support for new generation truss box boards
- Support GC Bad Boy tilt deadband to avoid hitting the camera on the yoke
- Allow access to entire range of gobo index values from the manual control menu
- Limit access to discrete range only for gobo wheel from the manual control menu
- Add support for future GC Archive application

GC Switch Board v3.00 change log:

- No changes.

GC Truss Box v1.04 change log:

- Version number change to support new generation truss boxes

Note: New generation (2019) GC Truss Boxes have the same functionality as older generation (2005) GC Truss Boxes. New and old boxes can be mixed/swapped with no change to GroundControl operation. New gen Truss Box LED indicators now flash based on the DMX rate rather than solid on. Example of difference can be seen at prg.pub/NewCardLEDVideo

GC 4-Way v0.01 change log:

- No changes.

GC Switch Board v3.00 change log:

+ Increase control channel timeout to 15 seconds
+ Update the strobe channel functionality for values 20-59: follow the intensity channel value
+ Add support for Follow Spot Controller handle
+ Log all control channel commands
+ Fix framing recalibration control channel command
+ Updated OMX mapping. Version January 2020.

GC Bad Boy v1.06 change log:

+ Remove warm-up period on lamp strike: start at full power immediately
+ Increase control channel timeout to 15 seconds
+ Add tilt deadband to avoid hitting the camera on the yoke
+ Allow the user to set the universe from fixture
+ Add support for Follow Spot Controller handle
+ Implement "Open White" on mech test menu
+ Log all control channel commands
+ Fix frost calibration issue which could cause frost to hang in calibration state.
+ Updated DMX mapping. Version January 2020.

GC Best Boy v1.01 change log:

+ Increase control channel timeout to 15 seconds
+ Allow user to select any OMX address instead of limiting to four options
+ Allow the user to set the universe
+ Add support for Follow Spot Controller handle
+ Log all control channel commands
+ Updated OMX mapping. Version January 2020.

Release Software and Firmware Version Summary

The current firmware/software version are show in the Information menu. The latest versions are as follows:

FIRMWARE	SOFTWARE
Truss Box: v1.04	GroundControl: v3.21 01/16/2020 14:48
2005: 01/08/2020 11:07 2019: 12/23/2019 10:04	GC Bad Boy: v1.06 10/07/2019 16:24
Switch Board: v3.00 07/28/17 12:42	GC Best Boy: v1.01 09/24/2019 11:48
4-Way Switch: v0.01 02/25/2016 10:08	GC Longthrow: v1.07 09/24/19 12:30

Note: There is no functionality difference from Truss Box 2019 and Truss Box 2005. 2019/2005 boxes can be mixed/swapped with no issues.

DETAILS

GC Controller Mechanism/Function Selection DMX Enable/Disable

The Controller Mechanism/Function Selection channel can be enabled (default) or disabled from incoming DMX control in the Options Window. When disabled, all Controller Mechanism commands from a DMX console will be ignored. The Controller Mechanism/Function channel is ENABLED by default.

When disabled, if any GC Attributes (Intensity, Iris, Edge, Zoom, Frost) were the previously controlled by a console, they will remain with console control until the attribute is taken over from the Home Screen. Pan/Tilt will revert to the Controller.

Using the Control Channel from a DMX console, Value 180 on the Control Channel will Enable this function and Value 182 will Disable.
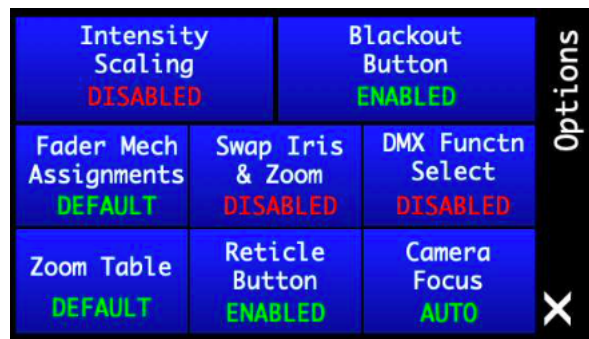

