

Change log this document

Rev 1.0 / 2006-11-21	First version
Rev 1.1 / 2006-11-22	Added download link and minor spelling corrections
Rev 1.2 / 2006-11-23	Added information regarding SW v 1.1. See Appendix 1.

Change log GuideMate Software

Rev 1.0 / 2006-11-21	First version
Rev 1.1 / 2006-11-23	Added possibility to select various finder scopes, minor GUI improvements, possibility to hide tools and "minimize" software.

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1 What is GuideMate?

GuideMate is a VERY simple software with no settings what so ever. The reason I spent three hours developing the software and writing this document was following:

I shoot in Alt/AZ mode and "no" software manages to autoguide in Alt/AZ mode with "perfect" result. To make the best of the situation I had an idea that turned out to work pretty well, at least for me, so why not share it with you? GuideMate can be useful for any setup including of course EQ mounts.

GuideMate is simply a "transparent digital finder scope" that can be used in combination with any imaging and autoguiding software on the market. Tracking is made by your self via a PC or a hand control. If you have e.g. a GoTo mount, the word *tracking* should be exchanged with *correcting*.

2 Download and Installation GuideMate

Download at: <http://213.115.157.66/Temp/install%20GuideMate.zip>. To install just run the "Install GuideMate.exe" and follow the instruction. A shortcut will be created on your desktop.

3 System Requirements

- A "normal" PC running on Windows XP, .NET framework 1.1 and your favorite imaging software's installed, meaning at least one autoguiding and one imaging software.
- A motorized mount (EQ or Alt/AZ doesn't matter). If the mount can be connected and controlled by the PC it will make your life easier and warmer... In fact it will work even with a non motorized mount, but hey, in 1969 we walked on the moon.
- A stunning patience, sense of humor, a happy wife/husband and under normally circumstances worm clothes.

4 My normal telescope and accessories setup

Maybe this can help you to understand...

- A Celestron CPC 800 running in Alt/AZ mode. This scope is mainly used for guiding. For guiding I use a cheap second hand Meade DSI color camera.
- A Piggybacked 76mm Borg/Astreya APO Triplet. This scope is usually used for imaging. I use for the moment an Orion Starshoot.
- A PC with PHD Guiding software (freeware at www.stark-labs.com) and Nebulosity (40\$) from the same nice supplier.
- Adobe Acrobat reader to be able to read the help file (www.adobe.com).
- ASCOM driver for my mount (freeware at <http://ascom-standards.org>).
- No clouds and some Swedish snuff ;-)

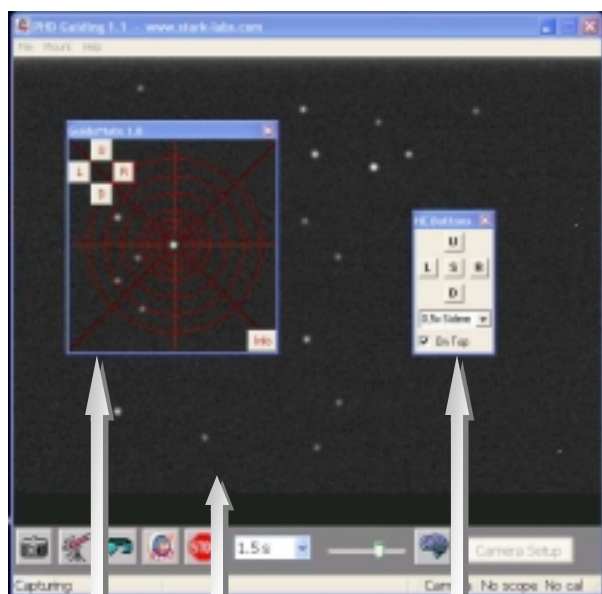
5 How I set up and use GuideMate

GuideMate can be used in many different ways, but I'm lazy so I explain how I use it.

1. Align scope and slew to target
2. Nebulosity I use as probably any user, so not much to say.
3. PHD Guiding I use a bit different then normally. I use it only to show me some stars that I will manually guide on from my PC or hand control with the help of GuideMate, so;
 - Select Mount/ASCOM in the menu
 - Select Camera type for guiding (In my case a Meade DSI) by clicking the "camera" button.
 - Connect telescope by clicking the "telescope" button. The ASCOM window will be opened. Select your mount type in the drop down list and then click "properties" button and make necessary settings. Do not forget to check the "Show hand control" check box.

