ASTROMECHANICS

ASCOM Canon EF Lens Controller

Simple solution for external focus & iris drive

Communication protocol description

Protocol description

User level software communicates with ASCOM Lens Controller via a simple commands transfer protocol. Commands transmit as a specially formed text units. You can use this protocol autonomously or embed it in your software products. You can use a development environment that allows you to interact with COM ports.

Connection

Use any terminal utility that allows you to connect to COM port associated with ASCOM Lens Controller (PUTTY for example). It's lightweight easy to use software with rich functionality.

Open PUTTY, choose connection method (Serial), configure serial line (COM port name) and speed as shown in the figure below. Then click Open.
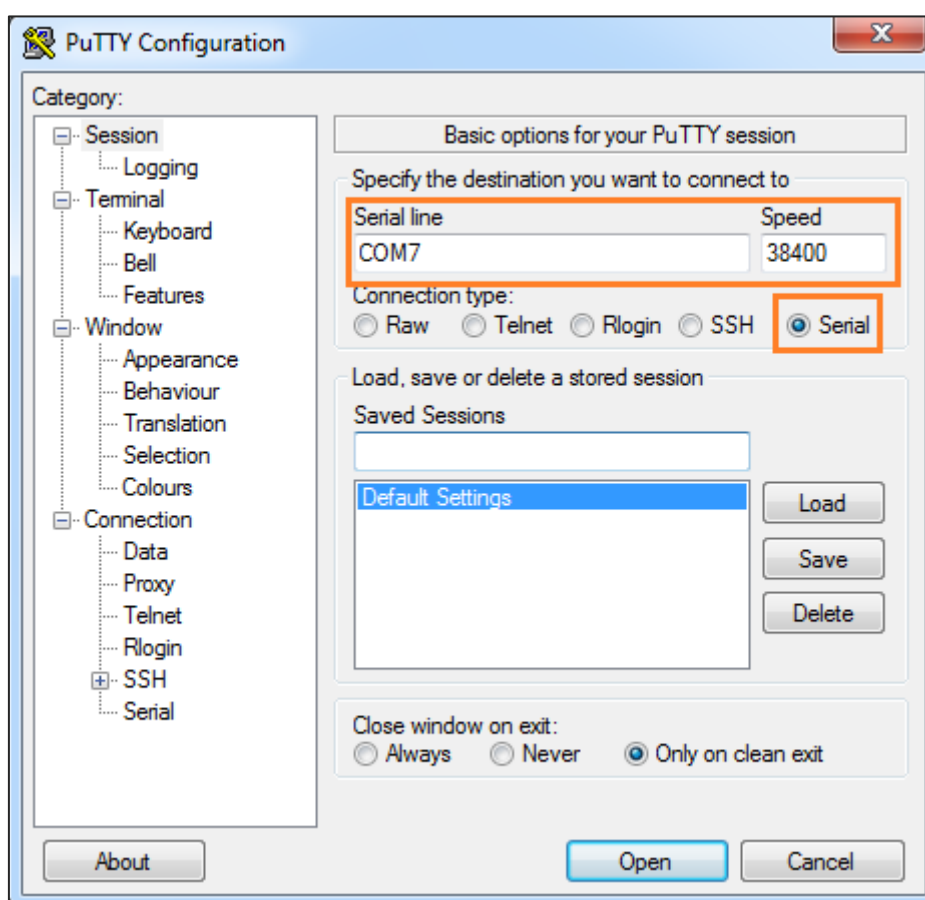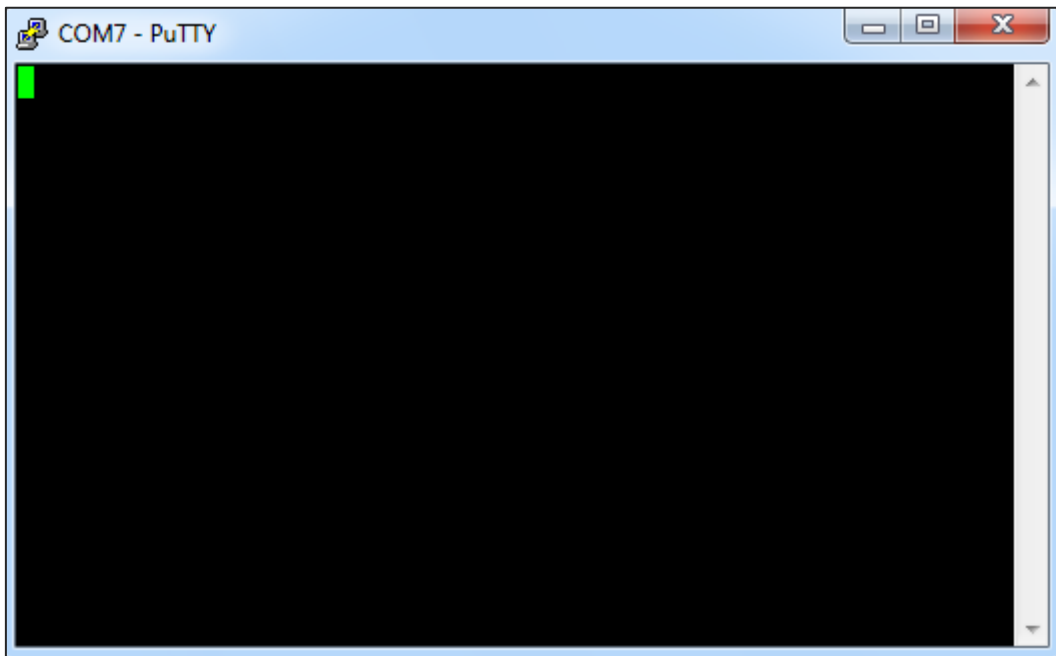