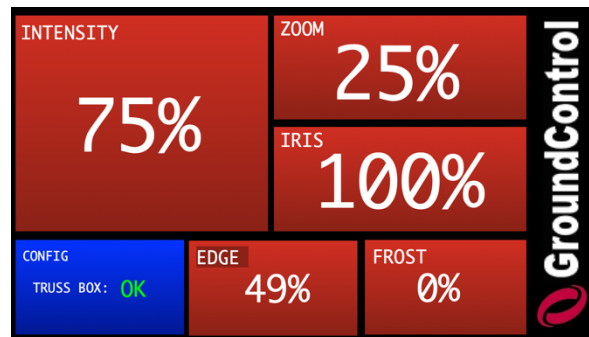Figure 1-1: Options Window With New Function Select Button

Figure 1-2: Home Screen With DMX Disabled

Updating GroundControl Software

GroundControl software is updated sing the two access ports (Figure 1-2) available on the underside of the Control Arm:

+ **Port 1 (DMX)** – used to load firmware into the Control Arm's Switch Board
+ **Port 2 (Ethernet)** – used to load firmware into the Control Arm's Main Board, the GC Truss Box, and the GC luminaire (connected to the Truss Box).
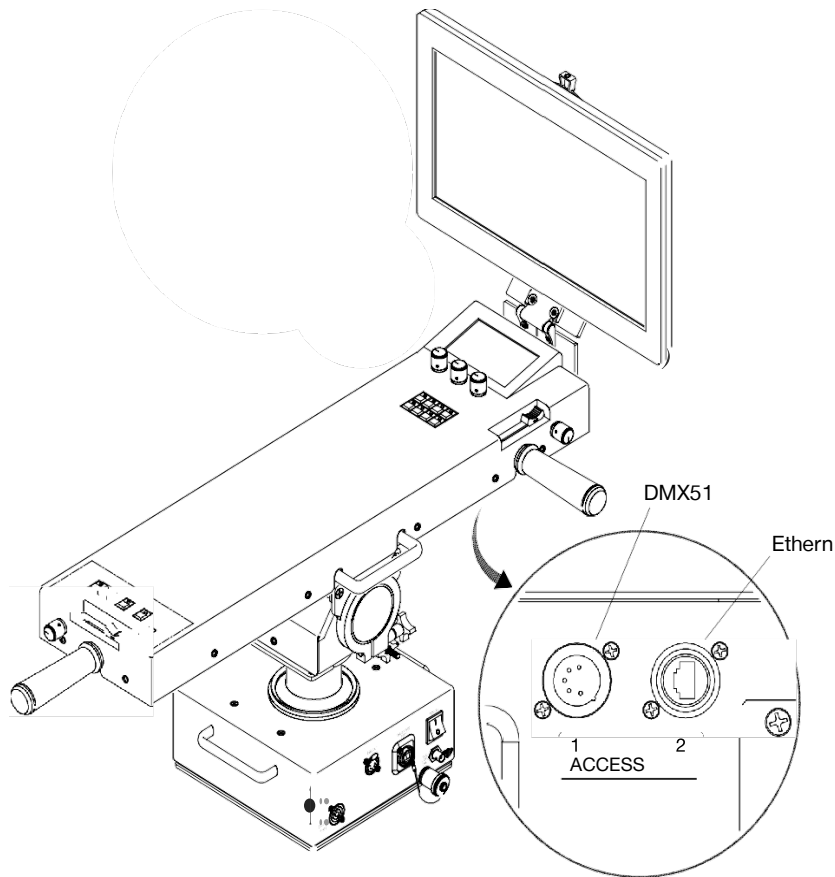
DMX51

Ethern

1   2
ACCESS

Figure 1-3: Access Ports

To update Main Board (GroundControl), Truss Box, 4Way Switch, or Luminaire:

Step 1. Connect Truss Box and Luminaire to GC Controller as normal

Step 2. Connect Ethernet cable between computer and Control Arm (Controller) Access Port 2 (Figure 1-3).

Step 3. Open the required .jar file.

Note: It might be required to download a new version of Java JDK. Follow the computer's prompt to download or navigate to prg.pub/JDK13. Once installed, the .jar file will be able to open.

Step 4. If computer has more than one Ethernet interface available, select appropriate network interface from drop-down menu. Ensure computer IP address is set within 10.66.x.x and subnet mask 255.255.0.0.

Step 5. If updating main board, disconnect fiber from GC controller

Step 6. Click **Start Download** button. Touchscreen display will change to bootloader screen and show load progress

Step 7. Wait for download to complete

Step 8. Once completed, it is recommended to power cycle the system.