NOTE: If you have a Alt/AZ mount that will not support autoguiding (most does not on reality) set track mode to "None". You may get an error message saying something like "Pulse Guide not supported". Don't care; just click OK with a smile.

- Click "Begin looping" button. You should now see the stars on the screen. Adjust Focus, Exposure time (1,5s is OK for me) and Brightness if required.
4. Start GuideMate and drag it / center it over a good guiding star. Fine adjustments can be done via the Up, Down, Left and Right buttons.
 5. Done – ready to start taking photos in Nebulosity and then guide manually (or I assume only corrections if you have e.g. a tracking GoTo mount) via e.g. the HC Button and/or hand control and/or any other PC controller (I use quite often Celestron PC remote controller). See pictures below.



GuideMate in PHD Guiding. ASCOM remote.



Celestrons PC Hand control remote

6 Known possible problems

- Some (at least one of my 7 years old Acer laptops) graphic cards have problems to manage transparency in other then 16bit color depth. Normally it works fine in both 24 and 36bit settings.
- If you're as me shooting in Alt/AZ mode you now have possibility to track for very long exposures if your patient. But field rotation will anyway be a problem after a few minutes... not much I can do about that ;-)

7 Feedback

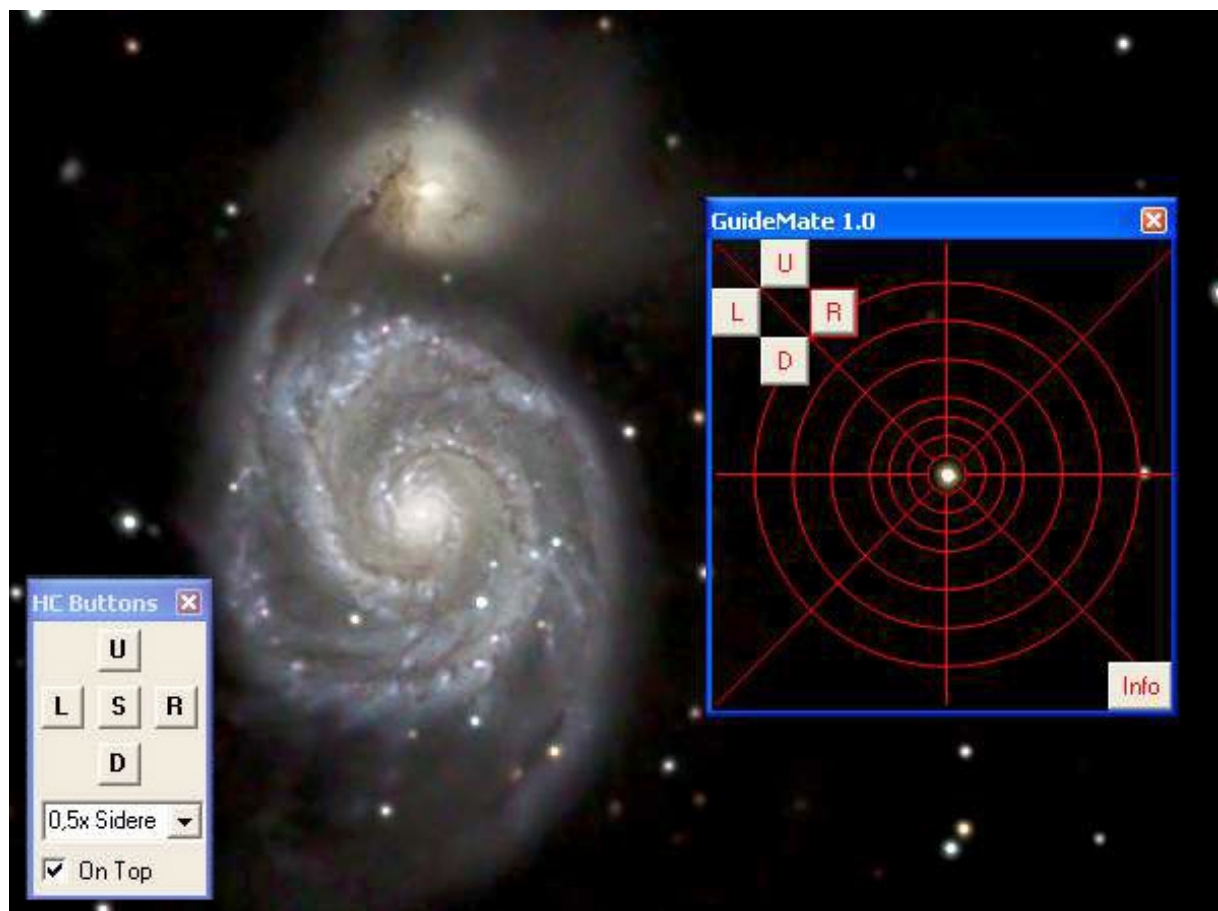
If you wonder something or have some improvement ideas, just contact me at Mattias.Klasson@Hotmail.com ... by the way... I live in Sweden.