PUTTY configuration

You can find port name in the Windows Device Manager.
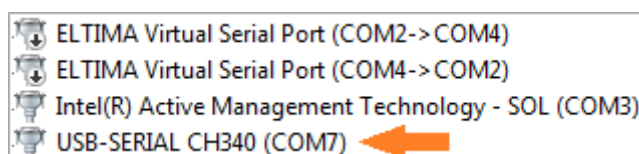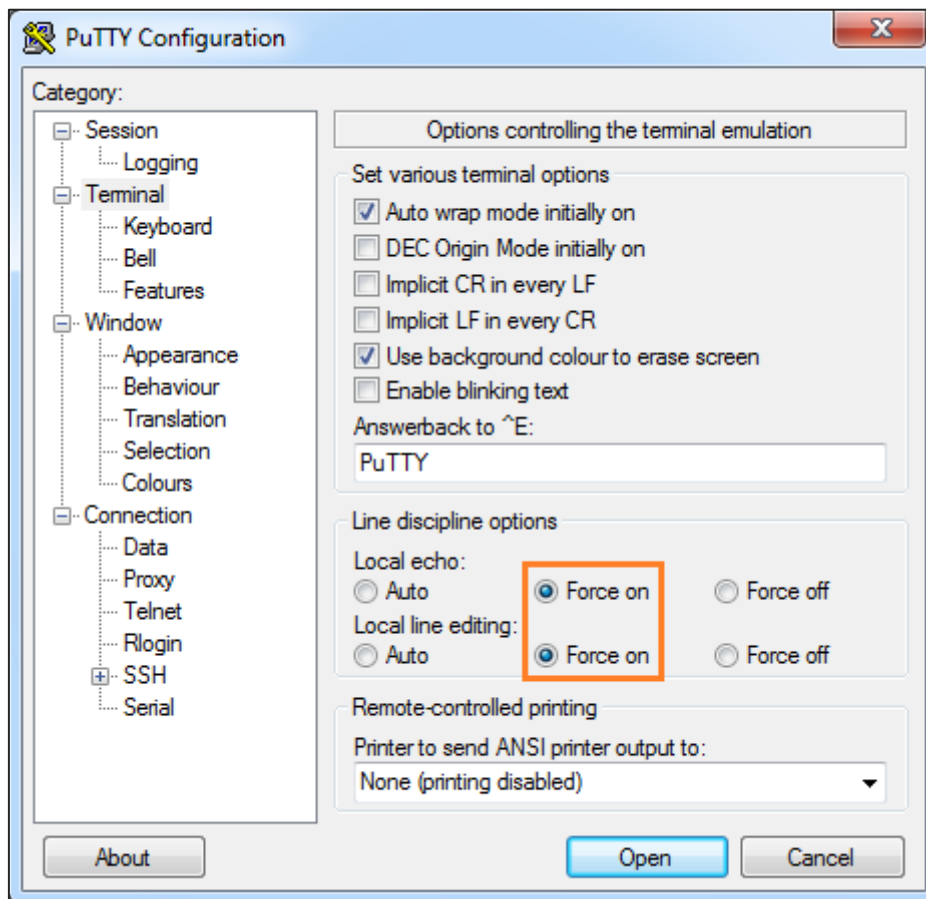