Step 9. When rebooted, the updated version can be verified in the Information menu from the Controller.

Note: It is highly suggested to perform a full system reset after any software update.

To update switch board:

Step 1. Connect Ethernet cable between computer and PRG Node device or S400 system

Step 2. Connect an XLR cable between a Node+, a Supernode or S400 device and the Control Arm Access Port 1 (Figure 1-3)

Step 3. Open required .jar file.

Step 4. If computer has more than one Ethernet interface available, select appropriate network interface from drop-down menu. Ensure computer IP address is set within 10.66.x.x and subnet mask 255.255.0.0

Step 5. Click **Start Download** button. Touchscreen display will change to bootloader screen and show load progress

Step 6. Wait for download to complete

Step 7. After download, the update version can be verified in the Information menu

Software Crossload

The Information menu provides a method for sending the current GC Main Board software to any connected Controllers. Controllers can be daisy-chained using the DMX512 ports located on the Control Arm interface panel.

Note: At the last Controller in the chain, install a male termination connector at the DMX OUT connector.
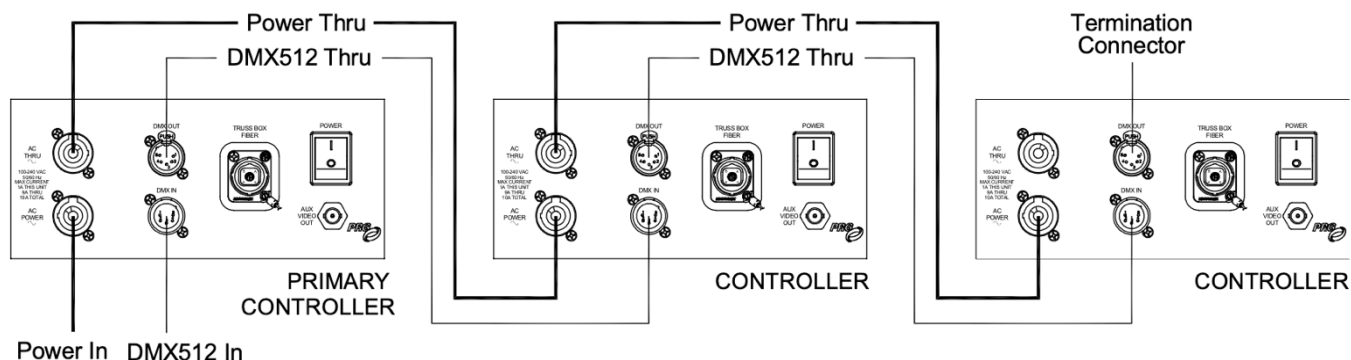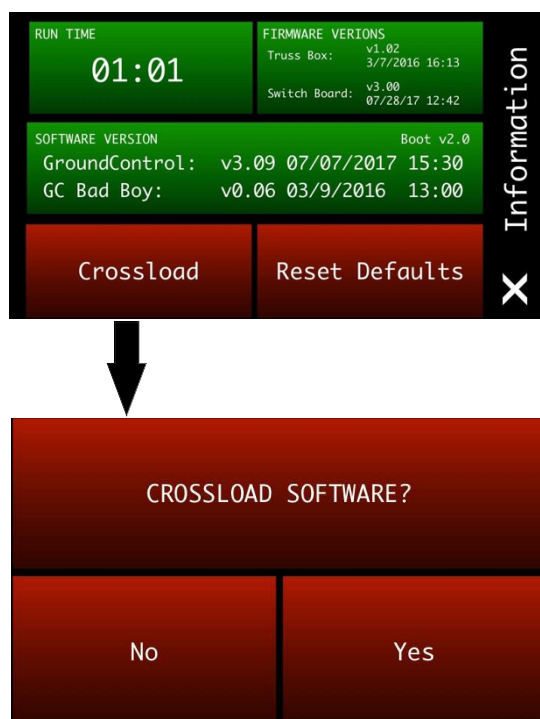

Figure 1-4: Example Daisy-Chain Configuration

To initiate the software crossload, press **Crossload Software** in the Information menu. At confirmation screen, press "Yes". If a connected Controller already has that software version, it will do nothing. If it does not have the same version, it will go into the boot screen and start updating.

Note: There should be no active control data during the update process.