8 Regards to

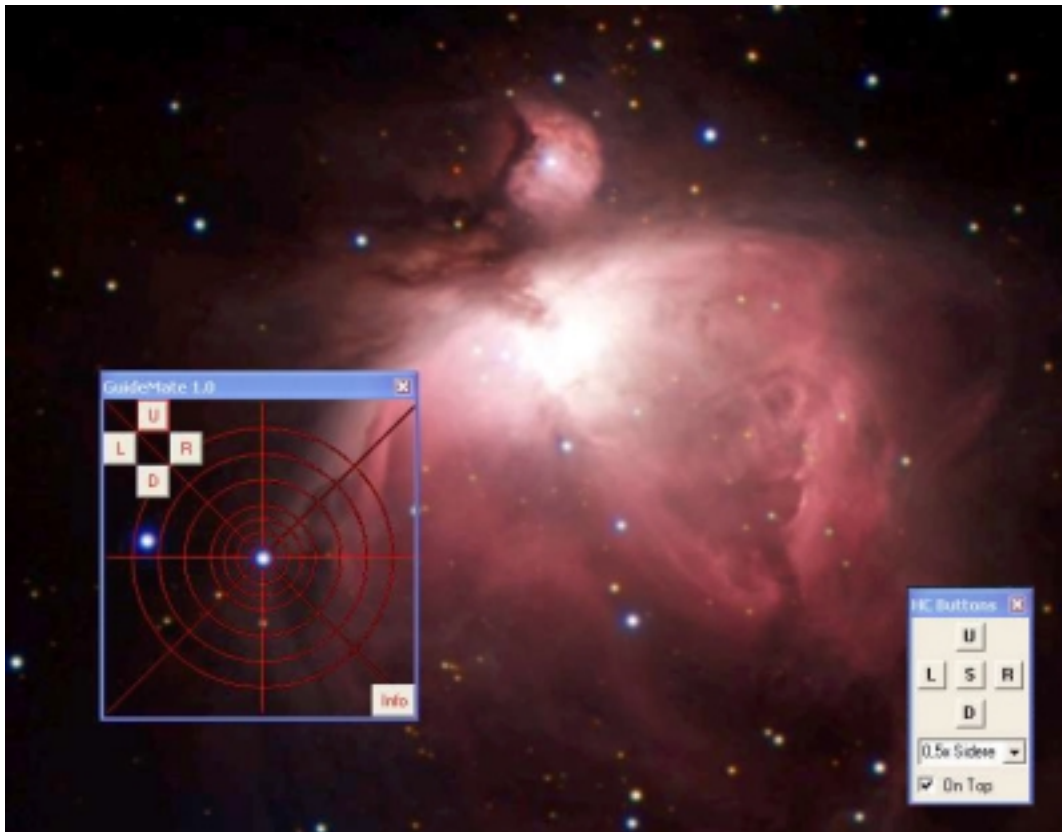
Stark-labs for the great, easy to use and low cost software (www.stark-labs.com), my lovely family and the talented astro photographer Robert Wahlström at my local astro club (<http://aak.alderaan.nu>) for lending my some nice pix (without knowing it for the moment).