List of available COM ports

Terminal window

Now you can try to type some commands. All commands terminate by # symbol. List of available commands and their syntax is shown in the table.

P#	Get current focus position (P# → 4800#)
Mxxxx#	Move the focus position to xxxx absolute value (M5200#). This command doesn't send a reply.
Axx#	Set the aperture value. NOTE: xx value is a difference between the aperture value you want and maximum aperture value (xx=0) available for your lens. For example: f1.8 → f2.8 with Canon EF 50 mm f1.8 – A04#. A00# return aperture value to f/1.8. This is easy to understand if you look at AV series for your lens. Canon EF 50 mm f/1.8 | **1.8** 2.0 2.2 2.5 **2.8** 3.2 3.5 4.0 4.5 5.0 5.6 6.3 7.1 8 9 10 11 13 14 16 18 20 22 This command doesn't send a reply.
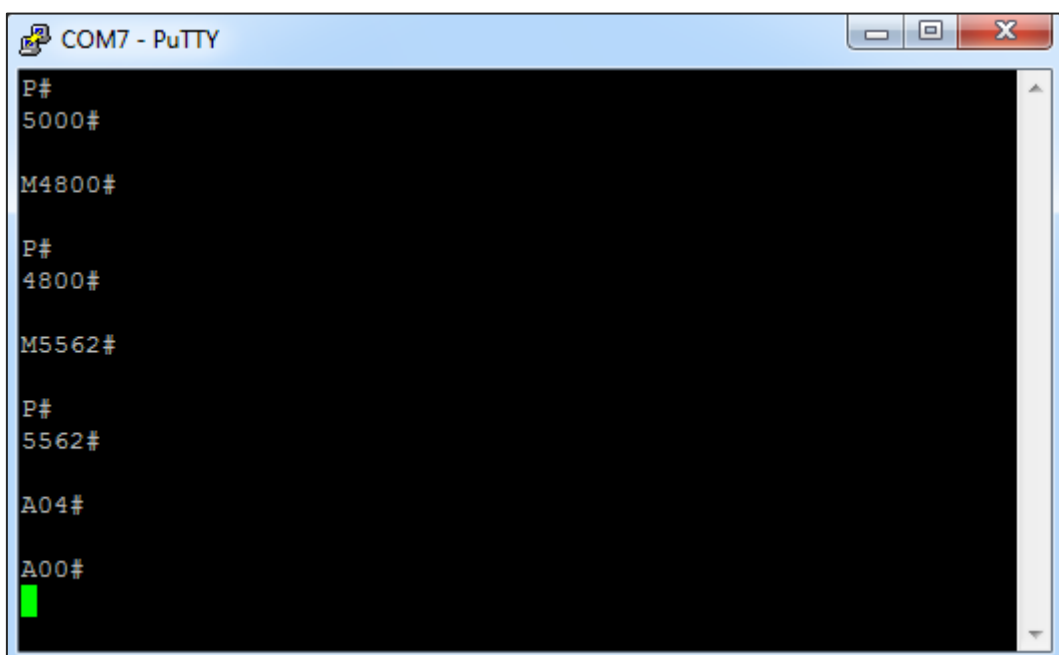
Protocol test in PUTTY

If you have problems with command line make sure that the following settings are enabled.

Line discipline options