GPL Camera Control Master II v1.00

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This patch is my attempt at making a car and track camera controller that can be used on the fly to control the Player F10 and Replay Pit Cam and Chase views. It is intended for those who want to make movies or special still screenshots of GPL.

The original CCM program was written by Peter van der Burg and is a very cool program, but it does not work with more than seven GPL cars or with newer operating systems such as Windows 7 and later. CCM2 does essentially the same as the original although it lacks some of its features. The good news is that CCM2 works with all operating systems, all mods, and with any number of cars.

CCM2 is a patch rather than a standalone, external program and you can place its .xml file into one of the following three directories. Then start GEM+ and let it rebuild the mod .exe.

1. GPL Installation/Mods/GEM+/Mod Physics directory. The patch will always be used by this mod only.

2. GPL Installation/Mods/GEM+/Mod Physics/Options directory. The patch will be used by this mod only and can be turned on and off with its GEM+'s checkbox.

3. GPL Secrets/GEM+/Options directory. The patch will be used by all installations and mods and can be turned on and off with its GEM+ checkbox.

I don't know how to read mouse inputs in assembly so I'm using keyboard inputs instead.

There are two operating modes. In the Player F10 and Replay Chase views, the camera viewpoint is based on the selected car's position so it will always follow that car around the track. As with any replay, you can

use the mouse or normal keyboard commands to control the replay. In the Fly (Replay Pit Cam) view, the camera is not based on any car and is free to move anywhere on the track so you will have to "fly" it yourself with the keyboard.

Use the following keys to control the camera viewpoint.

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1. Player F10 and All Cars Replay Chase Views:

A. Left Arrow--move left

B. Right Arrow--move right

C. Up Arrow--move forward

D. Down Arrow--move rearward

E. Three "3"--rotate left

F. Four "4"--rotate right

G. S--Super Spin On/Off Toggle counterclockwise

H. X--Super Spin On/Off Toggle clockwise

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2. Fly (Replay Pit Lane) View:

A. Left Arrow--turn left. Holding the key down will increase the rate of turn.

B. Right Arrow--turn right. Holding the key down will increase the rate of turn.

C. Up Arrow--increase speed

D. Down Arrow--decrease speed. Can be used to go in reverse too.

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3. All Views:

A. A--move up

B. Z --move down

C. One "1" --rotate down

D. Two "2" --rotate up

E. Five "5"--zoom in

F. Six "6"--zoom out

G. Zero "0"--reset cam positions to default

H. C--next camera (Grand Prix Legends original key)

I. V--next driver (Grand Prix Legends original key)

J. Shift + C--previous camera (Grand Prix Legends original key)

K. Shift + V--previous driver (Grand Prix Legends orignal key)

These keys may seem complex at first, but they are arranged in a logical manner and are really very simple. It may take a little practice to move the cameras about, especially in the Fly mode, but it doesn't take long to figure that out. Start the Fly mode at a slow speed and gradually increase the speed as desired. A series of key taps rather than continuously holding a key down will help. To stop forward speed, just tap the decrease speed button until the motion stops (and vice versa).

The camera movements may seem a bit jerky compared to the original CCM program which used mouse inputs for finer control. I've set the camera movements to what I think are reasonable values. It would have been nice to start with slower values and then switch to faster values if a modifier key such as the Shift Key were also pressed, but I don't know how to do that in assembly language. Currently, the settings are:

X Position--1.8 meters per second

Y Position--1 meter per second

Z Position—3.6 meters per second

Rotation--50 degrees per second

Speed Increment--2.5 meters per second

Please let me know what you think and offer suggested improvements.

Known Bugs:

Some keys are shared between modes so if you adjust the viewpoint in the Player F10 view, the Fly mode will start moving too even though you aren't in the Replay Pit Cam view. Press the Zero key to reset.

GPL's code can only process one key at a time so it's impossible for now to press two keys simultaneously to move the viewpoint in a diagonal direction.

In the Replay Pit Cam view, zooming in and out also appears to rotate the cam down and up slightly at the same time. This effect is not apparent at all tracks.

In the Replay Pit Cam view, the reset function doesn't always work properly. To completely reset the Pit Cam, exit the track and reenter.

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v.04 21 Dec 2015--initial beta

v.05 31 Dec 2015--adds zoom to Player F10 and Replay Chase views. Remaps keys for different country keyboards. Decreases yaw rotation rate.

v.08 2 Jan 2016--adds reset and counterclockwise Super Spin.

v.09 4 Jan 2016--fixes Super Spin tilt bug. Adds zoom to Pit Cam view. Updates reset.

v.10 5 Jan 2016--adds clockwise Super Spin. Fixes zoom out bug. Adds smooth, progressive FLY mode rotation.

v.12 9 Jan 2016--increases yaw rotation rate for easier flying. Decreases speed increment.

v.13 23 Jan 2016--increases x and z position rate and decreases speed increment.

v1.00 27 Jan 2016--initial release