MCX & EXOS II GoTo Cable Set & Adapters

Part No. 4964352

This adapter cable set works in combination with the new Bresser Driver which is compatible with **ASCOM** and the new **EXOS-II GOTO AZ/EQ V2.3hex** software version to allow users to update the handbox firmware for the BRESSER EXOS-2 GOTO Equatorial Mount and operate the mount using **Windows** navigation software via ASCOM.

Also suitable for **MCX Goto telescopes.** User of **MCX Goto telescopes** need to install only **ASCOM Platform** and **BRESSER GOTO ASCOM** driver - see point No. 1 , 4 and 5. Then directly go ahead from point No.15 on without doing any software update.
NOTE: **Do not try to upload the EXOS-II hex-file into MCX Goto handbox!**

Operating Instructions:

1. *Prior to doing any step, make sure you have installed the ASCOM Platform software available at* **www.ascom-standards.org/**.

2. Install driver of USB to serial interface adapter from CD-Rom.

3. To update the firmware on the mount's handbox, goto www.bresser.de item No.4964352, and download the software package. It contains the **BRESSER GOTO SYSTEM EXOS EQ v2.3.hex** software for Handbox along with the **Philips LPC2000 Flash Utility V2.2.3** for uploading the hex-file into the handbox and the **BRESSER GOTO ASCOM** driver.

4. Once the download is complete, extract the files into your documents folder, open and follow the Bresser GOTO ASCOM Driver setup V1.0.2 Installation Wizard.

5. After Installing select the Bresser GOTO ASCOM driver as your telescope choice

6. Install "Philips Flash Utility Installation.exe" to your computer

7. Once it is installed, setup all parameters as follows:

Filename: C:/BRESSER GOTO SYSTEM EXOS EQ v2.3.hex
XTAL Freq (kHz): 14745
Communication ConnectedTo Port: COMxx
Communication Use Baud Rate: 57600
Communication Time-Out (sec): 2
Erase/Blank: Entire Device
Erase/Blank Start Sector: 0
Erase/Blank End Sector: 14

8. Setup the cable for **software upload process** as follows:

NOTE: Short white cable adapter to be used only for uploading process!

9. Connect your handbox to your laptop and mount using the appropriate ports.

10. Once connected, power on the mount.

NOTE: The screen on the handbox will be blank after performing this step.

11. On the LCP2000 dialogbox, go to "Read Device ID"and click.

12. A message box appears and the software ask you to RESET your handbox. Simply switch off the mount and after waiting 2 seconds again power on your mount.

13. Confirm the message box to read the ID.

14. After the ID has been confirmed, select the "Upload to Flash" option and wait for the software loading process to be completed.

15. After loading is complete, turn off the mount, and disconnect the EXOS2GT Cable 2.3 from the handbox.

16. Turn on your EXOSII mount and make sure your handbox firmware version is 2.3 or above.

17. Set up the date and time, daylight savings information and location. After the system initialization is complete, connect the EXOS II GoTo cable set via the appropriate ports to both the handbox and your Windows 10 computer. Setup the cable for **remote control** as follows:

18. Open the ASCOM telescope/dome hub (POTH), choose setup and select Bresser GOTO compatible ASCOM driver.

19. Connect. The latitude and longitude of your location and your set time will sync with the handbox. You can now start navigating and tracking objects in the night sky.

NOTE: If using other astronomy programs like SkyMapPro, Cartes du Ciel without the POTH, goto telescope then telescope settings and choose ASCOM. Choose Telescope again and

connect Telescope. Select ASCOM Telescope Chooser and locate Bresser GOTO compatible ASCOM Driver and press ok. Configure your communications port and press OK.

If you want to use more than one ASCOM Client Astronomy Program with your mount, then you must use the POTH to service those clients. Just connect each client to the POTH in the Telescope Chooser.

NOTE: Due to the nature of the ASCOM driver's power needs, we recommend using an AC/DC 12V 3,0A power supply with a 5.5mm x 2.5mm DC power cable male plug for optimal performance.

Computer requirements: WINDOWS 10