9 Sample pictures

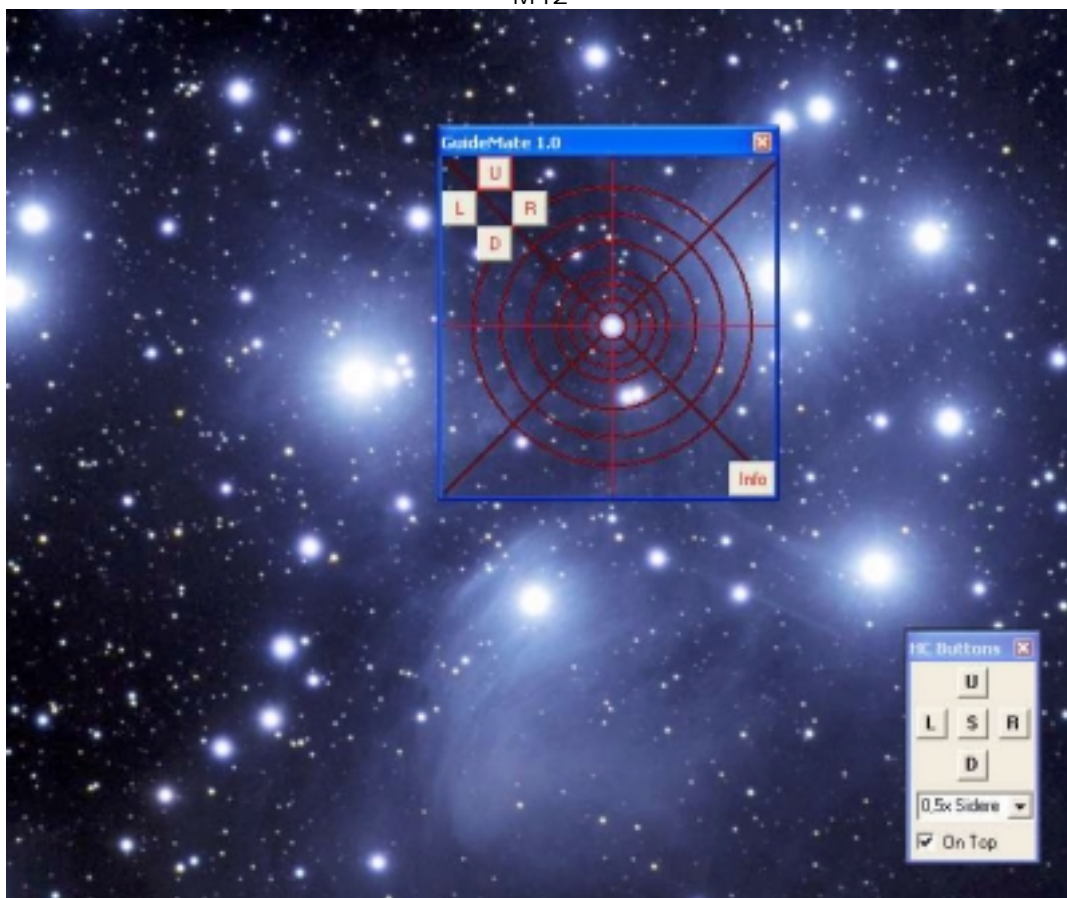
Note that the Orion camera what not used in these photos, but a Starlight Express was.



M51



M42



M45

10 Appendix 1 → version update information

In this Appendix you will find information about the software updates.

10.1 *Version 1.1*

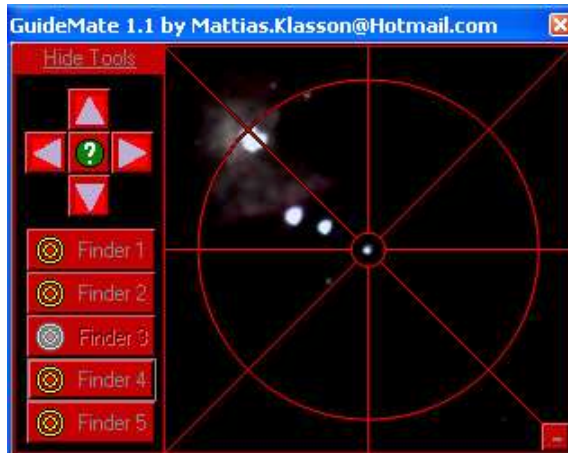
- General GUI improvement.
- **Select different finderscopes**
Possibility to select five different types of finder scopes. See pictures below:



Finder 1



Finder 2



Finder 3



Finder 4



Finder 5

- **Minimize the software**

Minimize the software via the "-" button in the right lower corner. It enables you to see more of the screen. Note that this is not a normal windows minimize function, it just make the software much smaller. To maximize again just click the maximize button. See pictures below;



Minimize

Maximize

- **Hide Tools**

You can hide the tools (all buttons on the left side) by clicking the "Hide Tools" hyperlink in the upper left corner. To show the tools again just click "Show Tools" hyperlink in the same location (Show and Hide hyperlink toggles). This feature may help you when guiding whilst your eyes can concentrate on the guide star, instead of unnecessary colors and shapes. See Pictures below;



Tools hidden

Tools shown

Clear skies //Mattias

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